Private Sector Infrastructure Facility at State Level Project

VOLUME 1: FINAL REPORT

Provided to the

State Governments of
Andhra Pradesh
Gujarat
Karnataka
Madhya Pradesh
and
Asian Development Bank

By

CPCS Transcom Limited
In association with
Oxford Policy Management
Nathan Incorporated
The Economic Research Institute
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Infrastructure Commercialisation Consultants

15 February 2005

Mr. Cheolsu Kim
Head, Financial and Private Sector
Asian Development Bank
Indian Resident Mission
4, San Martin Marg, Chanakyapuri
New Delhi 110 021

Dear Mr. Kim,

Reference: TA 3791-IND: Enhancing Private Sector Participation (PSP) in Infrastructure Development at State Level

It is with pleasure that I am forwarding to you the final report for the above technical assistance project. I believe that the five volumes attached can form the basis for improved private sector participation in the infrastructure sector in India.

In addition to the main volumes, we have also prepared an Executive Summary which summarises the main report recommendations. We have also structured the recommendations into seven key steps which are needed to enhance state level PSP activity. These seven steps comprise an action plan which can be applied by any State in India.

As you pointed out in the tripartite meetings, while the knowledge of how to support PSP activity seems to be fairly widely accepted, following through on that knowledge and implementing the projects is not being done. In the report we have provided a body of material which we hope can assist in that implementation.

While this report is bulky, it was written with the idea of eventually turning it into a reference book for wider dissemination to other state organisations around India. That option still remains. We believe that the concepts and the issues highlighted here, have broader application in other states as well.

In closing I would also like to thank you and your colleagues for your support and help on the project.

Yours sincerely,

CPCS Transcom Limited

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This is **Volume 1** of a five-volume set made up of the following documents:

Volume 1: Final Report, Private Sector Infrastructure Facility at State Level Project

Volume 2: Review of Existing Policies and Legislation for PSP and Privatisation in Infrastructure

Volume 3: New Draft Policies and Legislation for States

Volume 4: Concession Agreements

Volume 5: Case Studies

PREFACE

This document summarises information developed under an Asian Development Bank financed Technical Assistance Project, TA 3791-Ind: 'Enhancing Private Sector Participation in Infrastructure Development at the State Level" with support and cooperation of the States of Andhra Pradesh, Gujarat, Karnataka and Madhya Pradesh in India.

The purpose of the project was to review the legal and procedural foundation for private sector investment in infrastructure and to recommend changes in the investment climate or the process of seeking investment to increase the flow of private money allocated to infrastructure development in the four states.

These four states were selected because they are strongly supportive of private sector investment. The observations and recommendations made are aimed specifically at those states but are designed to be broadly applicable to all states. While this document is a report to the ADB and the four states, we plan, once it has been reviewed and approved, to produce it as a published book which can then be circulated widely among all the key players involved with infrastructure development in India.

The creation of a system to support Private Sector Participation (PSP) is essential if India is to compete for private capital on equal terms with other strong emerging markets, such as China, Thailand and Malaysia. Private capital is both selective and very mobile. One of the strong positive influences on PSP in India is the very strong entrepreneurial tradition among Indians. The intent of the changes recommended in this document is to stimulate Indian based investment, while attracting significant international capital.

Further, letting the world know that the system in India is supportive of private sector investment is also critical. Unless that message is communicated then the investment will still not come. That is why this document aims to present the status of the Indian investment environment to a wider audience. This is being achieved through a variety of state web pages, the investor's guide which accompanies this document, other direct support documents available directly to the states, and the book as described earlier.

The material contained in this document was collected prior to March 2004. Consequently, changes in structure of organisations or procedures that have occurred since that date, particularly changes as a result of the changes in Government, have not yet been reflected in this document.

ACKNOWLEDGEMENTS

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The Members of the Tripartite Committee

Asian Development Bank

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Mythili Ravi, Financial Specialist, ADB

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CONTENTS

Abbreviations and Acronyms

ADB	Asian Development Bank
AMRP	Ahmedabad Mehsana Road Project
BMIC	Bangalore Mysore Infrastructure Corridor
BPL	Below Poverty Line
CBO	Community-based organization
EIA	Environmental impact assessment
ESR	Environmental and Social Report
EWS	Economically Weaker Section
FI	Participating Financial Institution
FSI	Floor space index
GoAP	Government of Andhra Pradesh
GoG	Government of Gujarat
GoI	Government of India
GoK	Government of Karnataka
GoM	Government of Maharashtra
GoMP	Government of Madhya Pradesh
GRC	Grievance Redressal Committee
GSHP	Gujarat State Highway Project
I&CAD	Irrigation & Command Area Department
ICICI	ICICI Bank
IDBI	Industry Development Bank of India
IDFC	Infrastructure Development Finance Corporation
IFCI	Industrial Finance Corporation of India
IGA	Income generating allowance
IGS	Income generating scheme
IL&FS	Infrastructure Leasing and Financial Services
IMTA	Integrated Municipal Transport Authority
KSHIP	Karnataka State Highway Improvement Project
LA	Land acquisition
LAA	Land Acquisition Act, 1894
LD	Line department
LIG	Low Income Group
MEL	Minimum economic landholding
MUTP-II	Mumbai Urban Transport Project II
NEL	Nandi Engineering Ltd.
NGO	Non-governmental organization
NHAI	National Highways Administration of India
OD	Operational Directive
PAF	Project-affected family
PAP	Project-affected person
PL	Poverty line
PSIF II	Private Sector Infrastructure Facility at State Level Project II
PSP	Private sector participation
ROW	Right-of-way
R&R	Resettlement and rehabilitation
SERC	State Electricity Regulatory Commission
SC	Scheduled caste
SPV	Special purpose vehicle
ST	Scheduled tribe

STD	Sexually transmitted diseases
TA	Technical Assistance
TAMP	Tariff Authority for Major Ports
TDR	Transfer of development rights
UKP	Upper Krishna Project
UMT	Urban mass transit

List of Companion Volumes

The following lists the companion volumes to this report. These volumes are based on the working papers prepared during the project and are provided as background information.

Volume 2: Review of Existing Policies and Legislation for PSP and Privatisation in Infrastructure
Volume 3: New Draft Policies and Legislation for States
Volume 4: Concession Agreements
Volume 5: Case Studies

Further, we have prepared an Investor's Guide which provides contact information, checklist information and summary date of practical use to the potential investors. The Investor's Guide is available through the individual states.

We have also included a compact disc which contains a copy of all the reports and the investor's guide inside the cover of volume 1.

1 Introduction

1.1 Background

The Private Sector Infrastructure Facility at State Level Project (PSIF II) was presented to the Board of Directors of the Asian Development Bank (ADB) in November of 2001. This was the second in a series of loans to support private sector activity in the infrastructure sector in India. The participating financial institutions (FI) for these loans were Infrastructure Leasing & Financial Services Limited (ILFS) and the Industrial Development Bank of India (IDBI). This loan disbursed US dollars 100 million to each organisation to be applied to

selected and approved projects in the Target States (the "States") of Gujarat, Madhya Pradesh, Karnataka and Andhra Pradesh. The loans were set up to be competitive financially with those generally available through the commercial banks but with a longer term (up to 25 years) to make them more attractive in situations where longer term credit was needed. The loans were based on a premium over Libor rather than the earlier method of connecting the interest rate payable to a basket of currencies. The FIs may then apply a number of alternative methods to purchase marketable securities issued by the responsible FI, and hedge the foreign currency exposure of infrastructure projects in the States.

While the loans are administered by the FIs, the final approval for use of the loan money remains with the ADB and requires compliance by the borrower with the normal range of procurement, environmental and social assessment and impact mediation criteria normally applied to ADB funded projects. This is a significant difference between the ADB loan funding and commercial borrowing from domestic financial institutions that require no such formal compliance, although the tenor of the ADB sub-loan facilities can be extended beyond those available in the domestic banking and capital markets. Typically domestic capital markets provide funds for a period of 7 to 8 years while this facility can provide funds for up to 25 years. Further, while the private funding institutions do not exert the same control over environmental and social impacts as does the ADB, the proponents of the projects are required to satisfy the requirements of the Government of India which in the case of environmental issues, are virtually identical to those of the ADB.

The Loan agreement also specified technical assistance to the four states to provide support in identifying gaps and deficiencies in the legal, regulatory, institutional or operational areas that were impeding the access and use by the private sector of the available funding. Minimal draw downs have been made under the PSIF –II loan. This is in marked contrasted to the first PSIF I loan which was 96% committed for 8 ICICI and 5 IFCI projects (ICICI and IFCI are the FIs for the previous PSIF facility). PSIF-I commitments were made in the power (7), telecom (3), port (3) and road (1) sectors.

One of the objectives of this TA therefore is to identify the impediments to the use of the loan monies under this facility, and highlight systemic issues related to the provision of private sector participation in general.

While the earlier facility considered projects anywhere in India, this facility is restricted to the four named states . In addition, the sectoral scope for PSIF-II excludes telecommunications (save for optic fibre cable projects) and green-field power generation sectors. It also limits availability on National Highway projects within the States to less than 20% of the available funds. Further, as at November 2003, one of the implementing institutions, IDBI has decided to withdraw. As a result, the ADB has cancelled the IDBI component of the loan.

1.2 Scope of Work

The scope of work for this TA covers an initial review of the framework for Private Sector Participation (PSP) to identify the key constraints to PSP in each sector in each state and a review of the project pipeline to determine where specific external support is required to bring individual projects to closure. We are then to assist the state governments to address these constraints and to co-ordinate any recommended measures with the relevant ADB infrastructure divisions, including identifying areas for possible ADB support. At the end of the assignment, we are to provide a policy matrix by state and by sector that identifies:

- Key constraints to PSP
- Measures proposed to address the key constraints
- Progress on implementation of proposed measures.
- Outstanding policy reforms and improvements in institutions, processes and systems.
- Inventory of projects ready for PSIF II finance.

While the TA work considers all the infrastructure sectors eligible for finance under the ADB PSIF II facility we have agreed to focus our attention on those sectors where there appear to be reasonable

levels of activity and interest in the named states. These are the road, ports, urban mass transport, and water and sewerage sectors. While other sector activity may be of interest such as international airports, they remain under the primary control of the central government. We also consider special economic zones (SEZ) and IT parks but mainly from a information gathering viewpoint.

It is worth noting that the constitution determines that central government has power to legislate over airports and UMT by railway, and that state governments have power to legislate over state roads, UMT by means other than railway and water supply and sewerage. In addition, central and state governments have concurrent power to legislate over power, minor ports, and SEZs (but central legislation takes precedence in the event of conflict).

1.3 Companion Volumes, Workshops and Other Outputs

The outputs of this project are:

- Final Report and companion volumes as listed above
- Workshops
- An Investor's Guide
- Direct Institutional Support in States

1.3.1 Companion Volumes

We have produced a series of companion volumes, that, document various aspects of the project.

These are:

- **Volume 2: Review of Existing Policies and Legislation for PSP and Privatisation in Infrastructure.** We review the policies and legislation for PSP and privatisation of infrastructure at national and state level. We also review the legislative mandate for the nodal agencies which have been established to coordinate investment opportunities for PSP and privatisation at national and state level.

- **Volume 3: New Draft Policies and Legislation for States.** We have prepared a number of draft legal texts that can be used by the States to update their approach to PSP. These included draft enabling legislation for PSP support for Karnataka and MP, draft modifications to the roads acts, ports acts, changes to the Swiss challenge process for bidding, and draft dispute resolution recommendations. Further we have also prepared draft policies for roads, ports, water and sewerage and Urban Mass Transit.

- **Volume 4: Concession Agreements**. We have prepared example concession agreements for use by the States. These include a standard "concession/lease/BOT" agreement which is quite generic. This is followed by an example "Annuity BOT" agreement for roads, ports concession, water and sewerage, and Urban Mass Transit.

- **Volume 5: Case studies**. We examine in depth a selected project from one of the key sectors from each state. The Case Studies were selected from a long list provided by the States and are meant to highlight the process and issues that affect private investment in the States. The lessons learned from the Case Studies were used to develop some of the recommendations in the Road Map in Chapter 8.

1.3.2 Workshops

Four workshops were planned during the project but only three were held, as follows:

- A general workshop for members of the Nodal Agencies and the involved Financial Institutions to outline the scope of PSP activity, the interim findings of the project and to obtain feedback from participants about how best to incorporate the interim findings into the development of recommendations and the final report. This workshop was held in conjunction with the Second Tripartite Meeting in Delhi in Februray, 2004.
- Investment Incentives and Impediments and Possible Solutions for Improved Investment.

This workshop was held in Bangalore and included representatives of both the private sector and the nodal agencies in the states. The workshop considered the process of developing incentives for development, the project development process, the current institutional capacity of the nodal agencies to support development. Feedback from the workshop commented on a number of areas where improved support would be worthwhile;

- Incorporation of Social and Resettlement Issues in Project Planning and Development. This workshop highlights the key considerations related to social impact and resettlement assessment as applied to the kinds of projects considered for private sector support. In addition to the structure of the approach to social and resettlement issues, the workshop focused on the necessary capacity and skills needed at the nodal agency and sponsor level to appropriately consider these social and resettlement issues;

- Incorporation of Environmental Considerations in Project Planning and Development. This workshop was not conducted due to a lack of interest on the part of potential participants and timing of the TA when India is actively undertaking a nation-wide environmental review and empowerment of the state governments to manage their own environmental affairs. Instead of a workshop, more emphasis was placed on developing a guide to meeting environmental requirements for private-public partnership at the state level, utilizing the new approaches being devised by MOEF. At the time the TA was being executed the India ECOSMART was conducting workshops across the country introducing environmental their services as a quasi government organization to the private sector, and focusing on private public-sector partnerships.

1.3.3 Investor's Guide

The Investor's Guide is a kit folder available to prospective investors. It contains a synopsis of the following:

- Critical Policies and Laws which govern investment by state and web links containing the full policy or legal text where available;
- Status of regulatory oversight by sector and state and access to the website or agencies involved;
- A stepwise procedures flow chart to map the steps required with estimated time for clearance;
- Institutions who have key decision authority for processing applications for investment and the support available from the key nodal institutions within each state to support private sector initiatives for investment in target sectors;
- Guidelines for incorporating environmental considerations in project planning and development;
- Guidelines for incorporating social and resettlement issues in project planning and development;
- Guidelines for access to the available funding sources, including PSIF II and contacts and addresses as available.

The investor's guide is available through each state nodal agency listed in the forward to this document. Each state has a soft copy for further development and printing and distribution by the nodal agency.

1.3.4 Direct Institutional Support in States

Specific support has been provided to the individual states. For instance, draft policies have been developed for each of the key areas of roads, ports, urban mass transit and water and sanitation in consultation with the State. Further, draft legislative changes have been developed and example concession agreements have been provided to states for their further use.

In addition, we have worked with some of the states by providing recommendations to directly strengthen the capacity and capability of the nodal agencies either through improved legislation or through expanded financial or human resources.

1.4 This Document

This document synthesises a large number of individual working papers and other support documentation. The logic followed here is to consider what is needed to create an effective nodal agency to further support investment in infrastructure in Indian States. The chapters are developed to support that logic following roughly from the work done under the TA.

1.4.1 Chapter 2: Key Constraints and Impediments to Private Sector Development

Chapter 2 highlights the key constraints to private sector participation in infrastructure. These are the barriers to investment and are the areas of primary focus for the review of each state. The key constraints have evolved through the project. Further documentation and recommendations for how to deal with those constraints follows in subsequent chapters. Many of these key constraints are not new and have been referenced in earlier documents. The key point is that they still remain.

1.4.2 Chapter 3: The Enabling Environment – Policy, Legal and Regulatory Measures to Enhance PSP

Chapter 3 summarises the work competed on the policy/legislative/rules and regulatory review and the development of options for a regulatory framework to be considered for each state. Fundamentally, we believe that less regulation rather than more is the objective. If regulation can be achieved by mutual agreement through the Concession Agreement under contract law it is preferable to the option of setting up a statutory regulator.

1.4.3 Chapter 4: Fast Tracking the Private Sector Development Process

In this chapter we outline the private sector development process, the project life cycle and the current procedures followed in the states. This area is the one most relevant to the issue of development of a bankable project and we have significant recommendations to make regarding the development of projects for private funding by the State agencies responsible. The recommendations in this area are made with the view of generating significant debate in the States and also within the funding institutions since many of the recommendations here will involve significant expenditure of money by the States.

1.4.4 Chapter 5: Creating a Capable Nodal Agency – Institutional Support to PSP

This chapter focuses on the Institutional Linkages and Institutional Capacity Building that needs to be done. We highlight the issues and the structure of Institutions in each state. The development of an effective program of PSP in each state depends in large measure on the capacity within the state to support the development of privately financed infrastructure projects. The staff skills needed and the linkages between organisations within and among the line departments are critical to enable the projects to develop in a timely way and with a high potential for successful investment.

1.4.5 Chapter 6: Environmental and Social Issues

This chapter highlights the ways in which the project development cycle can best deal with key environmental and social issues. The arguments advanced here suggest that while the legal foundation for both environmental and social issues are reasonably well considered in formal legislation in India, the application of those rules often leaves much to be desired.

1.4.6 Chapter 7: The Possible Deal Breakers

The implementation of a privately funded project requires consideration of both private sector concerns as well as the interests of the public and the interests of other stakeholders such as employees or residents or users of the systems. Failing to deal with the implications of these factors

may lead to failure of the initiative. This chapter considers issues such as the provision of investment incentives, development and application of effective dispute resolution mechanisms and capital market adequacy.

1.4.7 Chapter 8: The Road Map for Effective PSP

While we have developed individual roadmaps for each states to guide development of PSP initiatives in that state, many of the recommendations are generic. This chapter highlights those recommendations in a time bound structure to help guide the states in the further development of their PSP promotion activity.

2

Key Impediments to Private Sector Investment

The identification of key impediments to Private Sector Investment in the four States is the central theme of our work. Through our review of the policy and legislative framework as well as undertaking the case studies, we have been able to assess the current situation and identified gaps and deficiencies in existence. Recommendations have been made to the respective States to rectify these deficiencies some of which have been implemented and others, currently under consideration. This chapter sets out our findings and discusses the summary recommendations developed in more detail in the later chapters.

2.1 Context for PSP

India is a country with significant development potential but to achieve that potential, significant impediments must first be overcome. This material

addresses some of those impediments and suggests ways to help unlock key components of potential economic growth.

The overall growth of the Indian Gross Domestic Product (GDP) has hovered in the range of 4 to 7% during the past few years. While this in itself is a significant achievement compared to the levels achieved in the 70's and 80's, it does not match the rate achieved by China, the other significant Asian developing economy and more importantly, it is not seen as significantly reducing poverty and it is not growing fast enough to drive the economy into full modernisation.

A major component of India's ability to generate the kind of growth achieved by China, is the need for massive investment in infrastructure – in virtually all areas – to both modernize the existing infrastructure and to provide sufficient capacity for further growth and development of the economy. The slowing of infrastructure growth from 8% in 1999 to 5%[1] in 2001 was a warning bell to the Government and quickly led to the establishment of the Special Subject Group on Infrastructure within the Prime Minister's Council on Trade and Industry. The mandate of the Special Group was to suggest remedies for the slowing of investment and growth.

Those recommendations largely follow two principles:

- Infrastructure services must be offered in the most efficient, low-cost manner to best meet the needs of the community;
- Users must pay for the actual cost of infrastructure services plus a reasonable return on investment.

In order to achieve these principles the Special Subject Group recommended six major policies, namely:

- Separate the regulatory function from the operation of infrastructure;
- Corporatise existing state owned operating enterprises to offer better autonomy and the ability to operate according to commercial principles;
- Privatise where possible appropriate state corporate entities;
- Promote competition where possible;
- Establish enabling regulations and in particular for rights of way and environmental clearance;
- Implement full cost recovery for infrastructure – including charges to the agricultural sector and other direct consumer charges.

The economic impact of infrastructure is both direct and indirect. Directly, expanded infrastructure allows for delivery of services quicker and with greater quality. We travel faster and more often. We communicate more and with increased ease. We use expanded power to increase output and better quality water helps us to live longer. But expanded infrastructure does more. It also allows companies to rethink how they do business. Indirectly, improved road systems allow distribution companies to reorganise warehousing and start to create just-in-time delivery systems. Better communication systems allow companies to substitute communication for travel. Consistent power allows companies to add shifts or to buy new equipment which can massively change the way a company produces goods. The expansion of infrastructure must move in harmony with expansion of other parts of the economy. A delay in growth of infrastructure will also delay other investments.

A review of the potential for expansion of National Highway 2 from Delhi to Calcutta in 1992 showed that for some stretches of the road, expanding to four lanes achieved a rate of return of close to 100% in the first year . This is direct evidence of massively delayed infrastructure improvement. The suppressed demand for the new road coupled with the massive delay on the existing highway resulted in first year benefits that virtually paid the full cost of the investment.

The role of Government and the environment for investment changes significantly from country to

[1] The return of the growth rate to above 7% in 2003/4 is welcome. But this rate likely owes much to the return of the monsoon and the buoyant mood flowing from the good harvest, rather than from structural changes in the economy.

country. Because many governments have limited capital for infrastructure investment, they look for increased investment from the private sector. The case to justify private investment in infrastructure leans heavily on the pragmatic need for capital rather than on the argument for economic efficiency. Toll highways are a good example.

Clearly, if the highway has a positive impact on overall economic development, that impact is largest when the road carries the maximum volume of traffic at the least cost possible. However, if it is operated as a toll highway, the toll will act as a traffic impedance and some travellers will chose to use the slower and less efficient alternative routes. The financial return to the highway operator is improved with application of the toll but the lower traffic inevitably reduces the overall economic benefit.

Private investment needs a positive rate of investment return. It is important therefore to assure that where private investment is sought, it serves the public need. Clearly, if the government does not have sufficient capital to invest, then having infrastructure provided by the private sector is much better than not having any infrastructure at all. Furthermore, experience in many jurisdictions has shown that the tying of toll revenue from operations to ongoing maintenance provides for a much better quality infrastructure over time than if maintenance funding is left to the vagaries of budget allocation and competing demands for government resources.

So on balance, increased private investment in infrastructure can offer a significant boost to economic growth, can expand the resources available to the government for infrastructure investment and often, of most importance to the general public, private investment can improve the quality of service available.

The market for private investment is very competitive. It is also very difficult to find projects that are sufficiently financially viable so as to provide a return on investment that is attractive to the private investor. In the early 1990's there was a burst of enthusiasm from the private sector for investment in power, telecommunications and transport. But by the end of the decade and beginning of the current decade much of that euphoria had disappeared and some investment funds were wrapping up operations due to lack of viable projects.

To achieve decent levels of private investment in infrastructure requires effort to break down the barriers to investment. In what follows, we outline how best we believe those barriers can be broken down in India.

2.2 How Can Government Best Support Private Investment ?

Governments around the world have chosen their preferred path to attracting private investment. These include a number of organization models to assist or facilitate private investment. The foundation for all these models is similar – that is, to provide good governance support to the private sector and to cut through the barriers that every civil service inevitably throws up.

The private sector is essentially pragmatic. It looks for:

- Fair and non discriminatory treatment:
- Predictable legislation, regulation and operating rules;
- A time-bound process for approvals;
- Freedom to set prices and collect revenue sufficient to recover investment plus a profit;
- For international firms, ability to repatriate profit.

The case studies reviewed the process of PSP in infrastructure in the four States taking the approach from the perspective of a private investor by taking projects at various stages of the planning and implementation. Four different sectors were selected based on discussions with the nodal agencies of each State viz. Karnataka (multi-sector); Andhra Pradash (water supply); Gujarat (ports) and Madhya Pradesh (roads). The focus of the cases also slightly differed, in Karnataka and Andhra Pradesh, awarded projects were tracked through the process of implementation to identify issues faced by the concessionaires, whereas for the States of Gujarat and Madhya Pradesh, the

focus was more on the concessionaire selection process, the legislative framework, enabling environment for investment and issues relating to financial closure.

Results of the review showed clearly much needed improvements in the following areas.

- Shortage of bankable projects;
- Insufficient project preparation and evaluation;
- Political commitment to eliminate undue delays to closure;
- Availability of State financial support and cross subsidization on projects;
- Conflicting roles of line departments as regulator and contracting party;
- Proper governance on operation of bureaucratic process.

Detailed reports of these case studies are contained in Volume 5 of the Final Report.

It is not difficult to recognise from our findings that the full potential of the private sector to meet the States' infrastructure needs is still largely untapped due to the extent of risks other than normal business risks that are sufficiently significant to discourage private sector entrepreneurs to participate more freely. These non-business risks are primarily attributable to the lack of efficiency and transparency in the contracting and supervisory process. While the increasing focus on private provision of infrastructure funding and services is placing new demands on the State Governments, the limited commercial management capacity has no doubt resulted in projects that have been inadequately prepared, little interest shown in the bidding process and tarnished reputation due to long delays caused by a bureaucratically driven decision-making process.

With regard to project financing, the tenure for loans available for infrastructure is still relatively short and the numbers of providers limited as the regulatory system, as well as the lack of adequately prepared documentation, have constrained the willingness of lenders to provide financing for these projects.

In order to improve the interaction between public and private sectors therefore, we have identified the following key improvements that have been implemented in other emerging markets in Asia and could be considered here.

- Clearly define relationships and independence among the regulatory agency, policymakers and the operating service provider and avoid conflicts of interest;
- Improve inter-departmental communications on project identification;
- Identifying and preparing viable project with differentiation between economic return for public funding and financial return for PSP;
- Identifying and providing State support, if necessary, for privately financed projects in the public sector;
- Capacity building for private sector management to improve efficiency;
- Improve the efficiency and transparency by establishing a single body responsible for contracting and obtaining necessary clearances;
- Strengthen the power of the anti-corruption agencies to audit the award of projects;
- Increase demands for long term debt instruments through pensions and insurance reform;
- Consider and review the procedure for infrastructure company listings and debt instrument issuance in the capital markets to support long term financing.

2.3 What are the Key Impediments to Expanded Investment?

While we have identified a number of issues throughout this report that merit further consideration and implementation to improve the PSP process, our conclusion points overwhelmingly to a single factor, **the lack of bankable projects**, as the key impediment to private sector investment. We have seen a lack of preparation in the development of projects within the State line departments. There remain within the States unrealistic expectations regarding the interest and risk perception from the private sector as well as the fundamental viability of the proposals. In each State we have seen many projects proposed for

potential investment. But very few of these projects are successful in attracting private capital. In some of the key agencies and line departments, there remains a fundamental lack of understanding of how a project should be prepared to ensure successful private sector participation while still accruing maximum economic benefit to the government. Until the process of development of bankable projects is improved through improvement of the capacity of the responsible state institutions, it is unlikely that the pace of investment in infrastructure will increase.

2.3.1 Conflicting Authority at the GOI and State Levels

India's constitutional framework comprises elaborate and at times conflicting divisions of power between the GOI and the States. Further power sharing with municipal bodies that is envisaged under the 74th amendment to the Constitution will add a layer of complexity concerning decision making authority and jurisdiction for project development and operation.

Table 3.1: Organisations in transport sector at the national level

Organisations	Functions	Relevant acts
Roads		
Ministry of Road Transport and Highways	Development of road transport infrastructure & National Highways, and overall regulation of freight road transport in the country	Motor Vehicles Act 1988 , Central Motor Vehicle Rules 1989
National Highway Authority of India	Development and maintenance of national highways in the country	National Highways Act 1995
Roads department, State Government	Development and maintenance of state highways in the country	VII Schedule of the Indian Constitution (Article 246), List II (State List), Item 13
Ports, shipping and inland water transport		
Ministry of Shipping	Co-ordination of various activities related to ports, shipping and inland water transport	
National Shipping Broad	Advisory body to the Ministry	Merchant Shipping Act,1958
Director General, Shipping	Implementation of various provisions of the Merchant Shipping Act,1958, of various international conventions relating to safety, and mandatory requirements under the International Maritime Organisation	Merchant Shipping Act,1958
Ports Trusts	Managing daily activities of the individual major ports in the country	Major Ports Trust Act,1963
Inland Water Way Authority of India	Regulation and development of national water ways for the purposes of shipping and navigation	Inland Waterways Authority of India Act, 1985
Transport Department, State Government	Regulation and development of water ways other than national waterways for the purposes of shipping and navigation	VII Schedule of the Indian Constitution (Article 246), List II (State List), Item 13
Tariff Authority for Major Ports	Independent regulation of tariff setting in Major Ports	Major Ports Trust Act,1963
Civil aviation		
Ministry of Civil Aviation	Planning and development of infrastructure for regulating air traffic. Responsible for Airport Authority of India, Director General of Civil Aviation and Bureau of Civil Aviation Security	Air Corporation Act, 1953
Airport Authority of India (AAI)	Infrastructure and facility for Air traffic is provided by AAI. It is also responsible for maintaining domestic and international airports and civil enclaves at defence airports in country.	Airport Authority of India Act, 1995

Unfortunately, infrastructure projects across all sectors do not fall neatly into these divisions of power and in certain sectors, projects and their sponsors are subject to conflicting signals and overlapping approvals at the GOI, State and in some sectors, (e.g. water, waste and urban mass transport to name a few) the Municipal level. Private debt and equity funds will not flow to projects in sectors where there is a potential (perceived or confirmed) for conflicting oversight authority to negatively impact the long-term viability of such projects.

A description of the varying responsibilities and authorities at State and National level in the transport sector is given in table 2.1:

The allocation of responsibilities between Central and State Government agencies in this sector is based on the principle of federalism. Similar is the case in the urban mass transport sector. In India, management of the urban areas is essentially a responsibility of the State Government, even though the 74th Constitutional Amendment devolves the responsibility of urban development to local bodies. Urban development, and therefore, urban mass transport, is primarily a responsibility of the State Governments in India, though some agencies that would play an important role in urban mass transport planning work under the Central Government with no accountability to the State Government, particularly Indian Railways. Table 2.2 lists some of the agencies involved with urban mass transport and indicates their specific responsibilities.

Table2.2: Institutions involved with urban transport in India

Organisations	Functions	Relevant acts
Urban transport planning		
Ministry of Urban Development	Overall responsibility for urban transport policy and planning	
Land Development Authority, State Government	Land use allocation and planning	State Development Acts
Roads		
Transport Department, State Government	Licenses and controls all road vehicles, inspection of vehicles, fixing motor vehicle tax rates	Motor Vehicles Act 1988
Ministry of Surface Transport	Administer the Motor Vehicles Act and notify vehicle specifications as well as emission norms	Motor Vehicles Act 1988
State Transport Undertaking, State Government	Operation of bus services	Road Transport Corporations Act 1950
Public Works Department, State Government	Construction and repair of State roads	VII Schedule of the Indian Constitution (Article 246), List II (State List), Item 13
Local municipality	Construction and repair of smaller roads, road signage, traffic lights, licensing and control of non-motorised vehicles, clearing of encroachments and land use planning.	Constitution (Seventy-Fourth Amendment) Act, 1992
Police	Enforcement of traffic laws and prosecuting violators	State Police Acts
Railways		
Ministry of Railways	Own and operate urban rail transit systems wherever they exist	Railway Act, 1989
Others		
Ministry of Petroleum and Natural Gas	Regulation of prices and quality of transportation fuels	Essential Commodities Act, 1955 The Petroleum Rules, 1976
Department of Environment, State Government	Monitoring air quality	

While most of the issues regarding conflicting authority between the National and State

Governments are beyond the scope of this work, in Chapter 3 following we do discuss some of the areas of separate and concurrent responsibility and possible approaches to them.

2.3.2 Need for Updated Regulatory/enabling environment

While the regulatory/enabling environment in all states is not the key impediment to increased private sector investment, it remains a key area of focus. While we recommend additions to policy, legislation and regulation for some sectors, the current status of these instruments combined with the flexibility of normal contract law exercised through the concession agreements provides sufficient flexibility and support to the private sector to allow most normal investment. This is born out by the fact that investment has occurred in all states in most of the key infrastructure areas. Further work in these regulatory/enabling environment areas will assist in creating an atmosphere of practical support for private investors and any improvements will increase confidence in the seriousness of the respective governments, but of themselves, these changes will not significantly increase the level of bankable projects presented to the private sector. They will simply improve the atmosphere and make the marketing of investment for each of the states more credible.

The GOI has taken some initiative in this regard recently. For example, it has enacted the Electricity Act and it is in the process of developing a Gas Act with similar scope. However, a systematic effort is needed to cover all sectors that have been opened up to private participation. This might be achieved sector by sector or on a multi-sector basis. Since this review is focused on what States can do to support increased private investment, the changes recommended to the regulatory/enabling environment are directed to the state level. Where possible we have tried to keep those changes within the framework of existing or planned legislation or regulations.

All states have laws, legislation and regulations in place for various sectors, albeit not all. Regulators have been established for the telecom (TRAI) and the electricity (CEA) sectors at the GOI level and these have been successful in enhancing scrutiny of public service providers. Nonetheless, regulatory uncertainty still lies at the root of contract disputes in these sectors (e.g., interconnections and number portability in telecoms) indicating a need for improvements. In other sectors, including airports, national and state roads urban mass transport, water/sanitation and ports (save for tariff setting), agencies that regulate the industry often have a major role as service providers which are in a position to compete with the private sector by virtue of their dual role. While regulation is certainly important, we have tended to err on the side of less rather than more. If at all possible, it is our position that regulation through the concession or contract process is often preferable to setting up and staffing of an independent regulatory body. In the following chapters therefore, we recommend regulation at the minimum level necessary to protect the investors and the public.

To optimize private investor interest, the role and enforcement powers of independent regulatory agencies should be discretely and transparently defined. The government's perceived or actual ability to intervene in the affairs of its regulators on an ad hoc basis, (particularly true in the environment sector, where regulations and standards are not familiar to private investors and state agencies' enforcement is sporadic) remains a distinct negative in the view of private investors and lenders. This is compounded in cases where government functions as both regulator and operator either directly or indirectly through its owned enterprises. In order to ensure broader participation by private participants and financiers, the key principles of each sector's regulations (e.g., service pricing methodology, dispute resolution, competition, and service expansion) should be established in advance of entry into private participation concession contracts or privatizations. These principles should be applied equally to public and private enterprises operating in the same sector.

In the absence of effective independent mechanisms to protect investment and ensure fair

treatment of investors, private participants may discuss projects but few will ever be in a position to commit substantial investments or to secure long term financing for their projects.

An example of the application of different regulatory structures is illustrated in the following table.

Table 2.3: Alternative Approaches to Structuring Regulatory Agencies

Industry Specific (eg. Electricity or Gas	Sectoral (energy, communications, transport)	Multiple
Argentina	Brazil (federal)	Australia (state)
Chile	Canada (federal)	Bolivia
India	Guatemala	Brazil (state)
Nicaragua	Colombia	Canada (state)
Peru	Hungary	Costa Rica
United Kingdom (Telecoms, Water)	Mexico	El Salvador
Venezuela	United Kingdom (energy)	Italy
	United States (federal)	Panama
		United States (state)

A full discussion of the regulatory/enabling environment is included following in Chapter 3.

2.3.3 *Need for Upgraded PSP Process to Ensure Development of Bankable Projects*

The development of bankable projects by the State organisations remains the key impediment to successful investment by the private sector. We have seen consistent substandard thinking regarding the development of bankable projects. Within each state, there remains a sense of unreality and wishful thinking regarding the interest, willingness to accept risk and fundamental bankability of proposed projects. In each state we have seen many projects which are proposed for potential private investment. However, the failure of the States to find investors for most if not all of these proposed investments is testament to the failure of the process. In some of the key agencies and line departments, there remains a fundamental lack of understanding of the importance of markets, willingness to pay, conservative revenue forecasting, use of incentives, realistic risk assessment, competent and realistic financial analysis and commitment to terms of agreements and enforcement of agreed responsibilities. Until the process of development of bankable projects is improved through improvement of the capacity of the responsible state institutions, it is unlikely that the pace of investment in infrastructure will increase. This deficiency has been highlighted in earlier documents and remains true today.

We consider the criteria of bankability to comprise three factors:

- Commercial viability of the project
- Sound Governance
- Political Commitment

Firstly, determination of the commercial viability of projects is a necessary process and has certainly been identified as a constraint to investment due to the inadequate evaluation at an early stage of the suitability of the project for PSP and the most appropriate PSP mode. Furthermore, there is also seen to be inadequate assessment of, and commitment to, the financial support required to ensure viability.

In Chapter 4, we have recommended the establishment of Private Finance Initiative Units (PFI Units) to evaluate, at an early stage in the project cycle, the most appropriate PSP mode and level of financial support for commercial viability, and linking the financial support into the budgetary process. In Chapter 5, we have also suggested training workshops to strengthen the capacity of various agencies and departments on evaluation and analytical techniques as well as commercial issues confronting private developers in project considerations.

2.3.4 *The Need to Strengthen Institutions provided for in the State Infrastructure Acts*

The complex and duplicative institutional framework of the State and Central Governments has meant that obtaining project clearances is often a cumbersome, costly and uncertain process. The representatives of the States are beginning to understand the nature of this dilemma for the private sector, and have begun to take steps to address it. For example, legislation to provide overall guiding development policy for infrastructure has either been enacted or is under development in

some states. Among the Four Target States, Gujarat and AP are furthest down this path. Both have already enacted development policy legislation (GIDA in Gujarat and IDEA in AP[2]). Both have also undertaken associated efforts to create institutions pursuant to this legislation (e.g., GIDB in Gujarat and APIA in AP) to serve as a "nodal agencies" to support project preparation and clearances.

Nonetheless, there remains a significant amount of work to be done to prepare both the processes and the human resources with which these new Authorities must manage the provisions of the new infrastructure development legislation effectively and facilitate private project implementation.

PSP projects are not easy to implement, and require effective decision-making at all stages from project identification to implementation. We identified a number of constraints that are largely of an institutional nature, including:

- In many cases there are too many institutions involved in PSP without a clear delineation of responsibilities.
- There is insufficient continuity of staff. During the course of our project we have experienced many changes in staff at the senior level in all States, with varying effectiveness of handovers.
- Some of the officials dealing with PSP do not have the necessary expertise or understanding of PSP to ensure that processes and procedures are followed in a timely and efficient manner.
- The arrangements for developers to obtain clearances and approvals are inefficient and cumbersome, resulting in long delays,
- Blockages to progress often require decision-making at the highest level (eg Chief Minister), but the institutional arrangements do not facilitate such decision-making in a timely manner.

The institutional arrangements are different in each State, and Chapter 5 assesses the effectiveness of each against three broad conditions for effectiveness: sustained political commitment; clear responsibilities during the project cycle; and a single window agency for clearances.

There is no "right" model. We therefore focus our comments on how the models can be strengthened.[3]

2.3.5 Need for Increased Financial Resources for Project Development.

Much of the requirement for developing bankable projects rests with the sponsoring agencies in the states. This increases the cost of project development. It should not be considered unreasonable to spend up to 3 to 6 crores Rupees to develop a bankable project to the point where private sector investment is sought and may begin.

If the nodal agencies or the line departments are required to spend this kind of money to develop bankable projects, the rigor attached to the pre-screening and the justification presented to the Chief Minister and the Minister of Finance for funding will improve dramatically. At that point the number of possible projects will be far fewer but much more potentially viable. A directed focus on the project screening process will also allow the state governments to more efficiently use scarce government resources and incentive mechanisms in a smaller number of viable PSP projects. Experience has shown that spending money to develop a project - to map out its market, its risk, its revenue, provision of incentives and a well structured concession or sale agreement will pay off in return to the sponsor. The money will come back in the form of improved investments, higher prices paid to the sponsors and improved

[2] www.gidb.org, and www.apinfrastructure.com

[3] The argument is put forward that the private sector still needs to be the engine of investment and that the private sector should be taking a more aggressive role in proposing financially viable projects for consideration. Karnataka in particular argues that focus on the Government to develop projects may not be successful because the fundamental consideration should be the interest in private sector financial viability. This argues for increased attention to the unsolicited bid approach to defining projects, with unsuccessful bidders being compensated for their costs. This approach was used successfully in the recent concessioning of the Bangalore International Airport Project.

atmosphere for investment. An example of where this level of commitment and incentive packaging has been successful is the Mangalore-Bangalore Railway BOT which has successfully combined the efforts of the private investors, the State Government and the Central Government.

We also strongly recommend in chapter 4 and 5, that a Private Finance Initiative (PFI) unit be developed within the Ministry of Finance to work closely and in concert with the sponsoring agencies to ensure that sufficient financial resources are available to adequately develop the project and that the projects fit within the overall budget framework of the Government.

2.3.6 Government Support and User Pay Principles

Public subsidization of the costs of many infrastructure services remains common in India particularly in the sectors of water/sanitation, urban mass transport and electricity distribution. The rationale for the subsidies is to ensure that the users are able to avail themselves of the services at affordable rates. However, there also appears to be significant political dimensions to the continued prevalence of subsidies even in the large metropolitan areas where the user base is arguably better positioned to share more of the cost of service burden.

For privately sponsored projects to take hold on a broad based scale, and to attract private investors, tariffs will ultimately need to be increased to levels where the cost of service together with a reasonable margin of profit can be generated. As an interim step prior to instituting full user pay policies, the government may indirectly compensate a private service provider through a direct up front payment (enabling below cost tariffs to be charged), minimum off take obligations, debt service guarantees or other methods such as income tax relief/holidays. These measures are a near-term bridge for private participation, but they should not be considered long-term solutions for the States.

In some cases, the government may consider the provision of the service to be a "right" as opposed to a commercial transaction. Some countries for instance consider provision of safe and affordable water as a community right and in these cases continuation of less than full cost provision of these services will remain the norm. For instance, in much of the Arabian Gulf, potable water is created through desalinisation. The resulting water is expensive but governments have taken the view that the water should be provided to citizens at a nominal cost. In these cases, user pay will not apply but private investment is still viable under supply contracts directly with the Government.

This philosophy does not necessarily cut the private sector out of the sector. In Qatar for instance, water is "created" by the private sector, provided to the Government at a fixed price per 1000 litres and then passed by the Government to the consumer at a nominal – i.e. lower – cost.

The attraction of the use of private sector players to participate in the provision of these kinds of services is the potential for:

- Increased levels of competition among suppliers;
- Reduced cost of provision of service through competition;
- More modern and higher technology equipment and processes;
- Contracted and verifiable quality standards.

However, such packaging of services becomes a Private Public Partnership (PPP), rather than a full PSP. With the new government in India committed to the concept of "fair" development, these hybrid schemes which allow for public support of private initiatives, may become more and more important. We discuss this more fully in chapter 4 and in chapter 7 under "incentives".

2.3.7 Lack of Standardized Agreements for Private Sector Participation

Concession agreements are a critical element in any private participation project. For all intents and purposes, it is the "asset" which private investors and lenders will look to for security and repayment. Each of the Target States has begun to develop individual concession agreements for certain sectors as a means to promote and facilitate private

participation. We consider there is a need for clarity in the areas (inter alia) of:

- Overall risk balance among parties;
- Tariff setting and adjustment mechanisms;
- Provisions for enforcement of security and concession transfer (e.g., step-in rights);
- Mechanics for determining and paying compensation in the event of termination and force majeure;
- Dispute resolution and arbitration procedures;
- Environmental responsibility and compliance clauses;
- Resettlement and relocation issues.

Risk allocation and sharing should be made with clarity and on a consistent basis. We have prepared model State concession agreements for

- Standalone lease concession BOT
- Roads concession (annuity)
- Urban mass transit concession
- Ports concession
- Bulk water supply concession.

These model agreements are not term sheets per se and we recognise each project is unique in its own right. They contain the standard provisions used as international best practice to allow for the States to use as reference documents to tailor to the particular project as required.

We have based the mock up agreements on existing agreements but ensuring that the above concerns are addressed adequately. The draft standard concession agreements are available for download at www.indiainfrastructureinvestment.com.

2.3.8 *Underdeveloped Local Capital Markets*

From both a practical and policy standpoint, there are significant limitations on India's capacity to borrow foreign currency for private infrastructure. According to the World Bank, it is generally accepted that a sustainable current account deficit for the country is in the range of 3% of GDP p/a. With the current deficit running at over 2% p/a, it is unlikely that offshore funding could provide much more than an amount equivalent 1% p/a of the country's GDP. In general, offshore funding currently plays a fairly insignificant role in Indian private infrastructure projects.

There is a relatively robust domestic project loan market. Among the long-term/development finance institutions (e.g., IL&FS, IFCI, IDBI, and IDFC[4]), the concepts and principles of project finance appear to be widely understood and practiced on a number of small scale transactions. Some institutions such as IDFC are capable of providing loan tenors of up to 15-20 years for the most robust private participation projects. However, we also note that the outstandings of such long-term project debt is not large due to the lack of demand (i.e., limited numbers of bankable projects). Total outstanding credit to private infrastructure as of June 2000 was Rupees 85.4 bn (< 5% of total bank credit). Although the general issuance trend for this segment of the credit markets is upwards, at the current levels of deal flow, availability of finance does not appear to pose an insurmountable issue for project implementation.

However, in the medium to long term this will no longer be the case. Most State Governments as well as the National Government are budget constrained and it is unlikely that they will be increasing the level of financial support channelled for infrastructure going forward. Furthermore, as individual sector reform programs take hold increasing the share of infrastructure developments that can feasibly be undertaken by the private sector, it appears that the long-term bank market alone may not possess adequate liquidity to fund the potential demand created by private developments.

In order to promote more efficient functioning of the commercial bank as well as the capital markets where infrastructure is concerned, there is a need to:

- widen the appeal of project finance credit among the commercial banking institutions; and
- facilitate capital market issuance by non-government issuers.

[4] For full names of institutions please refer to the abbreviations summary at the beginning of this document.

Within both the commercial bank and the capital markets today, the government is beginning to crowd out the private infrastructure developers and other prospective long-term creditors. In the commercial banking market, it is understood that the GOI is the largest borrower given its inherently lower credit risk for lenders. In addition, government security issues account for nearly 75% of the total outstanding stock of debt securities in India and for 90% of the volumes traded on the secondary market.

There are measures that can be taken to improve the attractiveness of project creditors to the domestic financial institutions. Some of these measures are incorporated in the legislative and regulatory recommendations contained in chapter 3 following and further in the discussion of incentives in chapter 7. A more extensive discussion of the various capital based and macro-economic risk factors is provided in chapter 7.

2.3.9 Priority Projects for PSIF-II

The overall number of projects identified by the States that fit the sectoral and other commercial and financial criteria of PSIF-II appears quite limited. Further, those projects that have been identified tend to lack a comprehensive file of detailed feasibility and commercial analysis. This may involve factors such as further resources for evaluation and packaging needed at the State level. As the project was drawing to a close, some of the States were undertaking a significant review of the shelf of projects with the objective of focusing attention on those that had the highest potential for successful PSP.

3

Restructuring the Enabling Environment - Policy, Legal and Regulatory Measures to Enhance PSP

As highlighted in the previous Chapter, we do not consider the policy, legal and regulatory framework (regulatory framework) in the Project States, as being a major impediment to private sector investment. Nonetheless, it remains a key area of focus for this Project. In this Chapter, we take a close look at the individual elements that together define the regulatory framework, thereby setting the background against which the existing policy and legislative frameworks for PSP in the target sectors in each of the Project States are then assessed. We identify constraints to increased PSP and highlight the inputs provided during this Project to address these constraints, as well as the remaining reforms that need to be undertaken. Section 3.1 outlines the individual elements that define the regulatory framework; Section 3.2 looks at the development of investor friendly policies, in regard to both infrastructure in general and sector-specific infrastructure; Section 3.3 examines the effect of other relevant laws on PSP in infrastructure development; and Section 3.4 offers some conclusions and recommendations regarding the regulatory framework for PSP.

3.1 What is the Regulatory Framework?

Without the appropriate policies and laws needed to reassure the private sector of the Government's commitment to PSP,, uncertainty over how private

investment will be treated will certainly diminish investors' interest in so investing. The regulatory framework is normally the cornerstone upon which all other parts of the investment scenario stand.

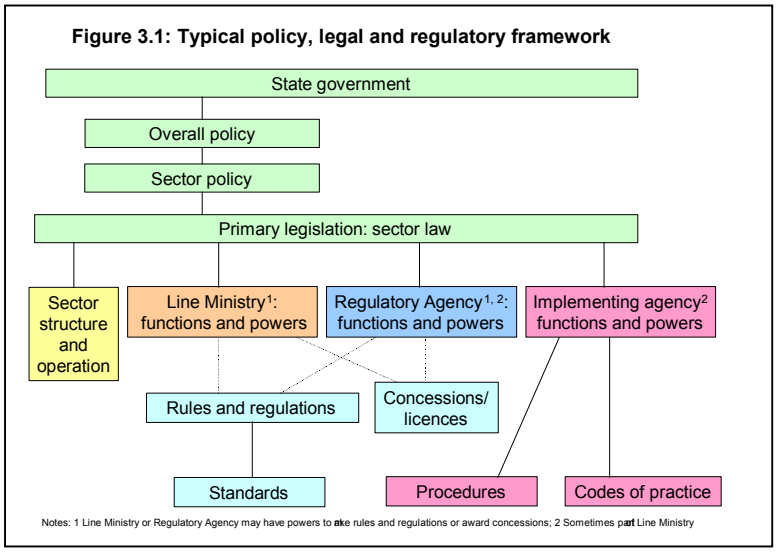
We must take into consideration the various individual elements (Figure 3.1) that together define this regulatory framework, albeit none of them will have the same importance in all the infrastructure sectors under review or in all the four Project States.

3.1.1 Policy Framework

Policy refers to the general principles by which a government, or a government body, is guided in its management of public affairs. Policy, or parts of it, can be made public in the form of a written statement.

Policy, in the context of this TA programme, includes both the overall policy regarding PSP in infrastructure (such as the State Infrastructure Policy, December 2000 issued by the Government of Andhra Pradesh) and sector specific policy (such as the Karnataka 'Policy on Road Development', 1998).

Figure 3.1: Typical regulatory framework



3.1.2 Legislative Framework

In its generic sense, "law" is a body of rules of action or conduct prescribed by controlling authority and having binding legal force.

"Law", for our purposes, needs to be sub-divided into three separate components:

Act or Statute

An act or statute is a written enactment of the legislature, adopted pursuant to its constitutional authority, by prescribed means and in a certain form such that it becomes the law governing conduct within its scope. Although not necessarily so limited, the expression "legislation" is often used as a synonym for a specific act or statute or a body of acts or statutes.

As noted in Chapter 2, the Constitution of India divides legislative power over various subjects, including infrastructure sectors, between the Central Government and the States, with moreover the creation of areas of concurrent jurisdiction. Thus, the Central Government has power to legislate over airports and UMT by railway, the State Governments over state roads, UMT by means other than railway and water supply and sewerage, and both Governments have concurrent power to legislate over power, minor ports, and SEZs (but central legislation takes precedence in the event of conflict).

The (primary) legislation in respect of an infrastructure sector often includes provisions for intended sector structure, operation, and ownership as also the functions, powers and duties of relevant ministries, regulatory agencies and implementing agencies. Of particular importance are the powers to award (and revoke) concessions or licences and to provide subsidiary legislation.

Common law

As distinguished from legislation, "the common law comprises the body of those principles and rules of action, relating to the government and security of

persons and property, which derive their authority solely from usages and customs of immemorial antiquity, or from the judgments and decrees of the courts recognizing, affirming and enforcing such usages and customs; and in this sense, particularly the ancient unwritten law of England.

Common law, while not discussed extensively in this document, unlike for example the various pieces of legislation which exist in the four Project States, has nonetheless a role to play in the interpretation of contracts, such as concession agreements, or equally importantly in filling the legal lacunae which such contracts do not specifically address.

Subsidiary legislation

This last component of the "law" is made up of rules and regulations, as those two terms are used in their narrow, technical sense in India (both at the Central and State level).

Rules

Rules are the general directives issued by Government, in the exercise of specific power conferred upon it by statute , in order to carry out the purposes of a given act of the legislature and subject to public notification in the Official Gazette and sometime, but not always, subject also to further control by the legislature.

Regulations

Regulations are the general directives issued by an administrative agency, in the exercise of specific power conferred upon it by statute, in order to ensure a uniform application of the law and generally to enable it to discharge its functions.

3.1.3 Regulatory Framework

The policy and legislative framework interact with each other to create the general overall regulatory framework for attracting PSP in infrastructure. For specific projects, the regulatory framework comprises:

- the contractual agreements between the government and the developer; and
- regulatory bodies to which the developer's activities are subject.

The contractual arrangements are specific to the project, while the regulatory bodies typically cover all operators that fall under their remit. Such regulatory bodies may be those responsible for monitoring general laws and regulations (eg health and safety), or those specially established for the economic regulation of the sector (eg the State Electricity Regulatory Commissions). This report addresses two essential questions about this generic regulatory framework for the four priority sectors under this TA programme (ie the road, minor ports, UMT and water supply and sewerage sectors):

- what should be included in the contractual arrangements; and
- whether there is a need for a special independent regulator.

To address the first question, we have considered what should be included in a concession agreement in each of the four sectors, and have prepared model concession agreements in Volume 4. In the next sub-section we summarise the key features of such concession agreements. The second question – the need for a special independent regulator in each priority sector - is addressed later in section 3.2.3, but in this section we set out some general principles that should apply if the need for an independent regulator arises.

All concessions are regulated through the contractual arrangements, and we recommend that new independent regulators should only be established if there are special reasons. Well-drafted concession agreements provide a clear and explicit regulatory framework for both parties, while independent regulatory bodies introduce a degree of subjectivity and uncertainty. The incorporation of detailed and specific rules in concession agreements reduces the need for regulatory discretion, and concession agreements can deal with most of the issues that are party specific.

Concession agreements

A concession agreement is an arrangement, in the form of a contract, whereby a private party (concessionaire) leases assets from a public authority for an extended period and has the responsibility for financing specified new fixed

investments during the period and for providing specified services associated with the assets; in return, the concessionaire receives specified revenues from the operation of the assets. The assets revert to the public sector upon expiration of the contract.

Concession agreements are an important, if not the most important, mechanism selected by the Project States, either by law (under the Andhra Pradesh Infrastructure Development Enabling Act, 2001 and the Gujarat Infrastructure Development Act, 1999) or by virtue of sectoral policies, to implement PSP in infrastructure. Such concession agreements, however, operate within the broader legal and regulatory environment and the concessionaire is accordingly subject in the normal way to comply with all applicable laws and regulations (labour laws, environmental and safety laws etc.).

While many aspects of a concession are transaction or sector specific, several key principles related to the award, design and monitoring of concessions are substantially identical across sectors. There is thus a set of core issues or topics that must be dealt with in most concession agreements. These include:

- Allocation of Risks between the Parties
- Price Setting
- Price Adjustment
- Allocation of Responsibilities between the Parties
- Specific Performance Targets
- Penalties and Bonuses
- Performance Guarantee, Insurance and other Security Rights of Public Authority
- Duration, Termination and Compensation
- Force Majeure and other Unforseen Changes
- Dispute Resolution

That said, it is important to note that there is no standard concession agreement. Since these are contracts between two parties, they necessarily must be negotiated clause by clause. The resulting agreement is always unique to the particular situation faced by the specifics of the project. For instance, responsibility for policing, for revenue collection, for unrelated use of land attached to the concession and so on are all areas where special conditions or special agreements are likely. Model concession agreements are therefore used by the participants as checklists to ensure that all the issues have been addressed during the negotiation to the satisfaction of the parties.

We have examined a number of model agreements used to implement concessions in India. By and large, these model agreements are consistent with what is being done elsewhere in the world. In preparing the draft concession agreements in Volume 4. we have therefore focused our attention on those areas where we believe improvements can be helpful in limiting disagreements in the future, and areas where improved wording can enhance compliance with concerns over the environment and resettlement.

The effectiveness of the regulatory framework provided by a concession agreement is firstly dependent on the quality of the agreement, and secondly on the monitoring of the agreement. For example, the pricing rules must be applied, the concessionaire's behaviour must be monitored to ensure compliance with pricing, quality and other obligations, and decisions must be made on the application of sanctions for non-compliance. We recommend in Chapters 4 and 5 the creation of a dedicated unit within the relevant line department to ensure proper supervision of concessions and to conduct any residual public sector functions. This would facilitate the development of expertise and may contribute to the development of professional norms that could strengthen resistance to ministerial direction. In this connection, it might in some instances be necessary to engage the services of highly qualified professionals as outside consultants.

Special independent regulators

In section 3.2.3, we have recommended that an independent regulator should be established for the water and sewerage sector. We have recommended that the other priority sectors should be regulated by concession without the establishment of a special regulator, although we acknowledge that circumstances could arise in which a public passenger transport regulator may be justified to regulate UMT and other forms of urban transport. In the following paragraphs we set out some general principles that should be applied in

developing proposals for an independent sector regulator.

Functions

In a fully competitive industry, with no significant externalities, market forces can determine the appropriate pricing and quality of service. However, in a monopoly or oligopoly, or where there are significant externalities, regulation is essential to control the price and quality of service.

There are three primary regulatory functions:

- Concession or licence award and revocation, i.e. the control of access to the relevant sector.
- Economic regulation in the form of control of "output", prices or profits, and, in some circumstances, "input" expenditures of companies in the sector.
- Quality of service regulation, which includes technical regulation - the control of technical quality such as service coverage, service characteristics and incidents of restriction to service provision and customer service regulation - the control of customer service quality, such as response times to customers' requests and complaints.

Objectives

The objectives, which we consider should guide the choice of scope and form of regulation, are:

- Efficiency. The regulation should encourage both allocative and productive efficiency and should not unduly increase transaction costs.
  (i) Allocative efficiency implies that services should be priced according to the underlying (marginal) cost of service provision.
  (ii) Productive efficiency implies that incentives should be given for service providers to reduce costs.
  (iii) Reasonable transaction costs implies that the scope of regulation should be restricted to those aspects of performance that are essential to meet the regulatory objectives (and should be carefully circumscribed to prevent undue interference in other aspects of performance) and, where possible, should focus on "output" performance measures, rather than "input" performance measures[5].
- Equity. The regulation should balance the interests of all stakeholders in the sector including Government, the utilities and customers within the overall regulatory framework set by law. Other features of equitable regulation are that it should be:
  (i) Non-discriminatory. It should ensure equal regulatory treatment of all parties in the same circumstances (except where explicitly required by Government, for example, to provide essential subsidy).
  (ii) Consistent. For example, in reaching a regulatory decision, the regulator should take due account of its past decisions on similar matters.
- Practicality. The regulation should take due account of practical issues such as making regulation commensurate with the scale, skills and resources of the regulated company.
- Transparency. All regulatory decisions should be published together with clear supporting reasoning (though there would be a need to take account of commercial confidentiality in certain cases); appeal against such decisions should be possible.
- Accountability. The regulation should ensure clear accountability for economic and quality of service regulation with no gaps or overlaps among the regulatory institutions.
- Reduction of regulatory risk. As far as possible, consistent with the above principles, the regulatory risk faced by the company should be minimised. This implies clarity of the regulatory framework and consistency of objectives and actions. It is important that all stakeholders can determine from the overall regulatory framework the objectives of the regulator and its likely position on all key matters. Reduced uncertainty should ultimately

[5] Output performance measures are indicators of what the public experiences and cares about (e.g. in the water sector, drinking water quality, quality of effluent discharges to the environment and the like); input performance measures are simply any other indicators which, if met, may (or may not) help achieve the desired output performance (e.g. type and quantity of raw water or sewage treatment and extent of filtration used).

lead to a reduced cost of capital as the financial markets recognise a lower regulatory risk premium and, in turn, customers should benefit through lower tariffs.

Clearly, these objectives inevitably conflict. For example, a regulatory framework, which ensures economic efficiency (by setting users charges that recover marginal costs), will not be equitable (as it will not allow cross-subsidy for social reasons and it will fail to cover average costs in natural monopolies). Accordingly, there are decisions to be made on the relative importance of the various objectives when adopting a regulatory framework.

Form of regulation

The form of economic and quality of service regulation usually recommended to achieve the above regulatory objectives is as follows:

Economic regulation

Internationally, there are two basic approaches to economic regulation (which may be combined into various hybrid approaches):

- "Price control". This approach determines either the unit price or the revenue, which the regulated business may charge for a period between regulatory reviews (say five years). This price or revenue may be set, in part, by reference to achievable reference costs rather than actual costs.
- "Profit control". This approach allows the regulated business to set its charges to cover its reasonably incurred costs together with an agreed rate of return on its asset base or capital invested in the business.

The main differences between the two approaches are in the degree of risk placed on the regulated company and the consequent incentives and potential reward to the company.

Under the "price control" approach, between regulatory reviews, the company faces risks and advantages relating to the difference between its actual costs and the revenue allowed by the price control: to the extent that its actual costs fall below its allowed revenue, its profits rise; to the extent that its actual costs exceed the allowed revenue, its profits fall. The company thus has a strong incentive to control cost in all possible ways, which without regulatory supervision could lead to under-investment and deterioration in quality of service. The "price control" approach simulates the behaviour of a competitive market under which one firm sometimes gains an advantage (for example through innovation) which leads to above normal profits but this advantage is gradually eroded as its competitors respond.

Under the "profit control" approach, the company is effectively certain it will make the allowed rate of return on capital invested, but has less incentive to control costs as these are passed through to customers and it receives a fixed percentage return regardless of its success in controlling costs. Without regulatory supervision, if its allowed rate of return exceeds its cost of capital, the company may over-invest – that is to invest above the level at which the total of investment and operating costs (including costs of failure to serve) are minimised – as this increases its absolute profits.

These two approaches are not, however, as distinct as it first appears, as for sustainability over the medium-term, the revenue allowed by a price control must allow an efficient operator to cover its costs and earn a rate of return, which is commensurate with the business risks.
Generally, the key lesson from international experience is that "price control" regulation is more suited to environments with relatively predictable costs, which tends to mean relatively steady growth environments with relatively predictable investment, whereas "profit control" regulation is more suited to less stable environments, particularly those which require large investment which cannot readily be awarded by competitive tender and which is unpredictable. The balance between these two forms of economic regulation will depend largely on whether the private sector will be required to undertake investment. If the private sector is to undertake substantial investment, we believe it will be necessary initially at least to adopt an approach that includes some element of "profit control".

In the four Project States, we think that economic regulation may also need to include some control of investment in select infrastructure sectors. While

we prefer to avoid "input" performance measures, we do not think that there is likely to be sufficient baseline data to rely completely on "output" performance measures of service quality in all sectors. Over time, as confidence in the regulatory regime increases, we would expect these "input" performance measures to be phased-out. An alternative would be to require the private operator to provide the baseline data within, say, two years of assuming operation and thereafter for the regulator, with the agreement of the private operator, to rely completely on "output" measures.

Quality of service regulation.

In the case of quality of service, the usual form of regulation is through "output" or sometimes "input" performance measures. In broad terms, the regulator:

- Sets measurable standards.
- Monitors performance against standards.
- Applies penalties for breach of standards (either to affected customers in the form of compensation payments or to all customers in the form of tariff reductions).

In general, in the four Project States, we note that, while adequate standards exist, often the monitoring and enforcement capability is inadequate. However, we see no reason why, with enhanced enforcement capability, this approach cannot be adopted in the relevant infrastructure sectors.

Regulatory agencies

A regulatory agency is a government body, created more often than not by an act of the legislature, responsible for control and supervision of a particular activity or area of public interest.

In the context of the relevant infrastructure sectors, the State Electricity Regulatory Commission (SERC) in each of the Project States is a classic example of a regulatory agency; less classic, but still qualifying as a regulatory agency, is the Gujarat Maritime Board, even though it not only regulates the minor ports sector in Gujarat, but also operates the majority of the minor ports in that State.

In this regard, it is worth noting that there exists a wide variety of international models and limited international consensus on the best approach for the design of regulatory agencies. Much depends on local institutional culture and circumstances. Nonetheless, we have identified below some of the key issues that impact on the design of regulatory agencies; namely, the appropriate degree of independence from the government or the relevant line ministry; the appropriate governance; the accountability of the regulatory agencies; and whether the agencies should be single sector or multi-sector and, if multi-sector, what sectors should be grouped.

Degree of independence

Internationally, newly-created regulatory frameworks seek to separate policy, regulatory and implementing functions and to establish regulatory agencies that can be seen to be independent. We recommend regulatory agencies with fairly full autonomy from government, having decision-making authority but with limited discretion, as we consider that this is most likely to facilitate PSP in the Project States. In India, as noted earlier:

- We are concerned that situations may arise where undue influence is placed by government on regulators.
- Regulatory flexibility requires a strong tradition of impartial independent regulation. In some areas this may not exist in India at the moment. We are concerned that excessive flexibility will be perceived by potential investors to pose unacceptable regulatory risks.

The key conditions for regulatory independence are:

- Adequate decision-making authority. The regulatory agency must be empowered to make decisions and to enforce those decisions without further recourse to government.
- Appointment and dismissal of members of the regulatory agency only by means of a transparent and independent process.
- Adequate funding. There are two broad mechanisms to achieve this:

(i) To allow the regulator to levy fees on the regulated entities, usually subject to a percentage cap fixed by government in the relevant legislation.

(ii) To allow the regulator to charge its costs to the government. Typically, the government provides funds from the state budget as demanded by the regulator (but, of course, the regulator is accountable for those funds and subject to audit by the Comptroller and Auditor General).

- Prohibition against the regulator or members of the regulatory agency holding [or acquiring within five years of completion of term of office] interests in any of the relevant regulated entities.
- Legislation that establishes the above.

The degree of financial autonomy of regulatory agencies varies in India. For example, both the Telecom Regulatory Authority of India (TRAI) and the Central Electricity Regulatory Commission (CERC) have been allowed to levy fees and to set up their own funds. However, the Electricity Act, 2003 empowers the GOI, in consultation with the Comptroller and Auditor-General of India, to prescribe the manner in which the CERC Fund may be applied to meet certain specified expenses of the CERC. The CERC also requires the GOI's approval for the creation of posts.

Governance

Governance is the mechanism for ensuring that good quality, timely decision-making takes place with appropriate input from relevant stakeholders. In the corporate context, governance relates to the composition and decision-making powers of the board of directors (and other senior committees) and the rights given to shareholders and any related contractual provisions. By analogy, in the regulatory context, governance relates to the composition and decision-making powers of the regulator or regulatory agencies and the rights given to Government or advisory commissions.

Internationally and nationally, there exists a wide range of governance arrangements, which could be used as models. The basic choice is between a single regulator and a regulatory agency made up of several members ("commission"). In the Project States, we strongly believe that regulatory commissions should be established as this is the usual practice in India and, by contrast with a single regulator, a regulatory commission, besides possessing potentially greater overall expertise and experience, is:

- Less vulnerable to undue pressure from government.
- Less likely to be captured by the relevant industry.
- Less vulnerable to corruption.

We believe that the SERCs provide the best guide. Accordingly, we suggest:

- Regulatory commissions comprised of either three or five members. An odd number of members ensures that decisions may be taken on a simple majority basis. Fewer members facilitate timely decision-making (but potentially at some cost in terms of quality).
- Appointment of members of the regulatory commission is by means of a transparent and independent selection process, according to clear selection criteria based on experience and qualifications. Appointment will be made by the State Government based on recommendations of an independent selection panel.
- Membership is for a fixed term of at least three years.
- Removal of members of the regulatory commission takes place by due process on the advice of an independent authority (such as the High Court) and is only possible for limited reasons such as incapacity to perform functions, manifest incompetence and the like.
- Regulatory commissions receive, and are required to implement, written public policy directions from the State Government.
- Regulatory commissions take advice on major policy matters, and such other matters as may be requested by the commission, from advisory committees of relevant stakeholders but are not required to follow such advice.

Accountability

Clearly regulatory independence cannot be absolute and regulators must be accountable for their

actions. To ensure accountability, firstly the decision process should be transparent, secondly there should be an avenue for appeals against regulatory decisions, and thirdly there should be external scrutiny of the regulator.

- **Decision process**. We believe strongly that the regulatory decision-making process should be consultative rather than quasi-judicial where possible. A consultative process allows a comprehensive discussion of issues with different stakeholders, yet tends to be less costly and less time consuming than formal hearings, which can become adversarial (particularly where significant sums of money are involved). Of course, certain matters necessarily have to be resolved through a quasi-judicial process, in particular, those where the decision of the regulator involves an award in favour of one party or requires imposition of a penalty. In other cases, the consultative processes should be encouraged. We note that in India, the TRAI follows a consultative process in cases other than dispute settlement, whereas the SERCs follow a quasi-judicial approach.
- **Appeals process**. Clearly there needs to be an avenue for appeals against regulatory decisions. However, appeals should be limited to matters of law or jurisdiction, and not extend to matters of fact. The appellate authority should not deal with the substance of regulatory decisions, unless the evidence presented or the procedure adopted shows that regulatory decisions are unreasonable. The appellate authority could be the High Court or a Tribunal with quasi-judicial powers. We note that the GOI Electricity Act of 2003 establishes an Appellate Tribunal for Electricity, having the powers of a civil court, to hear appeals against orders of the CERC or SERCs. The Supreme Court of India hears appeals against decisions or orders of the Appellate Tribunal for Electricity on limited grounds. We consider that the scope of the Appellate Tribunal for Electricity could be extended to cover other sectors, including water supply and sewerage.
- **External scrutiny**. We recommend that the Comptroller and Auditor General should scrutinise the regulator's accounts and expenses. We also recommend that the regulator be required to table an annual report on its regulatory activities before the state legislature. However, we would not expect the legislature to debate regulatory decisions, which have been arrived at through due process.

Single or multi-sector

The choice between the sector-specific and multi-sector regulatory agency approach is finely balanced. There are a variety of models around the world, some of which were highlighted in figure 2.3 in Chapter 2 above.

The effectiveness of regulatory agencies is largely determined by the factors already mentioned, but there are some differences between single and multi-sectoral agencies. Broadly, the advantages of the sector-specific regulatory agencies approach are that it:

- Provides more industry focus and specialisation.
- Lessens concentration of regulatory power.
- May be more conducive to innovation.
- Allows comparison amongst regulators and hence pressure to improve regulatory performance. However, taken to extreme, this may lead to populist approaches such as seeking to regulate user charges down leading to unrealistic rates of return.

In contrast, the advantages of the multi-sector regulatory agencies approach are that it:

- Facilitates learning across sectors. This is important for new agencies.
- Reduces the risk of capture by the industry.
- Reduces the risk of political interference, as a multi-sector agency is likely to be more distant from individual line ministries than is a single sector agency.
- Facilitates consistent approaches to regulation across sectors.
- Allows resource savings. This is important not only in terms of financial resources but also in terms of human resources as regulatory skills are in short supply and take time to develop.

We lean towards multi-sector regulatory agencies, particularly for network industries and for public passenger transport (PPT), because, at this early stage in the development of independent regulators in India, we place greater weight on the need to reduce potential political interference, to make best use of scare regulatory resources and to behave consistently, than on the need for regulatory focus or concerns about excessive regulatory concentration. However, we do not have strong views and would not rule out sector-specific regulatory agencies either, immediately, or at a later stage when justified by the regulatory workload.

Internationally, multi-sector regulatory agencies have been established on several bases. The main dimensions are extent of coverage of sectors and extent of coverage of economic, technical and customer-service regulation. For example:

- **All regulated sectors**. As an example, the Independent Pricing and Regulatory Tribunal (IPART) in New South Wales is responsible for economic regulation of all monopoly service providers in the state. It regulates electricity, gas, water supply and sewerage and public transport (including both city rail services of the State Rail Authority and the State Transit Authority).
- **Public utilities**. As an example, the New Jersey Board of Public Utilities is responsible for economic, technical and customer-service regulation of electricity, gas, water supply and sewerage and telecom in the state.
- **Metropolitan transport**. As an example, the Strathclyde Passenger Transport Authority (SPTA) in Scotland is responsible for economic and customer-service regulation of suburban rail, metro, buses (operating on non-commercial routes) and ferry services in the greater Glasgow area. It takes advice from the Strathclyde Passenger Transport Executive (SPTE), which implements rail, metro, bus and ferry services in the region. The SPTE is a separate legal entity, but subject to management appointment, direction and budget approval by the SPTA.
- **Energy**. As an example the Office of Gas and Electricity Markets in England & Wales is responsible for economic, technical and customer-service regulation of electricity and gas.

In grouping sectors to form a multi-sector regulatory agency, there are clear synergies in grouping sectors that share common features, including common geography. There can be significant synergy from grouping economic and customer-service specialists, but there is limited synergy from grouping technical specialists from different sectors. Most regulatory agencies include economic specialists and legal, financial and administrative support and hence there is some case for grouping all sectors. However, regulatory agencies dealing with utilities, and hence the public, often include customer-service specialists and thus there is a further case for grouping such agencies.

3.2 The Development of an Investor Friendly Environment

All four Project States profess to support PSP. However, some have made such support a key policy thrust of their governments. When governments change, often policy changes with them. It is therefore important to develop written policies and to use those policies as the basis for legislation, where necessary, in order to enshrine what may be only transient policies on a more permanent basis..

In what follows, we consider first the general infrastructure policy and legislation regarding PSP in the Project States. Thereafter, we present, in tabular form, an international comparison of these general policies regarding PSP. This is followed by a sector-specific discussion of the infrastructure sectors identified for this Project, with particular emphasis on the target sectors.

3.2.1 Overall Policy and Legislation regarding PSP in Infrastructure

In this Section, we examine the existing policy and legislation in the four Project States to encourage PSP in infrastructure in general, including the role of co-ordinating nodal agencies, and assess their

comprehensiveness and effectiveness. Some observations and conclusions are then offered at the end of the discussion in bullet-point form.

Policy

Of the four Project States, Andhra Pradesh and Karnataka[6] have adopted specific State Infrastructure Policies to promote PSP, which include guidelines on matters such as speedy and transparent developer selection, provision of adequate administrative support and reduction in procedural delays and the offering of incentives. In Gujarat, the general policy regarding PSP in the infrastructure sector is laid out in the Gujarat Infrastructure Agenda - Vision 2010, which generates a shelf of projects for development to be undertaken by the public/private sector, and analyses the financial and investment implications for implementing those projects and the private sector investment necessary[7]. Madhya Pradesh does not have a PSP policy generally for infrastructure, which is included in the overall Economic Development Policy, but has formed the Madhya Pradesh Economic Development Board (MPEDB) to plan and monitor project implementation for infrastructure projects with the potential for such PSP.

Legislation

The Gujarat Infrastructure Development Act, 1999 (GIDA 1999) is one of the two examples in the Project States of legislation establishing a State-wide infrastructure authority, i.e. the Gujarat Infrastructure Development Board (GIDB). The other is the Andhra Pradesh Infrastructure Development Enabling Act, 2001 (IDEA 2001), which establishes the Andhra Pradesh Infrastructure Authority (APIA).

The GIDA 1999 was the first such act in India and served as a model for the IDEA 2001, which is a broader and more comprehensive piece of legislation than its Gujarati predecessor. The IDEA 2001 can, in turn, serve as a model for other States. The IDEA 2001 places many of the types of incentives that would be provided to a private developer as provisions of the Act itself. Thus the types of generic risks to be covered in concession agreements and the types of State Support that might be provided are covered in detail in Schedules attached to the Act. Further, a separate Schedule defines ten types of concession agreements covered by the Act. Also, elaborate provisions are made for a Conciliation Board and for compulsory conciliation proceedings, before arbitration or court proceedings may be resorted to for settling disputes. Further, an Infrastructure Fund is mentioned in the Act, although it is now felt that such a Fund might be a separate body with borrowing powers. One possible shortcoming of the Act is that the means of enforcement and level of penalties imposed for any violations there-under may not be sufficient.

As compared to IDEA 2001, the GIDA 1999 has a more comprehensive list of projects that specifically come under the Act and of the types of concession agreements allowed. It is not, however, as explicit with regard to types of generic risks covered by such concession agreements or the types of guarantees and incentives that may be provided by the State. Further, its dispute resolution provisions do not provide for conciliation proceedings. The Government of Gujarat is in the process of framing draft rules under the GIDA 1999. As part of the TA programme, we have reviewed both the GIDA 1999 and draft Rules 2002 and proposed amendments to the same, which include the elimination of the 15% maximum ceiling in respect of government subsidies and incorporation of developer selection process based on direct negotiations for unsolicited proposals in respect of certain projects.[8]

As regards Karnataka and Madhya Pradesh, there is no general legislation for PSP in the infrastructure sector, though Madhya Pradesh has enacted a law fairly recently to raise and deploy funds for select infrastructure projects. The law in question is the Madhya Pradesh Infrastructure Fund Board Act, 2000, supplemented by the provisions of the

[6] The Government of Karnataka is presently considering a revision to the existing Infrastructure Policy. Although we have not seen the new draft Policy, we understand that it aims to clarify the respective roles of the various institutional actors in assisting PSP in infrastructure.

[7] The Government has currently engaged consultants to re-evaluate the shelf of projects contained in the Agenda and to review its PSP programme.

[8] The proposed amendments to the GIDA 1999 and the draft Rules 2002 are included in volume 3.

Madhya Pradesh Infrastructure Investment Fund Scheme Act, 2001. In addition, an Infrastructure Privatisation Act in Madhya Pradesh was mentioned as a means to provide a better environment for private investments in infrastructure and to introduce a transparent process for project privatisation. Such an Act has not, however, yet been drafted.

The question may be posed whether is it better to have legislation or policy? While legislation provides greater certainty as compared with policy, which may be changed on a whim by the government without the need to seek the approval of the legislature, the more permanent nature of legislation may however sometimes prove to be disadvantageous. For instance, the GIDA 1999 limits government support for PSP projects to a maximum of 15%, thereby precluding PSP projects that may be excellent and provide major benefits to the Government, but only at support levels of 25% or 30%. This may be contrasted with the situation in Madhya Pradesh, where the absence of a ceiling on the subsidy contribution by the government has resulted in award of a subsidy of as much as 63% to the private developer of a BOND - BOT road project.

The general policies of the States regarding PSP in infrastructure cannot be said to be specific enough in and of themselves to provide a clear framework for potential private investors. Therefore, as part of the output of this TA programme, we have drafted general legislation for PSP in infrastructure for Karnataka and Madhya Pradesh and provided the drafts, which are based on the GIDA 1999 and IDEA 2001, to the two States for further consideration by the State Governments. [9]

Nodal Agency

The nodal agencies for assisting PSP in infrastructure in Andhra Pradesh and Gujarat are the APIA and GIDB, respectively. In fact, the GIDB, unlike the APIA, has a significant level of staffing to carry out its functions and has been in operation for a longer period. Thus, its experience can serve as an example of the benefits and difficulties facing this type of State-wide infrastructure authority in India.

Karnataka, by contrast, has a complex system, with a number of institutional actors having one-stop shop responsibilities depending on the specific type of project. We understand that the new draft Policy currently being considered seeks to simplify this system and to bring greater clarity to the project development cycle. In Madhya Pradesh, although there has been discussion of the establishment of a State nodal cell to coordinate the development of infrastructure projects for PSP or to expedite the privatisation of infrastructure facilities, there is no nodal agency at present. Rather, in addition to the MPEDB mentioned earlier, the Madhya Pradesh Industrial and Infrastructure Development Corporation (MPIIDC) has been given responsibility for implementing and facilitating public-private partnership projects.

Observations and Conclusions

The following are some observations and conclusions about the general policy and legislation regarding PSP in infrastructure in the four Project States:

- The containing of the necessary specifics in a law and in its implementing rules provides greater certainty than if the specifics are contained in a policy alone. A policy can usually be more easily changed than a law. However, a more specific policy is better than a more general policy.
- A specific law, such as the IDEA 2001 or the GIDA 1999, which covers PSP in infrastructure in general terms, is helpful to the potential investor in so far as it lays down a simple and well-spelled out process for that investor to follow. The more specific such a law, the better. Thus, the Andhra Pradesh legislation provides a clearer road map than does the Gujarat legislation, but it still lacks a basic set of implementing rules.
- The dispute resolution provisions contained in such specific law should provide for

[9] Please refer to volume 3 for a copy of the draft legislation. Within States some difference of opinion on the need for legislation remains. In some states we have been requested by one Department to develop the noted draft legislation while officials of other Departments believe that a well crafted infrastructure policy document clearly laying out the process for investors to follow would be sufficient guidance for investors. We leave this issue for further discussion within States.

compulsory conciliation proceedings, as in the case of the IDEA 2001. In the absence of reference to compulsory conciliation in the law itself, as is the case with the GIDA 1999, this should be incorporated in the various concession agreements entered into under the provisions of the infrastructure law.

- The containing of the necessary specifics in a law provides greater certainty than if the specifics are contained only in a concession agreement, as such agreements develop on a case-by-case basis, even if there is a model concession agreement, and cannot effectively address issues of community standards, community challenge procedures, protection of community interests and so on.
- A coordinating agency, such as the GIDB or the APIA, needs adequate trained staff, financial resources and a clear set of implementing rules, model concession or other agreements and clear procedures for application, in order to effectively promote PSP. The issue of capacity building of nodal agencies is discussed in detail in Chapter 5. As of now, no agency in the four Project States has reached that point, not even the GIDB.
- States should lay out a simple project clearance system as a template for the potential investor. Implementing this simple clearance system and shepherding the investor through it should be a key purpose of a general coordinating infrastructure agency, such as the GIDB and the APIA;
- Neither the GIDA or the IDEA contains any specific mention or reference to the need to examine environmental boundaries as part of the clearance roadmap. There are 'boilerplate' statements, open to wide interpretation and abuse. In contrast, the SPCBs of AP, Karanataka and Gujarat have development project category lists, linking types of projects to environmental requirements. GIDA, APIA and related bodies in the four project states need to take advantage of these environmental 'roamaps' and create a linkage to the SPCBs and have this well defined in their process.

3.2.2 International Comparison of Policies regarding PSP in Infrastructure

Each country develops infrastructure investment and development policies to accommodate its individual historical, political and legal traditions,, requirements and preferences. The following table 3.1 summarises PSP policies for Andhra Pradesh, Gujarat, Karnataka and Madhya Pradesh compared with Thailand, Malaysia and Philippines with broadly similar development in infrastructure.

Table 3.1: International and Indian Comparison of Legislative Support for Private Sector Investment

Thailand	Malaysia	Philippines	Andhra Pradesh	Gujarat	Karnataka	Madhya Pradesh
General Principles The Royal Act on Private Participation in State Affair was passed in March 1992. It formalized Public Private Partnerships procedures. The Act was justified by the fact that the then current review criteria were uncertain. The Act aims at enforcing private sector participation. The Government agencies (department, state enterprise, state agency or local administration) retain responsibility for their projects.	There is no specific Public Private Partnerships Law. Existing laws are used and adjusted as necessary. Privatization is governed by Guidelines on Privatization and a Privatization Master Plan. A prioritized list of projects is established.	The amended BOT law of 1993 aims at mobilizing private resources for the purpose of financing the construction, operation, and maintenance of infrastructure.	The general policy regarding private sector participation and privatisation in the infrastructure sector in Andhra Pradesh is laid out generally in Andhra Pradesh Vision 2020 and specifically in the State Infrastructure Policy (G.O.Ms. No. 427 dated December 18, 2000. That Policy is then reflected in the purpose clause of the legislation establishing the Andhra Pradesh Infrastructure Authority (APIA).	The general policy regarding private sector participation and privatisation in the infrastructure sector in Gujarat is laid out in Gujarat Infrastructure Agenda- Vision 2010, prepared by the Gujarat Infrastructure Development Board.	Karnataka does not have a special agency for coordinating infrastructure projects. The present Infrastructure Policy of Karnataka is set forth in a Government Order dated 26 December 1997. Its purpose is to give potential investors the Government commitment to encourage private sector investment in infrastructure. The process of encouraging PSP is complex, and may only be clarified with the adoption of a new State infrastructure policy.	Madhya Pradesh also does not yet have a nodal agency for coordinating private sector participation in the infrastructure sector, nor does it have a general State infrastructure policy. However, the Madhya Pradesh Economic Development Board (MPEDB) has general responsibilities for both publicly funded and privately funded infrastructure projects.
Sectors Covered The law applies to all"affairs" of all government agencies, state enterprises, government units or local administrations and those using the natural resources of these entities. However, it does not include concessions falling under the Law on petroleum and minerals. The projects are defined as investments in state affairs exceeding a billion baht.	Many sectors have benefited from private investment: ports, roads, power and telecommunication services, urban infrastructure, water supply, sewerage, and hydro-electric generation.	Most sectors in infrastructure are open to private participation. Other sectors not currently mentioned in the law may be added by the authorized agency.	21 infrastructure sectors are covered by the policy, including the 14 such sectors listed specifically in Schedule III of the IDEA 2001, as described in detail above, plus minor ports and harbours, airports and heliports, information technology and telecommunications, industrial/knowledge parks and townships, tourism, education, and metro railroads and other urban transport systems.	Various sectors are covered. The vision relies on power, ports and industrial parks as drivers. It relies on port-led development strategy to attain regional growth and demand for other sectors. Roads, water supply and townships are envisioned as linkage.	The State Government has issued a great number of separate policy statements for specific infrastructure sectors, such as power (1997 and 2001), information technology (1997), roads (1998), special economic zones (2002), and urban water and sanitation (2003).	Though various sectors are open to private participation, road sector projects have had the most success in attracting PSP to date.

Public Support Public support and incentives are determined on a case by case basis. The guidelines of January 1993 for reviewing private sector participation provide that the project owner must provide a preliminary indication of its requirements for public support, such as: application for investment promotional privileges, land procurement, request for Government joint investment and Government protection.	The Government is prepared to make available various financial, commercial, fiscal and other support.	Among other incentives, projects in excess of one billion pesos are entitled to the general incentives provided for in the Omnibus Investment Code	Policy provides for State Support in the form of Administrative Support, Asset-Based Support and Foregoing of Revenue Streams. The latter shall include exemption of all inputs required during the construction period from sales tax, the exemption of the first sale/transfer from payment of stamp duty and registration charges, and the exemption from payment of seigniorage fees and cess on minor minerals during construction of the project.	The State Government or Government Agency may be provided in the following manner: participation in the equity of the project, but not exceeding 49% of the total equity; subsidy not exceeding 15% of the total cost of the project; senior or subordinate loans; State guarantee; opening and operation of an escrow account; conferment of a right to develop any land; and other incentives as deemed fit.	The State Government may offer certain incentives (beyond those already available) to make projects viable. These incentives may include exemption from certain State taxes and the provision of land free of charge.	The Madhya Pradesh Adhosanrachna Vinidhan Nidhi Board Adhiniyam, 2000 (MP Act No. 6 of 2000) (the "Fund Board Act") to offer repayment guarantees for such private sector investments; and Madhya Pradesh Infrastructure Investment Fund Scheme Act, 2001 (MP Act No. 12 of 2001) are two recent pieces of legislation to help raise and deploy funds for infrastructure projects.
Transperency Transparency and competition are the stated basis of the process. Competitive bidding may or may not be used. Cabinet must approve direct negotiations. If there is no responsive bid, the invitation to bid is canceled. If there is one or more responsive bids, a joint venture agreement may be completed, but only if the government benefits.	Competitive bidding is very rarely used in Malaysia. When the project is initiated by the public sector, implementation can be one of two ways. Either the Government directly chooses or nominates a private party to undertake the project, or, if a pre-feasibility study has already been carried out by the Government, it can direct the Privatization Unit to offer the project for direct negotiation with a selected private party or call for a restricted tender of the project.	The concerned Government agencies must include in their priority programs the projects that may be financed, constructed, operated or maintained by the private sector under the Act and must give wide publicity to same. A List of Priority Projects is established by concerned agencies and must be approved by appropriate authorities and widely publicized by executing agencies.	Privatisation mandates will be granted based on a competitive bidding process. Tendering will be to pre-qualified bidders based on their technical and financial competence with their bids assessed for technical and commercial sufficiency.	Selection will be on the basis of open competitive bidding of pre-qualified bidders, first on the technical bid and then on a commercial bid, which will involve only one variable – the concession period. The selection will be based on the evaluation of a High Level Committee set up for that purpose.	The State Government will offer a project through competitive bidding procedures but may enter into a Memorandum of Understanding with any qualified company in the event that competitive bidding does not elicit a response.	An Infrastructure Privatisation Act was mentioned as a means to provide a better environment for private investments in infrastructure and to introduce a transparent process for project privatisation. However, such an Act has not yet been drafted.

Foreign Participation The law does not discriminate between national and foreign participation.	Foreign investment tends to be directed to projects where new technology or expertise is required.	Any individual, partnership, corporation or firm, local or foreign, may participate in public private partnerships. For the construction stage of infrastructure projects, the project proponent may obtain financing from foreign and/or domestic sources and may a engage a foreign or Filipino contractor. If a public utility franchise is required, the operator must be Filipino or the corporation must be owned by 60% Filipinos. (The 60 % requirement is being amended to allow majority foreign ownership).	Foreign direct investments are permitted up to 100% equity in several infrastructure sectors (e.g. roads and bridges; other sectors require approval past a certain equity stake (e.g. 74% for airports).	The State recognises the scope for co-operative, complementary and participative ventures between private (both domestic and foreign) and state sectors. Foreign direct investments are permitted up to 100% equity in several infrastructure sectors (e.g. roads and bridges; other sectors require approval past a certain equity stake (e.g. 74% for airports).	Foreign direct investments are permitted up to 100% equity in several infrastructure sectors (e.g. roads and bridges; other sectors require approval past a certain equity stake (e.g. 74% for airports).	Foreign direct investments are permitted up to 100% equity in several infrastructure sectors (e.g. roads and bridges; other sectors require approval past a certain equity stake (e.g. 74% for airports).
PPP Coordination The National Economic and Social Development Board and the Ministry of Finance support joint ventures with the private sector. The sectoral ministries must take the initiative. An executing agency that desires private participation in any project reports to its responsible ministry with a detailed study and project analyses.	The Government's role is to evaluate the projects and to protect the public interest. The Economic Planning Unit has a central role in policy and decision making on large projects. The Unit reports to the Prime Minister.	The Coordinating Council of the Philippine Assistance Program is responsible for the coordination and monitoring of projects implemented under this Law.	The AP Infrastructure Policy applies to all infrastructure projects implemented with Private Public Partnership (PPP). A government Authority consisting of a Chairman and up to 15 other members, including ex-officio members is responsible for the approval of projects and the monitoring of their execution.	A board, consisting of a Chairman, Vice Chairman and Member-Secretary, and such other members (not exceeding 15), appointed by the State Government, is responsible for enabling, promoting and monitoring private sector investment in infrastructure.	Karnataka does not have a special agency for coordinating infrastructure projects, including private sector participation, similar to the APIA or the GIDB. Instead, there are several agencies, which perform functions to encourage and approve such private sector participation projects.	A Project Planning and Monitoring Unit (PPMU), headed by the Chief Secretary, was to be set up as part of the MPEDB to plan and monitor project implementation for select large investment projects. Infrastructure projects identified as showing potential for private involvement on a BOT or similar model with a minimum investment of Rs. 10 crore were to be referred to the MPEDB.

Tariffs Not covered in the Law.	Not covered in the Guidelines.	Authorized to charge and collect reasonable tolls, fees and rentals for the use of the project facility not exceeding those incorporated in the contract. The Private party may also be repaid in the form of a share in the revenue of the project or other non-monetary payments. Tolls, fees and rentals are subject to approval by government regulatory bodies and must take into account the reasonableness to the end-users of private structure.	Tariff setting bodies and procedures are sector-specific.	Tariff setting bodies and procedures are sector-specific.	Tariff setting bodies and procedures are sector-specific.	Tariff setting is sector-specific.
Unsolicited Proposals The law does not allow unsolicited proposals.	Unsolicited proposals are assessed for desirability.	An unsolicited proposal is not disqualified by the need for Government support, other than direct government guarantees, subsidy or equity. They may be accepted if they involve a new concept or technology, or if there is no direct government guarantee, subsidy or equity or if there is no other offer after the government agency has invited them. The unsolicited proposer always has the right to match the price of other offers for the same project within thirty days.	The Government may directly negotiate with developers for a project, where only State-level clearances are necessary and where no fiscal incentives and minimal inter-linkages are required. Swiss Challenge Approach (used for any Category II (supported) Project initiated by a private sector participant)	Selection of developer in case of unsolicited proposals will be follow the procedure of open competitive bidding and the Swiss Challenge Procedure.	The State Government may execute a Memorandum of Understanding (MOU), valid for a limited period, in cases where the private investor proposes a project that the Government had not contemplated offering to the private sector because it did not appear commercially viable or if he proposes a project that is novel or visionary.	No mention of unsolicited proposals. The selection of entrepreneurs will be on the basis of open and transparent competitive bidding, with equal opportunity to all.

3.2.3 Sector Specific Regulatory Frameworks

This Section looks at sector-specific regulatory frameworks. While all infrastructure sectors are covered in what follows, the focus of our work has been the roads, ports, urban mass transit and water/sewerage sectors. The discussion in respect of each of these target sectors has been organised to first provide an overview of the current status of PSP in the sector, followed by a review of the existing regulatory framework, assessed against the background of the guiding principles set out in Section 3.1. In the process, gaps or constraints, if any, to increased PSP in the relevant sector are identified and suggestions made to overcome such shortcomings. The discussion of each target sector is concluded with the highlighting, in bullet-point form, our observations and conclusions with regard to that sector.

Roads

Background

The roads sector has seen significant PSP in recent years, especially at the national level, as a means of meeting major needs for new or improved roads and severe government budgetary constraints. The National Highways Act, 1956, was amended in 1995, to allow the Central Government to enter into agreements with private parties for the development and maintenance of national highways. Model concession agreements have been developed for large projects (over Rs. 100 crore) and for other projects (up to Rs. 100 crore). A model annuity-based concession agreement has also been finalized. Guidelines for PSP in National Highways were issued in 1997, supported by a number of policy actions, including: (i) according tax exemption to build-operate-transfer (BOT) investors; (ii) ensuring GOI commitment in all construction preparatory activities, including land acquisition and removal of utilities; (iii) enabling GOI to provide grants of up to 40% for BOT projects; (iv) allowing foreign direct investment of up to 100% of equity; and (iv) allowing duty free import of construction equipment.

At present, there are over 25 BOT projects for national highways in different stages of construction or operation. Further, the National Highway Authority has recently notified that a major expansion of its BOT program is underway separate from the current work on the existing National Highway system.

At the State level, too, policies regarding such private sector investment in roads have been developed in each of the four Project States. In **Andhra Pradesh** the general policy regarding road infrastructure is set out in that State's Vision 2020, which views roads as truck infrastructure, constituting the infrastructure backbone of the State. Andhra Pradesh has also announced a more specific road policy, namely the Policy Framework for Private Participation in the Roads Sector, dated 23 September 1997. However, we believe that no State highways in Andhra Pradesh have yet been constructed or improved based on this Policy, although plans for PSP for five toll expressways have been completed. The ten completed and on-going BOT projects in the State are for bye-pass roads and bridges.

Gujarat issued a Road Policy as early as in 1996, which seeks PSP "in a big way", in view of the paucity of budgetary resources for road projects. Gujarat has already completed nine BOT road/bridge projects. In addition, the GIDB and the Gujarat State Road Development Corporation (GSRDC) have identified four projects to be offered to private sector parties. However, the response to recent BOT projects has been poor in the State. GIDB feels that the lack of a clear cut policy regarding Government subsidy, low estimates for traffic levels and questionable prospects when tolling two lane roads are major factors.

Karnataka issued its Policy on Road Development in 1998, which sets forth specific rules regarding financing and concession agreements in respect of PSP. The four-laning of the Bangalore-Maddur section of the Bangalore-Mysore State Highway (SH-17) is the major BOT project to date, under the management of the Karnataka Road Development Corporation Ltd. (KRDCL). The other BOT project is the Sandur Bypass Project being prepared by the Karnataka Infrastructure Development Department (IDD) and the Karnataka Public Works Department, with the Infrastructure Development Corporation

(Karnataka) (iDeCK) helping with project preparation.

Madhya Pradesh has a 10-year road policy, which recognises the need to attract PSP, due to the shortage of Government funds available. As in the other Project States, the main projects under BOT to date in Madhya Pradesh have been bridges and bye-pass roads. Also, maintenance projects have been carried out on the Bhopal-Dewas State Highway and the Indore-Ujjain Road.

Policy

As noted above, all four Project States have road policies, though these vary in their comprehensiveness and legal basis. A review of such State policies is provided below.

In **Andhra Pradesh** the Policy Framework for Private Participation in the Roads Sector, 1997, provides for private participation in State and district roads, which are economically viable. In this regard, BOT concession periods are set at a maximum of 30 years, with the private developer being offered certain incentives, both financial and non-financial. The State Government will carry out all preparatory works, including acquiring land for right of way, utility installation, and resettlement and rehabilitation of affected establishments. Eventual disputes between the parties are to be resolved using the provisions of the national Arbitration and Conciliation Act, 1996. We note further that in addition to the rules set in the State Infrastructure Policy itself, certain rules regarding PSP in roads projects, as for other infrastructure projects in Andhra Pradesh, are found in the IDEA 2001.

Gujarat has the most detailed road policy of the four Project States. It sets out certain Guidelines for PSP in Roads Projects in the State, including the types of incentives that will be considered by the State Government for such projects to help make them commercially viable. Several of these Guidelines, such as those regarding the nature of concession agreements, the process for bidding and negotiation, and monitoring of such projects, have been incorporated in the GIDA 1999, whose rules regarding PSP in infrastructure projects must be considered as well. We note that there are several areas where that Act adds to or contradicts the Guidelines. To take a few examples, the Act would allow a guarantee in respect of the liability of a Government Agency arising out of a concession agreement, while the Guidelines would not; the Act sets a maximum period for a BOT project at 35 years, while no maximum is set in the Guidelines; and the Act makes more explicit that a concession agreement shall contain an arbitration clause.

In **Karnataka** the State road policy contemplates that projects that are commercially viable will be offered to the private sector as BOO, BOT or BOOT schemes in which the Government will participate on mutually agreed terms, while projects that are not individually commercially viable may be combined with viable projects and offered to the private sector. Concession agreements for such road projects generally will be for a period of up to 30 years, with the private operator having the freedom to set tariffs within the framework of existing statutes. Further, the Government reserves the right to enter into a Memorandum of Understanding (MOU) with any qualified company in the event that the competitive bidding process does not elicit a response. At present, these rules regarding financing and concession agreements contained in the policy are in the process of being applied with regard to major roads, with very few parameters set in advance, either in such road policy or in the general State Infrastructure Policy.

In **Madhya Pradesh,** under the Tenth Five-Year Plan (2002-2007), the road sector is given priority with regard to infrastructure development. In addition, the State Government has issued a State Road Policy (2001-2010), under which the following schemes have been initiated to attract private investment: Build Operate and Transfer (BOT); Maintenance Operate and Transfer (MOT); and Public Private Partnership (PPP). In addition, the State Government has formulated Guidelines for such PSP, which are essentially the same as those for Gujarat discussed above. We believe that Madhya Pradesh was the first State to initiate PSP and investment in the construction of roads and bridges as also to carry out road maintenance under such arrangements. The implementation of the Road Policy is monitored by the State Public Works Department, which is currently preparing a detailed scheme for the development of a State

Road Maintenance Fund that would pool toll revenue and road taxes, as well as have the revenue from an additional cess on fuel and taxes on vehicles.

Thus, we note that several initiatives have been taken by the Project States over the past decade with regard to PSP in road projects. However, while most of these effectively cover such PSP, a need has been felt to update some of the State road policies. Accordingly, as part of the output of this TA programme, we have developed a revised roads policy for Karnataka to encourage and guide the process of reform in the roads sector, which can be used as template for updating the roads policies in the other Project States as needed.[10]

The main objectives of the proposed updated road policy are to ensure the provision of a high quality, well maintained, safe and efficient road network and to facilitate the upgrading of the road infrastructure by introducing tolls or direct user charges where possible. Its key features are:

- To establish 20 year strategic targets for road development by category of road, viz. State, Major District, Other District and Village Roads.
- To establish a road fund to complement other sources of funding for road development and road maintenance.
- To support private investment in road development (through open and competitive bidding, Swiss Challenge Procedure or direct negotiation), wherever such investment can be self- sustaining and where such investment will reduce the financial burden of the road development on the State Government.
- To confirm the role of the State government in identifying and evaluating road project to determine those suitable for PSP (either without financial support or with some financial support from the State) and those which are not suitable for PSP and hence which must be funded by the State.
- To confirm the role of the State Government in acquiring land needed for the road development, dealing with issues of rehabilitation and resettlement of affected people, and obtaining all major environmental clearances and approvals.
- To confirm the role of the private sector in developing and operating road projects under concession contracts that define minimum performance standards, allow the private developer to fix and revise tariffs according to the market; and provide for the completed project to revert back to the Government at the end of the concession period.
- To note that, if the concession contract is deemed inadequate for regulatory purposes, a regulatory institution may be established to, among other things:
  - (i) Set safety and environmental standards for the operation of the privatised infrastructure.
  - (ii) Adjudicate and rule on disputes over provision and quality of service.
  - (iii) Rule on entry of new companies where the new company may be in direct competition with an existing company and where such competition is precluded in the concession agreement.
- To review the legal framework and, if necessary, revise/enact specific highways legislation, consistent with the updated policy.

Modifications for Other States

- The revised road policy prepared for Karnataka includes standard clauses, which could be used by other Project States. In this regard, two key areas of difference will need to be addressed by other States for development of their own policies:
  - (i) Summary of current road infrastructure and the hard targets for development of the road system over the next 20 years, since the targets for development are clearly specific to States and will need to be customized; and
  - (ii) While Karnataka has now set up a road fund, supported by a cess on fuel, which will provide a consistent basis for future road funding, both for maintenance and for capital works, the other Project States will not necessarily have a road fund and consequently, funding for road development will need to be linked to the overall State budget.

[10] The full text of this Road Policy Statement for Karnataka can be found on the project web page for download.

Legislation

In general, roads are a State function, based on Entry 13 of the State List of the Constitution. (Article 246, Seventh Schedule). Entry 13 states that States shall be responsible for communications, that is to say, roads, bridges, ferries and other means of communication not specifically listed as the responsibility of the national Government under the Union List. However, Entry 23 of that Union List specifically gives the Central Government authority over highways declared by national law to be national highways. The relevant national legislation is the National Highways Act, 1956 mentioned earlier.

State legislation regarding PSP in the roads sector varies greatly in comprehensiveness among the Project States. Karnataka is the only such State with a State Highways Act, but each of the other States has at least minimum legislation for such participation and for the collecting of tolls by private parties. However, none of those statutes has the implementing rules to provide a precise roadmap for such participation, not even in Karnataka.

Environmental legislation with respect to roads has been greatly enhanced through the definition of what constitutes a road subject to environmental assessment on the basis of it being a new or existing road, the size of the investment, the amount of forest cover to be removed and the proximity to legally protected areas, either at the national or state level. This system is being further enhanced by MOEF's re-engineering of its environmental assessment process[11]. The problem arisis with the qualifiers placed on the categories, in relation to who can evaluation and administer certain, mostly larger EAs. To the states these clauses see arbitrary and considered a continuing grab for power by the central government. Other countries have avoided this problem by stating that whenever a project spills over into another state or has transboundary implications (in India it could be three states), MOEF becomes involved. This seems to be the direction the new draft MOEF regulations are taking.

[11] See www.MOEF.org

Andhra Pradesh does not yet have a specific State highways act, although the enactment of such an act has been considered. Roads are generally the responsibility of the State Roads and Buildings Department, with some roads in the Hyderabad Metropolitan Area being designed and developed by the Hyderabad Urban Development Authority (HUDA). As noted earlier, the nature of concession agreements and the process for selection of a private party are set out in the IDEA 2001. In addition, the State Motor Vehicles Act has been amended to enable the private sector to levy tolls and regulate traffic on toll roads.

Gujarat also does not yet have a separate State highways act. The GIDA 1999 provides the legal basis for PSP in roads as well as in other infrastructure sectors. The legal base for the levying of tolls is through the Gujarat Act No. 9 of 1994, which amended Section 20 of the Bombay Motor Vehicles Act, 1958. That Amendment permits the levying of such tolls for either new construction or improvements of roads or bridges by the party responsible for such construction or improvements, after approval by the Government, but does not have a strong enforcement mechanism. In practice, there also have been problems due to delays by the State Government in issuing toll notification, due to pressures for local users and their representatives.

Gujarat is contemplating the enactment of a new Gujarat Highways Act, 2003, namely "A Bill to Provide for the Regulation of Road Development and Road Transport". This draft Gujarat Highways Act follows the guidelines issued by the GOI for a Model Highways Act. In this respect, we note that the draft Act– whatever other merits it may have - is entirely silent on the issue of PSP in the road infrastructure sector and on the issue of the levying of tolls on state roads, either by the State Government itself or by any other third party.

This is in marked contrast with the GOI's National Highways Act, 1956, which provides clear rules pertaining to PSP with respect to highways covered by the Act:

- Section 7 of the said Act provides for the setting of tolls and other fees for the use of the national highways and of the bridges and

tunnels on such highways. The GOI is allowed to set the rates for such tolls and fees by notification in the GOI Official Gazette. Section 7 creates the legal basis for tolls on national highways, whether collected by the Government itself or by private parties under a concession agreement.

- Section 8-A gives the GOI the power to enter into agreements with private parties for the development and maintenance of national highways. Subsection (2) of this section specifically provides that such a private party may collect and retain fees set for services rendered by him as specified by the GOI. Such fees are to be related to expenditures involved in the building, maintenance, management and operation of the whole or a part of such a national highway, interest on the capital invested, a reasonable return on that investment, the volume of traffic and the period of such agreement. Subsection (3) of Section 8-A further gives such a private party the power to regulate and control traffic on that national highway as required for its proper management in accordance with the provisions of Chapter VIII of the Motor Vehicles Act, 1988.

While it is true that the lack of provisions similar to Sections 7 and 8-A in the proposed Gujarat Highways Act do not preclude future PSP in that State's road infrastructure sector – given the existence of the 1994 amendments to the Bombay Motor Vehicles Tax Act, 1958 and of the GIDA 1999 – we recommend that in enacting a new highway law, care should be taken to address the right of the State to:

- levy tolls on state highways;
- delegate that right of levy to a private investor of its choice;
- enter into agreements with a private investor for the purpose of constructing, operating and maintaining a State highway or part thereof; and
- confer upon such private investor the power to regulate and control traffic on the State highway or part thereof which is the object of the agreement.

Accordingly, we recommend that another chapter should be added in the current draft of the Gujarat Highways Act, namely, "Chapter III-A: Toll Highways", to incorporate appropriate tolling and PSP additions in the draft Act. The full text of the proposed Chapter III-A can be downloaded from the project web page. We have provided two alternative drafts of the kind of provisions that should be adopted in Chapter III-A. The first version is a composite of sections 7 and 8-A of the GOI National Highways Act, 1956 and of sections 19-A, 48-A and 58-A of the Karnataka Highways Act, 1964. Since the provisions of these two Acts are very similar, we have added, for comparison purposes, a second version based on sections 27, 28 and 30 of the South African National Roads Agency Limited and National Roads Act. The same words and expressions used in the Gujarat Highways Act have also been used in our two draft versions. It has also been assumed for drafting purposes that the Gujarat Roads and Buildings Department will be, for the foreseeable future, "the highway authority", in the same way as the Karnataka Public Works Department (KPWD) is the highway authority under the Karnataka Highways Act, 1964.

Karnataka The Karnataka Highways Act, 1964, as amended, along with the Karnataka Highway Rules, 1965, was originally enacted for the purpose of modernizing highway legislation in the State to provide not only rules for construction and development of highways under State control but also to provide a legal basis for the levy of betterment charges to help pay for such highways and their improvements. It also seeks to restrict ribbon development along highways and to prevent encroachment on highways. The Act was amended subsequently to permit the levying of tolls on bridges and roads (Section 48-A) and to allow the State Government to enter into an agreement with any person in relation to the construction, development and maintenance of the whole or a part of a highway (Section 19-A). This gives specific legal standing to concession agreements for highway construction or rehabilitation.

The Highways Act and Rules are broadly satisfactory in terms of tolling and PSP and can serve as a model for other States. However, no "terms and conditions" have yet been prescribed

under subsection (2) of section 19-A of the Act. We recommend that this omission be remedied. Further, the Act does not contain the types of specific provisions regarding concession agreements, incentives and State Support for PSP found in the Gujarat and Andhra Pradesh Acts establishing general infrastructure authorities. Those provisions give a clearer picture to the potential investor of the rules regarding his investment.

In **Madhya Pradesh,** the levying of tolls for the new construction on roads and bridges, as well as for their improvement, has been specifically permitted by an amendment to the Indian Tolls Act, 1951. Madhya Pradesh does not yet have a separate State highway act, but the Madhya Pradesh Highway Bill 2001, based on the guidelines for a Model Highway Act issued by the GOI, is pending concurrence of the GOI.[12] The Madhya Pradesh Highway Bill, 2001 also needs a Chapter III-A similar to the one outlined for the draft Gujarat Highways Act. However, since Madhya Pradesh does not have a general infrastructure law similar to the GIDA 1999 there is a need to modify both versions of Chapter III-A recommended for the Gujarat Highways Act. These modifications can be seen in the full text of Chapter III-A downloadable from the project website.

With the enactment of a State Highways Act and the establishment of the proposed State Road Maintenance Fund mentioned above, Madhya Pradesh would have in place the key elements of modern State road legislation. However, for PSP, it would still be important to have the types of exact provisions found in the Andhra Pradesh and Gujarat infrastructure authority legislation.

Overall regulatory framework

Regulation in the road sector usually means regulation in the road *transportation* sector. The scope for regulation in the road *infrastructure* sector is more narrow. It becomes even narrower if it is focused, as should be the case in this TA programme, on simply allowing and encouraging PSP in the construction, maintenance and operation of roads. The main instrumentality used in the four project states to allow and encourage PSP in the road infrastructure sector has been BOT- type concessions, more particularly limited to existing roads (i.e. roads that are rebuilt and enlarged, rather than built for the first time on a new right of way). BOT-type concessions[13], together with Operation and Maintenance concessions[14], are the two types of concessions most frequently used in the road infrastructure sector (the expression "road concessions" is used in what follows to describe both types of concessions). As part of the output of this TA programme, we have prepared two example concession agreements for the roads sector, one for standard BOTs and one for Annuity Based BOTs which can be found in Volume 4 of this report series.

While it is concession contracts that allow PSP, it is the regulatory framework of the relevant jurisdiction where these contracts are entered into, and performed, that makes the contracts viable. Important aspects of regulation with respect to road concessions include:

- Basic enabling legislation;
- Selection of concessionaire; and
- Basic contractual framework.

We make recommendations on each of these aspects below:

[12] The GOI had refused to accept the Madhya Pradesh Highway Bill, 2001, as originally drafted. In addition to a number of very minor changes, the GOI asked that Chapter VII of the proposed Bill ("Levy of Betterment Charges in lieu of Diversion Premium") be removed. A revised draft has been sent to the GOI for final approval and the enactment of the Bill into law could happen sometime in 2004.

[13] Under a BOT (Build-Operate-Transfer) type of concession, important investments for an initial construction, upgrading or major road rehabilitation component, and consequent mobilisation of private funding sources, are required from the concessionaire, which are to be repaid from the revenue collected from road users (usually by way of tolls)..

[14] Operation and maintenance concessions are used when it is the government objective to have the private sector operating and maintaining an already existing road or road network. The private sector then typically charges user tolls to help finance the improved operation and maintenance of the road. Such a concession shifts the financial burden of operation and maintenance from the government to the road users.

Basic Enabling Legislation

To enable PSP in State roads through road concessions it is important that:

- The relevant jurisdiction passes a law allowing the government to cede some of its authority to the private sector with respect to the construction, operation (especially the levying of tolls) and maintenance of road infrastructure.
- Such law, or another law, identifies the state agency responsible for overseeing the bidding, construction, operation and management of the authorised projects.

Selection of the concessionaire

While there is nothing to prevent a private investor from taking the initiative to submit to the Government a proposal to construct, operate or maintain a road, the initiative usually comes from the Government or one of its agencies. Unless the Government or the agency enters immediately into direct negotiations with a preferred private investor to grant it the concession, the selection of the concessionaire is usually done through competitive bidding. This requires – before the bidding commences – the elaboration of clear rules as to how the selection process will unfold.

The process of bidding for, tendering, and awarding a concession should be done according to criteria understood and recognised by all potential bidders so as to inspire confidence in the fairness and transparency of the selection process. Moreover, most international financial institutions, such as, for example, the ADB[15], require a transparent, competitive bidding process as a condition of financing for major PSP projects. The bidding process in awarding a road concession to a private investor is both time-consuming and costly. As a result, potential investors will only bid if they are confident that the process is transparent and fair, in addition to considering whether the proposed project is commercially sound.

[15] The position of the ADB is given in the "Guidelines for Procurement under ADB Loans" (February 1999).

As noted earlier, Andhra Pradesh and Gujarat already have in place such a legal framework for the selection of a concessionaire in the road infrastructure sector by way, respectively, of the IDEA 2001 and GIDA 1999; Karnataka and Madhya Pradesh, however, do not.

Basic contractual framework for the concession

While not absolutely necessary, a concession law can be useful in dictating or shaping key elements of the concession agreement, without necessarily turning that document into a contract of adhesion and removing the need for negotiations between the State and the concessionaire. Such law should at the minimum:

- Provide for the maximum duration of the concession, either by way of a pre-determined fixed amount of years or under some formula by which the concessionaire is able recover its investment and obtain a satisfactory rate of return.
- Define key concepts in the concession agreement, including standards with regard to the expected performance by the concessionaire.
- Set standards and methods of toll collection, including specifying the toll system, and identify any exempt traffic or vehicles.
- Set out the State's obligations toward the concessionaire with respect to land acquisition or extend to the concessionaire its own right of expropriation.
- Address the methods of financing the construction or rehabilitation of the road infrastructure, including specifying the maximum extent of any direct financial support by the State to the concessionaire (for example, through grants, capital and operating subsidies, tax relief, provision of land, etc.).

Regulatory agency

Any discussion pertaining to a regulatory framework for the road infrastructure sector must consider the usefulness of establishing an independent regulatory institution within that framework. We consider that creating an independent regulatory institution for the sole purpose of regulating road concessions would not be useful. This is because:

- Tariffs cannot be fixed by an independent authority as they are usually fixed in the concession agreements.
- There are few road concessions to supervise in any of the project states.

However, this does not mean that the proper implementation of the road concession should not be monitored. Any delegated responsibility must be checked and concessionaires in the context of PSP in road infrastructure are no exception. Someone should certainly be responsible for this checking and generally for making any investigations, inspections or audits necessary to ensure that the concessionaire is properly carrying out his responsibilities. But such monitoring does not necessarily entail the creation of a special independent authority.

One simple approach to monitoring is to require the concessionaire to provide information on its activities in the form of documents, whose content and frequency are clearly specified in the concession agreement and to provide for an annual audit (or audits at other fixed intervals) of the concession by an independent auditor[16]. A more comprehensive approach is to create a special unit, potentially within the State department responsible for transport, which will ensure proper supervision of concessions and other contracts with the private sector[17].

Observations and Conclusions

- The road **policies** of all the Project States, except Madhya Pradesh, should be updated to ensure the provision of a high quality, well maintained, safe and efficient road network and to facilitate the upgrading of the road infrastructure by introducing tolls or direct user charges where possible. The revised roads policy developed for Karnataka can be used as a template for updating the roads policies in the other Project States.
- All the Project States, except Karnataka, should adopt general highway **legislation**, based on the guidelines issued by the GOI for a Model State Highway Act. Such legislation should most definitively incorporate the provisions with regard to tolls and PSP, as discussed earlier in connection with the draft highway legislation for Gujarat and Madhya Pradesh. For Karnataka, "terms and conditions" under subsection (2) of section 19-A of the Act should be prescribed and detailed implementing rules be framed regarding the types of participation permitted, the incentives that may be offered, and the types of State Support that may be provided.
- Andhra Pradesh and Gujarat should create a road fund for road development and road maintenance, as already proposed in Karnataka and currently under consideration in Madhya Pradesh.
- A comprehensive **concession contract** should be the primary regulatory instrument, In this regard, the draft concession agreement provided as part of this TA programme may be considered for adoption by the Project States. A special unit, potentially within the State transport department could be created to ensure proper supervision of concessions and other contracts with the private sector.
- The road sector in India has been innovative in its use of annuity based BOT structures. The annuity BOT together with the capital support BOT are the two most common styles of PSP in the sector. A recent review by the ADB has recommended further development of the annuity BOT model to include toll collection and retention by the operator as a contract enhancement and transfer of risk to the private sector. We agree with this suggestion and we recommend that the States review this option as a means of enhancing PSP in state road development.
- Creation of an independent **regulatory body**, for the sole purpose of regulating toll roads and the private party operating them, is not justified at present, as tolls are specifically fixed in the concession agreements and there

[16] Section 19 of Madhya Pradesh's Standard Road Concession Agreement is an example of such an approach.

[17] A good example of this solution fully fleshed-out (in respect to a hypothetical railway concession in "Ifrika") can be seen in Word Bank SSATP Working Paper No. 64 - "Concessioning the Ifrika Railway: A Case Study" by Karim-Jacques Budin (May 2003), at pages 90-94.

very few road concessions to supervise in any of the four Project States.[18]

To summarise, we note that the road sector is reasonably well served in India with extensive use of concessioning at both the Central Government and State Government level. The concession agreements used for investments in the road sector are well established and cover a variety of types of private sector investment. Some of the agreements are now quite mature and in some cases the concession period is reaching its final stages. While more consistent treatment of commercial issues in the draft Acts currently under development in the Project States would be attractive to the private developers, it has not overly impeded investment to date. In fact, the road sector is one of the bright areas for PSP in India and is likely to be one of the key areas for expansion of investment in the future.

Power

Power is the infrastructure sector, which has seen the most policy initiatives regarding PSP and the establishment of a modern regulatory framework. The recently enacted national Electricity Act, 2003 provides a comprehensive legal basis for reform at both the State and national level. It provides a more clear-cut and streamlined process for policy formulation in the sector, than the ad hoc measures enacted previously. The main emphasis is upon the corporatisation of distribution bodies and upon the establishment of regulatory bodies at the Central and State level. As noted earlier, the regulatory structure adopted by the power sector can serve as a model for other infrastructure sectors as well.

The important features of the Electricity Act 2003 with reference to facilitating PSP are set out below:

- The de-licensing of power generation thus enabling the concept of merchant power plants to take root.

- Provision for trading of power and facilitating the same by mandating open access to transmission and distribution networks within a defined time frame.
- Allowing the operation of multiple distribution licensees within the same geographic area.
- Unbundling State Electricity Boards so that independent transmission utilities, which, are required to implement open access, can be put in place.
- Encouraging the progressive elimination of cross-subsidies so that tariffs come to fully reflect the cost of supply and thus ensuring the development of the power business as a commercially viable business proposition.
- Ensuring that subsidies are provided for by the State Government thus ensuring that welfare measures are implemented in a transparent manner without engendering the financial health of the entities in the power sector.
- Requiring compulsory metering of electricity within two years, plus the power to disconnect supply on default in payment due as well as stringent anti-theft of power provisions.
- Provision for the Central Electricity Regulatory Commission (CERC) and also for independent regulators at the State level- the State Electricity Regulatory Commissions (SERCs).

This national Act prevails over State Electricity Reform Acts because State Acts for matters on the Concurrent List under the Constitution (as is electricity) must also be approved by the Central Government and give way to Central Government legislation on the same topic. The sections on electricity distribution, compulsory metering and tariff determination are of special interest to potential private investors.

Each of the four Project States has reform policies and legislation for the power sector developed in the late 1990s, based upon national level reform but prior to the enactment of this comprehensive Act. Each State has constituted a State Electricity Regulatory Commission. Each has signed a Tripartite Agreement, Memorandum of Understanding and Memorandum of Agreement

[18] As far as we are aware, Karnataka is the only Project State considering the establishment of a separate road regulatory institution, though Madhya Pradesh is considering establishment of a State Highway Authority. Some suggest that the Karnataka State Highways Authority (KSHA) could be strengthened and could function as regulatory institution, until a critical mass of road concessions have been granted when a separate regulatory institution could be created. We understand that the KSHA is chaired by the additional chief secretary and, being separate from the KPWD, might provide some comfort to concessionaires in dispute with the KPWD.

with the Central Government to implement power reforms in a phased manner. Each State has corporatised its State Electricity Board into subsidiaries handling generation, transmission and distribution. Except for Andhra Pradesh, each Project State has enacted legislation to set stringent penalties regarding theft of electricity.

At present, these policies and laws are still in the process of implementation. The electricity regulatory bodies have been established but are only just beginning to function and do not yet have the necessary implementing rules. In particular, the following challenges remain at the State level to enhance private sector participation in the power sector:

- Successful corporatisation/ privatisation of the distribution companies established after the break-up of the State Electricity Boards.
- Rationalisation of retail electricity tariffs.
- Maintenance of regulatory independence by the State Electricity Regulatory Commissions and the effective discharge by those Commissions of their adjudicatory functions.
- The framing of appropriate implementing rules by the State Electricity Regulatory Commissions in key areas, including:
- tariff determination;
- introduction and determination of open access;
- prevention of anti-competitive behaviour (such as common ownership of transmission and trading activities).

The power sector is not a priority for private participation under this TA programme. However, progress in preparing such implementing rules and in the successful privatisation of the electricity distribution companies can be monitored for lessons with regard to other infrastructure sectors. In addition, its regulatory structure may serve as a model for other sectors, especially for water and sewerage.

Minor Ports [19]

Background

Ports are an important infrastructure sector for three of the four Project States; the exception is Madhya Pradesh, which is landlocked. Accordingly, several initiatives are being taken by these States to develop and improve the performance of their minor ports sector.

Andhra Pradesh, in its general policy document, "Vision 2020", identifies ports, along with roads, as trunk infrastructure constituting the infrastructure backbone of the State. As of September 2003, the ports of Kakinada, the LNG Terminal, Krishnapatnam and Vadarevu had been privatised in the State. In addition, the concession agreement, shareholders' agreement and State Support Agreement for the green-field Gangavaram Port was signed on 7 August 2003.

The **Gujarat** Vision 2010, too, concentrates on ports, together with power and industrial parks, as 'drivers' for infrastructure development in the State and relies on port-led development to attain regional growth and demand for other sectors. The Gujarat Maritime Board (GMB) - the nodal maritime authority for the State - is now facilitating the development of six privatised and four joint venture green-field ports.

Karnataka intends to develop three minor ports in strategic locations and to co-ordinate port development with associated industrial estate development and infrastructure development. Unfortunately, however, Karnataka's ports plan does not seem to have taken off, as much of its coastline falls in the sensitive Western Ghat belt, thereby giving rise to environmental concerns. The Karwar Container Port is the major private sector port project in the State, where the private developer will both build new container facilities and rehabilitate existing facilities.

[19] Ports in India are classified into major ports, under the jurisdiction of the GOI, and minor ports, under the jurisdiction of the respective States within whose confines such ports are located. For the purposes of this TA programme, we are concerned only with minor ports in the Project States.

Policy

National Level [20]

PSP in the ports sector has been a major emphasis at the national level since the issuance of the Guidelines on Private Sector Participation in Ports on 26 October 1996. This was followed in 1997 by the additional Guidelines for Private Sector Participation in Ports Through Joint Ventures and Foreign Collaborations. The 1996 Guidelines set rules for private sector participation in major ports that have influenced State port policies with regard to other ports. Further, the 1997 Guidelines permit a major port to form a joint venture to assist a minor port.

The 1996 Guidelines cover such matters as the areas identified for privatisation (leasing of existing port assets as well as construction of new assets), including port handling and pilotage, the leasing of existing port assets to the private sector for a maximum of 30 years, and the construction or creation of additional assets for a maximum period of 30 years on a BOT basis. They also cover general tender conditions, including open, competitive bidding and a two-stage system of technical and price bids. Foreign investors with the necessary clearances and registration under the Companies Act, 1956 are qualified to bid. Labour conditions for a new project are set by the port authority concerned. In addition, the recommendations in the Guidelines regarding the establishment of an independent tariff regulatory authority for major ports under the Major Ports Trust Act, 1963 was implemented in 1997 with the establishment of the Tariff Authority for Major Ports.

The 1997 Guidelines for Private Sector Participation in Ports Through Joint Ventures and Foreign Collaborations expands the basic rules to allow a number of types of joint ventures, including a joint venture between a major port and a minor port, related to the improvement of existing minor ports for the coordinated development of both the major port and minor port. Such improvement may include supporting infrastructure, such as roads, railway and civic and urban facilities, which are required for the efficiency of that port. The joint venture company concerned may include private companies but if so, the collaboration is limited to 30 years, as above, for leasing of port assets by the private sector. The 1997 Guidelines amend the earlier Guidelines to state that at the end of such concession period all assets will revert back to the port, not free of cost, but in accordance with the agreement between the parties.

State Level

State port policies reflect the above national Guidelines for port PSP as well as general policies for PSP regarding all infrastructure sectors.

Andhra Pradesh was one of the first maritime states in India in 1994/1995 to recognize the need for increased port infrastructure and the central role required for the private sector to meet that need. Its Vision 2020 forecasts that four to six large ports will be created by 2020, in addition to other ports "…developed for captive use and linked to specific growth engines". A more specific port policy has been prepared by the APIA, which provides that port privatisation is based on a Build-Operate-Share-Transfer (BOST) or Build-Operate-Maintain-Share and Transfer (BOMST) approach over a 30 year concession period with the possibility of extension and an in operation period of five years on leased Government land. The developer is given the freedom to fix the tariff and to set his own employee policies, as well as right of first refusal on new port activity within 30 kms.

Gujarat announced a Port Policy in December 1995, which integrates the development of ports with industrial development, power generation and infrastructure development. One objective of the Policy is: "To attract private sector investment in the existing minor and intermediate ports and in the new port locations." The 1995 Port Policy was supplemented on 29 July 1997 by BOOT Principles to serve as a framework for the involvement of the private sector in port construction and operation. These provide for, among other things, a concession period of 30 years based on a lease, equity participation by the State Government, tax

[20] Although major ports are not an area of focus for this TA programme, we briefly discuss the Guidelines formulated by the GOI for projects in major ports, as the State Government initiatives are modeled on these Guidelines

concessions, and operational autonomy and complete flexibility to the developer to set and collect tariffs.

As part of the output of the TA programme, we have reviewed the 1995 Port Policy and 1997 BOOT Principles against the GIDA 1999 and the draft Rules 2002 with a view to making recommendations on how to deal with any discrepancies. We note at the outset that in the case of any inconsistency between the Port Policy/BOOT Principles and the GIDA Act/ draft Rules 2002, the latter will prevail. Nevertheless, we have categorized differences between the two into separate groups to suggest ways in which these may be resolved. These are:

- Matters specified in the Port Policy/BOOT Principles, but not dealt with in the GIDA 1999/ draft Rules 2002, will continue to apply; most of these matters have been included in the model port concession agreement finalized in March 1999.
- Matters specified in the GIDA 1999/draft Rules 2002, but not dealt with in the Port Policy/BOOT Principles, may, to the extent considered necessary, be included in any updated port policy/BOOT principles issued by the State Government.
- In the case of any inconsistency between matters covered both by the Port Policy/ BOOT Principles and the GIDA 1999/draft Rules 2002, the provisions of the Port Policy/BOOT Principles will only apply if these may be reconciled with corresponding provisions of the GIDA 1999/draft Rules 2002.

The full text of such review is available on the project website for download.

The ports policy for **Karnataka** is set forth in a Government Order dated 12 February 1997. With regard to PSP, the Policy is aimed at attracting investment for the development of existing minor ports as well as for green-field locations. The modes of PSP contemplated by the Policy are in the form of BOOST concession agreements for a period of up to 30 years. Further, the State Government will acquire and allot lands and may offer incentives to enhance the economic viability of projects, the private party would be licensed and relevant Government assets would be leased to the private sector in return for a fee.

Based on the review of the present GOI Guidelines and policy initiatives of the various State Governments, we have recommended certain guiding principles for ports infrastructure, which may be adopted by the maritime Project States, particularly with a view to facilitating PSP.[21] We note at the outset that State Governments should adopt a flexible and responsive approach in dealing with the emerging challenges of the ports sector and periodically review and assess the status of the sector to identify required changes in policy. At the same time, frequent and unnecessary changes in the policy should be avoided to provide a predictable and stable investment climate for the large and long-term investments required in the sector.

While the environmental controls governing port development are outwardly simple, namely that major ports are under the control of the central government and minor ports are the responsibility of the state government, intermediary regulations regarding sighting, size of operations, proximity to sensitive areas means that regulatory control rests with at least three levels of government. A condition well suited to graft and unfair practices, playing heavily in the low level of private sector investment in minor ports. This is the situation despite considerable mobilization by the states. For more than a decade, India's maritime states have petitioned the central government to delegate all minor port related environmental controls to the state where the facility is located, and let the state deal with the regional and district level controls. The central government's role as a quality control monitor and technical capacity building entity is important and should remain.

- **Integrated approach**: Port sector development should be undertaken in the context of overall economic development as well as development of related infrastructure such as environment friendly tourism on both the landside and on the water. Minor ports

[21] A more detailed discussion of the ports sector, both nationally as well as that the level of the Project States, along with the key requirements of any policy initiatives may be found on the project website.

rarely survive as single industry or single sector facilities. Therefore, consideration must also be given to maintaining suitable conditions at ports to attract multisectoral users, including those need clean, quite and healthy conditions at ports. Thus, availability of interconnected infrastructure would be an important consideration in identifying and prioritizing port locations for development. Similarly, linkages would be planned and developed as an integral part of port development.

- **Financing**: The Government should only make such public investment in port infrastructure as is necessary to serve as a catalyst to private investments. To encourage PSP in port projects, flexible, innovative and responsive approach to contractual and fiscal terms should be adopted. In this regard, options such as annuity and management contracts should be explored as possible alternatives to the BOT model and its variants which are currently viewed as the sole mechanism for PSP in the ports sector. In addition the State Governments should consider incentives such as exclusivity provisions in the concession agreement and transport connectivity.
- **Competition Issues**: Ports infrastructure should be integrated with the road and rail networks to increase inter-port competition. Intra-port competition should also be encouraged wherever possible and new facilities concessioned to multiple providers. The concession agreement should also be designed in such a manner that there are no restrictions on developing competing facilities
- **Labour Reforms**: Necessary labour reforms should be undertaken, including the designing of an appropriate voluntary retirement scheme for excess staff, and proper training to improve the performance and productivity of employees.
- **Regulatory Issues**: The Maritime Boards or ports departments should only act as regulators and facilitators of services and leave the operational aspects to the private sector. Issues such as licensing, tariff regulation, environmental protection and safety, should be reviewed periodically to assess the need to strengthen regulation.
- **Maritime related industries:** Ship- building, ship repair,, the provision of dredgers and other flotilla units, like tugs, barges, launches and support crafts, should be developed around new ports by suitably sharing the waterfront and the common infrastructure among these various industries.

Legislation

Ports, declared by law to be major ports, are placed in the Union List of the Constitution and are administered under the Indian Ports Act, 1908 and the Major Port Trusts Act, 1963, as amended. Central legislation also governs rules regarding maritime shipping and navigation on tidal water and port quarantine. Port matters may also be handled by uniform international rules set by maritime conventions of which the Government of India is a signatory.

Ports, other than major ports, are a concurrent responsibility of both the Central Government and the State Government, and are governed by the Indian Ports Act, 1908. The said Act grants powers to State Governments with regard to all ports within their jurisdiction, which have not been designated as major ports.

Andhra Pradesh has not passed any legislation in the ports sector and acts by way of the Indian Ports Act, 1908. We note further that minor ports are covered under Item 15 of Schedule III of IDEA 2001, thereby making it applicable to all port projects implemented through public private partnership.

Gujarat has enacted the Gujarat Maritime Board Act, 1981 to establish the GMB, which reports to the Department of Ports and Fisheries, and to vest it with the administration, control and management of minor ports. Moreover, the GIDA 1999 provides for the participation of the private sector in the financing, construction, maintenance, and operation of "projects", which projects include ports (other than major ports) and harbours.

At present, a long-term Port Development Gujarat Programme (PODEG) is being carried out by a joint Indian-Dutch venture. Its recommendations include two draft laws - one for creating a revised GMB (the Gujarat Ports Authority), and the other to create an

independent port regulatory authority (the Gujarat Maritime Authority).

As part of the output of this TA programme, we have reviewed the two draft Acts to examine whether there exists proper separation of powers and functions between the two Authorities; whether the draft Acts allow and encourage PSP in marine and port services and facilities, and further, whether there are any overlaps/discrepancies between the said Acts. While a detailed discussion of these issues with reference to relevant provisions contained in the draft Acts can be found on the project website, our conclusions regarding the same may be summarized as follows:

- The division of responsibility between the two Authorities, as proposed by the draft Acts, may not achieve the objective of separating service delivery and development from regulatory functions. Thus, the Gujarat Maritime Authority may encounter a very real conflict of interest when acting as a marine services provider under the circumstances contemplated in the proposed Act, and also as a regulator.
- Both draft Acts contain provisions aimed at allowing and encouraging PSP, and require their respective Authorities to enable effective competition in the provision of services and facilities. In this regard, we suggest that the responsibility of promoting effective competition in the provision of both marine and ports services should rest primarily with the Gujarat Maritime Authority. We note, further, that any provisions of the draft laws concerning PSP, including any implementing rules, would need to be integrated within the wider framework for PSP provided by the GIDA 1999.
- There is considerable overlap between the powers and functions of the proposed Authorities as well as some discrepancy between the provisions of the two drafts with regard to the transfer and vesting of the property of the GMB.

Thus, while Gujarat is clearly at the forefront in establishing State laws for port development and regulation, the relevant provisions of the draft Acts would have to be amended suitably to address the above issues, before the draft Acts can serve as a basis for preparing a comprehensive port regulatory framework for the State as also for the other maritime Project States.

Karnataka does not have a general State ports law, like the Gujarat Maritime Board Act, 1981. However, the Karnataka Ports (Landing and Shipping Fees) Act, 1961 provides for the setting of tariffs by the State, through the Director of Ports and Inland Water Transport of the State Public Works Secretariat, for the use of port facilities and services.

We do not, however, recommend that similar legislation be introduced in Gujarat and Andhra Pradesh. Instead, we set out suggestions for a draft scheme for regulating minor port fees and tariffs, which would allow port authorities, port facility operators, marine port services providers and port services providers the freedom to set their own fees and tariffs, while at the same time allowing the relevant regulator to control potential abuses such as unreasonable, discriminatory or predatory pricing. [22] For Karnataka, this would involve the repeal of the existing Ports (Landing and Shipping Fees) Act, 1961.

We note, further, that if draft ports legislation prepared for Gujarat are suitably amended to ensure the proper division of responsibility between the two proposed Authorities, as also the assignment to the Gujarat Maritime Authority of regulatory functions with respect to port services and facilities, including matters related to the fees charged for these port services, there should be no difficulty in designating the Gujarat Maritime Authority as the 'Regulator' for the purpose of the draft scheme referred to above.

Regulatory framework

The port sector is usually regulated by a port law that includes the establishment of an agency or authority that will govern ports within the relevant jurisdiction. There are three approaches to establishing a port agency or authority:

- **Single port agency.** A central port agency, either the minister responsible for

[22] The full text of such draft scheme is available in volume 3.

transport/shipping and navigation or an independent body, is responsible for all the ports and port facilities within the relevant jurisdiction. Such an approach is not always the best solution in terms of regulatory framework for the port sector since it can undermine competition in the sector and excludes any meaningful local/municipal participation on the governing council or board of the central port agency (which is important given the social, environmental and cultural interaction between a port and its associated city).

- **Autonomous port authorities.** Autonomous port authorities can be created for each port, either within the framework of a single law or by separate laws. The authorities so created can take various forms (although they are usually a public body). How these bodies operate in practice, especially in terms of allowing or encouraging PSP, is not usually elaborated in the law though there are two main models:
  (i) **Service ports** that have a predominantly public character. Under this model, the port authority offers the complete range of services required for the functioning of the port. The port owns, maintains and operates every available asset and cargo-handling activities are executed by labour employed directly by the port authority**.**
  (ii) **Landlord ports** that are characterised by its mixed public-private orientation. Under this model, the port authority acts as regulatory body and as landlord, while port operations (especially cargo-handling) are carried out by private companies. Infrastructure is leased or, increasingly, offered under concession to the private sector.

- **Fully privatised ports and integral port concessions.** In fully privatised ports, the port land is privately owned. This requires the transfer of ownership of such land from the public to the private sector and may involve transfer of regulatory functions, such as marine safety, environmental and traffic management (harbourmaster's functions) to the private sector. Full port privatisation has been developed only in the UK and in New Zealand. Alternatively, the entire port complex can be operated under a master concession and land ownership remains public. The master concessionaire assumes the role of a landlord port authority for the assets it has agreed to operate or construct and then offers sub-leases of various terminals or other installations to third parties. Such a scheme can approach comprehensive privatisation. The only real distinctions are that, under this kind of "integral port concession", the transfer of assets is temporary and the concessionaire may have little responsibility for harbourmaster's functions.

Of these options, autonomous port authorities may engender competition more effectively. However, we recognise that the structure of the port sector needs to be examined carefully in each State to identify whether there are real opportunities for competition (given, for example, the differing cargo handling facilities at each port and the differing connectivity at each port). To the extent that opportunities for competition are limited, then a single State-wide port authority may be more suitable.

Accordingly, we suggest that, as with the road sector, the concession agreement should form the main regulatory instrument.[23] Further, since PSP in ports has been promoted by the maritime Project States only in the form of BOT concession agreements (or variations thereof such as BOST), our earlier comments concerning competition for the market and transparency in the selection of a concessionaire in the context of the road sector are also relevant here.

However, as for the road sector, it will be important to integrate such a concession agreement, with the port law and with the wider legal and regulatory framework for encouraging PSP. The main focus of such port law should be to ensure that all ports have the ability to operate as landlord ports or to concession an entire port complex in the form of a master concession. We recommend that a State port law should also include matters such as:

[23] As noted earlier, we have prepared a draft concession agreement for the ports sector, which is included in volume 4.

- Definition of minor port area;
- Functions, powers and duties of policy, regulatory and implementing institutions;
- Power to make minor port rules (in all areas except public health);
- Rules concerning economic regulation, including setting or port dues and charges.
- Rules for conservation of minor ports and safety of shipping;
- Rules regarding minor port development;
- Cross-reference to specific environmental and land use planning regulations and specifications to be complied with during planning, construction and operations of a facility.

Regulatory agency

We believe that in all three maritime Project States, no special regulatory body, such as the GOI's Tariff Authority for Major Ports, should be created just to prevent predatory pricing or to ensure reasonable tariffs and non-discrimination amongst port users. A reasonable alternative would be for the minister responsible for ports in the State to act as *de jure* regulator, although in practice he could delegate this role to a part-time panel of three or more experts, appointed by him and approved by the State Government.

- In this regard, we note that Andhra Pradesh and Karnataka are considering adopting the existing Gujarat model with a State Maritime Board, which combines regulatory and some implementing roles, while Gujarat is now considering separating regulatory and implementing roles. However, we understand that the changes in Gujarat may take several years. Accordingly, a State Maritime Board may suffice for port regulation in all three maritime States.

Observations and Conclusions

The following are some observations and conclusions regarding the existing port policy, legislation and regulatory framework in the three maritime Project States:

- Several states have taken initiatives to improve port capacity and performance. However, the strategy to achieve the policy objective has not been thought through and progress so far has been halting and ad hoc. There is no concerted move to speed up the privatization of all port services. Adequate attention has not also been paid to strengthen the support infrastructure such as land and rail connections and to streamline administrative and customs procedures. The way forward is for the states to develop an integrated approach for the commercialization and privatization of port services. One possibility could be to give the implementing agency, such as the maritime board or the ports department, a program approval for implementing the entire master plan, rather than the current approach of project-by-project approval for private participation by the State Government, reducing thereby bureaucratic delays in PSP approvals.
- The port **policies** of all three maritime Project States should be updated in a permissive manner to allow all forms of PSP.
- Any specific ports **legislation** being considered for Andhra Pradesh and Karnataka should delineate clearly the functions, powers and duties of policy, regulatory and implementing institutions, as well as set out, in detail, basic guidelines for PSP in port management or operations.
- Of the three States, only Gujarat has comprehensive **regulation** with regard to PSP in the port sector. Gujarat is now proposing to separate the service delivery and development functions from the regulatory functions through the creation of two separate Authorities. However, as noted earlier, the draft Acts prepared by the State would have to be suitably amended, before such separation of functions can be achieved.
- The **concession agreement** should form the primary regulatory instrument. No economic regulation should be contemplated. Instead, each port should be free to fix its port dues and charges, within the framework of the draft scheme for regulating minor port fees and tariffs suggested earlier.
- A State-wide Maritime Board with a dedicated PSP unit, following the successful Gujarat model, could be established to monitor the concession (based on receipt of audited

performance reports provided by the concessionaire) and to conduct any residual public sector functions.

Airports

Karnataka and Andhra Pradesh have initiated the construction of major international airports for their state capitals. This reflects the increasing recognition of the importance of the developments of airports as a critical necessity for the overall development of the economy. In particular, the greenfield Hyderabad International Airport will be developed as a major part of a strategy to position the State as a hub for the Arab world and for Southern India and Southeast Asia. In Karnataka, apart from the International Airport, the State Government also has felt the need to develop the small airports sector in the State. For Madhya Pradesh there is a proposal to upgrade the Indore Airport to an international airport, although it is not one of the proposed international airports listed in the national Policy on Airport Infrastructure. But the State Government has indicated that it will petition for such a change in status for Indore due to the creation of the SEZ there.

Airports are a national government subject in India under items 29 and 30 of the Union List, Article 246, Seventh Schedule of the Constitution. Item 29 covers airways, aircraft, air navigation and airports. Item 30 covers carriage of passengers and goods by air. Thus control and development of airports in the country are the responsibility of the Central Government. However the development of airports also requires the active involvement and support of the State Government since many crucial aspects of airport development, such as land acquisition and the provision of electricity and water, are contingent upon State Government cooperation.

The Ministry of Civil Aviation formulates national policies for airports, including rules regarding airport facilities, air traffic services and passenger and goods travel by air. The Office of the Directorate General of Civil Aviation is the main regulatory body responsible for the regulation of air transport services to, from and within India, and for the enforcement of civil aviation regulations, air safety and airworthiness. Each civilian airport and a number of civil enclaves at defence airports are under the control of the Airports Authority of India (AAI), created from several existing agencies by the Airports Authority of India Act, 1994.

In the past several years, the national Government has issued several major policy documents regarding private sector participation for airports, namely the Draft Civil Aviation Policy (April 2000) and the Policy on Airport Infrastructure. The draft Civil Aviation Policy would be largely implemented through the Draft Civil Aviation Act, 2000. Further, there is a Domestic Air Transport Policy that covers foreign equity participation in air transport services.

The basic objective of the Draft Civil Aviation Policy is to create and continue the facilitation of a competitive and service-oriented civil aviation environment in which private participation is encouraged. With regard to airport infrastructure, the private sector may undertake both construction and operation of new airports and upgrading and operation of existing airports and airport facilities. Foreign equity participation in such projects is permitted up to 74% automatically and above that to 100% with special permission of the Government. Private sector participation may include not only participation by private companies, individuals and joint ventures, but also participation by a State Government and by urban local bodies. Such participation may be based on the BOT model and its variants in terms of construction and operation of airport infrastructure and on long-term leases in terms of managing said infrastructure. Such private investment may also be in non-aeronautical activities (shopping centers, entertainment parks) near airports to increase revenue and promote the airport's viability as long as they are not carried out at the expense of aeronautical functions and are consistent with security requirements.

With regard to regulatory framework, the Policy calls for the constitution of a statutory, autonomous Civil Aviation Authority (CAA) to ensure aviation safety and security, to prescribe and enforce minimum standards for all agencies at an airport, to settle disputes with regard to abuse monopoly, to ensure a level playing field for all persons, to issue licenses and to regulate tariffs.

The Policy on Airport Infrastructure is subordinate to the general Civil Aviation Policy. It notes that

the Aircraft Rules, 1937 already permit private ownership of non-Government airports. It proposes a reclassification of airports into international hubs, regional hubs and other operational airports. It repeats the 74% rule for foreign ownership mentioned above and sets specific rules for private sector investment. Options for management of airports are be kept open, including the possibility of management contracts. Turnkey projects with international or bilateral cooperation shall be permitted for large projects, as long as the normal licensing procedure for airports is respected.

The Airports Authority of India (AAI) would create profit centres for all individual airports and hive them off as individual companies or enter into commercial arrangements or joint ventures with private parties. For greenfield projects, there would be approval by the Central Government and the State Government concerned would be responsible for the obtaining of land, for water and power, for construction of access roads, and for similar matters.

These private sector participation policies are supported by recent and proposed legislative changes. The Airports Authority of India (Amendment) Act, 2003 made revisions that now allow the Authority to assist in the establishment of private airports (new Section 12(3)(ad)) and to lease the premises of an airport to a private party. (new Section 12A). Thus the Authority now may assist a private party to establish a greenfield airport, as with the new Hyderabad and Bangalore Airports, or may lease an existing airport to a private party for renovation and improvement. In addition, the draft Civil Aviation Act, 2000 mentioned above would provide for the establishment of a Civil Aviation Authority as an independent regulatory body and help to provide a legal basis for the draft Civil Aviation Policy.
Since civil aviation is a national matter, there are no specific State airport policies. However, some mention is made in general State policy documents of requirements in the sector and of priority airport projects for that State.

MOEF and the CPCB administer all environmental regulations concerning new airport development and improvements of existing airport. Since airports are considered to be strategically (security-related) important, the Civil Aviation Authority has the power to override environmental controls, if needed.

In summary, airports are subject to central government control with the exception of land and ancillary services. As with national highways, some flexibility exists within the application of the PSIF II loan which may consider specific support to airport concessionaires – particularly for land side access facilities.

Urban Mass Transit

Background

Urban Mass Transit (UMT) comprises suburban rail, metros, light rail and buses in segregated bus ways (public passenger transport comprises UMT, other buses, taxis and auto-rickshaws). The most suitable options for UMT depend on urban characteristics and should be determined within the context of the urban development plan and transport strategy of the urban local body (ULB). In India, buses predominate UMT, though there are existing or planned light rail or metro schemes in the major metropolitan areas. [24]

In India any urban mass transit project where central government funds are involved, MOEF, New Delhi has environmental control over the project.

Andhra Pradesh has commissioned the first stage of a Multi-Modal Transit System (MMTS) in Hyderabad, mainly using existing Indian Railways track. The first stage was completed entirely with public monies, but the second, more ambitious stage, which is presently being designed by an international consortium of consultants, will seek PSP. We understand that Andhra Pradesh has been considering developing similar arrangements for two other major urban areas, Visakhapatnam and Vijayawada. Urban buses are operated by the Andhra Pradesh State Road Transport Corporation (APSRTC), but there are yet no plans for privatising or concessioning these bus services (though

[24] Although we have included bus systems in the Project States for the completeness of coverage, the focus of our discussion are metro systems.

private operators will continue to provide buses and crew to APSRTC).

Gujarat intends to develop a multi-modal (rail/road) integrated transport system for Ahmedabad in an area that includes the Ahmedabad Municipal Corporation, areas under the Ahmedabad Urban Development Authority and the corridor between Ahmedabad and Gandhinagar. In addition, the GIDB is developing plans for the establishment of such systems in Baroda and Surat. Urban buses are operated by the Gujarat State Road Transport Corporation but, as far as we are aware, there are no plans for the privatisation of the bus services.

Karnataka intends to develop a metro in Bangalore, though this initiative is not currently planned to allow for PSP. Bangalore buses are operated by the Bangalore Metropolitan Transport Corporation (BMTC). BMTC wants to introduce articulated buses in dedicated routes, which may be suitable for PSP. In addition, the Karnataka State Road Transport Corporation (KSRTC), including the BMTC, is using private buses on its public routes under what is called a public-private partnership. For BMTC in Bangalore, about 20% of buses operate on this basis.

Madhya Pradesh has no plans for rail-based UMT. However, it plans to unbundle and, ultimately, to privatise the Madhya Pradesh State Road Transport Corporation which operates buses.

Policy

National

While State Governments are primarily responsible for the management of urban areas (including urban transport), several enactments, which have an important bearing on State urban transport, are administered by the Central Government. In addition, some of the key agencies involved in the planning of urban transport work for the Central Government, with no accountability to State Governments.

In view of this, the GOI has proposed a Draft National Urban Transport Policy, which seeks to spell out the approach that the Central government would adopt with regard to the specific areas that are under its control, as well as to offer guidelines for the State Governments in respect of areas that are within the competence of the States. The national Draft Policy, thus, seeks to provide a comprehensive framework for future action to mitigate the emerging problems of urban transport, which can form the basis of State urban transport policies.

Amongst the proposed policy initiatives at the national level, as recommended by the Draft Policy, are included:

- The vesting in a single Ministry of the GOI of the responsibility for planning, co-ordination and monitoring rail-based urban transport systems in the country, and the setting up of a multi-disciplinary cell in such Ministry for that purpose.
- The funding of metro rail projects jointly by the Central and State Governments; the provisions of concessions for such projects and the setting up of special metro funds at the national and state level, which would be funded through budgetary support and levy of dedicated taxes.
- The enactment of comprehensive legislation that covers not only the construction stage but also the operation and maintenance stage of metro rail system.
- The integration of sub-urban, metro and road systems, with the long-term objective of a common ticket for various modes of transport, and the setting up of a co-ordinating authority to effect such integration.

State

None of the Project States has an UMT policy. Therefore, as part of the output of this TA programme, we have prepared a draft UMT Policy as a template for application in the Project States, within the overall framework of the national Draft Policy. The template is focused on Andhra Pradesh, but includes the changes required to tailor it to the specific needs of the other Project States.

At the outset we note that the main objectives of an UMT policy should be to ensure provision of adequate quantity and quality of UMT services in

each ULB and to ensure that UMT services operate on an integrated and commercially viable basis.

The full text of the draft UMT Policy for Andhra Pradesh can be found in Volume 3. The key features of this Policy are:

- To facilitate establishment of an Integrated Municipal Transport Provider (IMTP) responsible for development and operation of publicly owned UMT for Hyderabad initially and for other large municipalities in due course. Subject to the agreement of the Municipal Corporation of Hyderabad and Indian Railways, the IMTP for Hyderabad will comprise the following:
  - (i) The intra-city buses in Hyderabad currently owned by APSRTC;
  - (ii) The Multi-Modal Transit Scheme;
  - (iii) The Hyderabad Metro; and
  - (iv) The commuter rail services currently owned by Indian Railways.
- To ensure control of price and quality of service through a concession contract between the Municipal Corporation and the IMTP, as well as setting user charges and quality of service. This requires that:
  - (i) The IMTP develops an integrated transport plan for the municipality, consistent with the Municipal Corporation's transport strategy, for approval by the Municipal Corporation;
  - (ii) The IMTP seeks all appropriate forms of PSP in its UMT services. Such forms include but are not limited to sub-concessions, leases and operations and maintenance contracts;
  - (iii) The Municipal Corporation provides asubsidy, including through any special metro fund, equal to the gap between the full costs of an efficient operator and the revenue received from user charges (if the concession contract does not allow the IMTP to recover its full costs under efficient operation through user charges);
  - (iv) The Municipal Corporation initially and later an independent Integrated Municipal Transport Authority (IMTA) monitors performance of the IMTP under the concession contract;
  - (v) The IMTP initially and later the IMTA monitors performance of any sub-concession holder under its sub-concession; and
  - (vi) The dispute resolution mechanism envisaged in the Andhra Pradesh Infrastructure Development Enabling Act, 2001 will be used to resolve disputes between the Municipal Corporation and the IMTP and disputes between the IMTP and any sub-concession holder until such time as the IMTA is established.
- To facilitate establishment of an IMTA, for Hyderabad initially and for other large municipalities in due course, to control price and quality of service by regulatory oversight of the concession and sub-concessions, once sufficient PSP has been achieved to provide an appropriate workload. Subject to the agreement of the Municipal Corporation and Indian Railways, the IMTA for Hyderabad will regulate:
  - (i) All intra-city buses in Hyderabad;
  - (ii) The Multi-Modal Transit Scheme;
  - (iii) The Hyderabad Metro;
  - (iv) The commuter rail services; and
  - (v) Intermediate public transport.
- To promote integrated UMT services in each major ULB.
- To require each major ULB to prepare and publish a transport strategy, consistent with its urban development plan, promoting integrated multi-modal transport.
- To require each IMTP to prepare an integrated transport plan that sets out policies for the promotion of safe, efficient and economic UMT services in the relevant municipal area, making maximum use of PSP.
- To ensure that the level of charges, together with any subsidy provided by the relevant Municipal Corporation, State or GOI or by other sources of funding, covers the full costs of efficient UMT services.
- To ensure that the structure of charges reflects the underlying costs of UMT service subject to any adjustments aimed at:
- (i) Providing cross-subsidies to meet public service obligations; and
- (ii) Ensuring that fare relativities support overall transport policy so that bus fares are

lower than suburban rail and metro fares [and taxi fares and personalised transport costs].

- To encourage PSP in all aspects of UMT infrastructure and services and to allow any appropriate mechanism for PSP in building, owning, operating, maintaining and leasing of UMT infrastructure.
- To restructure the APSRTC, if appropriate, to facilitate transfer of its intra-city bus operations for major urban areas to the relevant IMTPs.
- To enact a state UMT law.
- To work with the GOI to promote development of a national UMT law.
- To facilitate regulatory control of the IMTP by the relevant Municipal Corporation through its concession contract and to facilitate regulatory control of any sub-concession holder by its IMTP under its sub-concession.
- To incorporate a detailed time-bound action plan for implementation of the above policy.

The draft UMT Policy seeks to separate policy, regulatory and implementing roles. However, the drafting is deliberately permissive and would allow the IMTP to continue to fulfil both regulatory and implementing roles indefinitely. Internationally, given the degree of public ownership in the UMT sector, it is usual for some regulatory and implementing roles to be combined. Examples include Transport for London, the Strathclyde Passenger Transport Authority for the greater Glasgow area, and the Metropolitan Transportation Authority for New York.

Tailoring for other project states

As none of the Project States has an UMT policy, we believe the above UMT policy for Andhra Pradesh can be adopted by the other project states mutatis mutandis. Limited changes would be necessary for Gujarat and Karnataka as both propose to implement rail-based UMT and to delay privatising or concessioning bus services. However, one significant change would be necessary for Karnataka to reflect its plans for a State-wide Tramways Authority (rather than for city-wide IMTAs). More substantive changes would be necessary for Madhya Pradesh as it does not propose to implement rail-based UMT and it intends privatising or concessioning bus services.

In the case of Madhya Pradesh, we suggest the following amendments:

- Delete requirements to establish IMTPs (and all consequential references);
- Insert requirements to unbundle MPSRTC to form several regional bus companies under a state holding company;
- Insert requirements to offer the regional bus companies for privatisation; and
- Insert requirements to implement a State-wide PPT regulator, with regional structure corresponding with the regional bus company structure, in place of requirement to implement IMTAs for major urban areas.

Legislation

Municipal UMT/tramways is a State matter based on Entry 13 of the State List of the Constitution (Article 246, Seventh Schedule). Generally, the States have then granted that authority to municipalities under the relevant State Municipal Corporation Acts. In some cases, that grant is specific, as under the Hyderabad Municipal Corporations Act, 1955. In other cases, the grant is through the general power of delegation of the State under such Acts, as under the Karnataka Municipal Corporations Act, 1976, the Bombay Provincial Municipal Corporation (Gujarat Amendment) Act, 1999, which applies to Ahmedabad and Surat, and the Gujarat Municipalities Act, 1963, which applies to the other municipalities in Gujarat.[25]

However, because of the role of the national government in most metro projects, there is relevant national legislation. Where Indian Railways track is used, as in Hyderabad, the Indian Railways Act, 1989 governs. Further, as per the definition of "railway" under the Act, the Railways Act would also appear to govern in cases where a metro goes beyond a municipal corporation boundary as in Ahmedabad. This is an anomaly that should be removed. We note further that the old Indian Tramways Act, 1886, appears also to apply to such projects, at least in Gujarat and Madhya Pradesh.

[25] As in the case of minor ports, urban transportation is covered under Item 4 of Schedule III of IDEA 2001, thereby making it applicable to all UMT projects implemented through public private partnership.

With regard to the metropolitan cities, the Metro Railways (Construction of Works) Act, 1978 has been enacted, which was to initially apply to the Kolkata metro project, but could later be extended by the GOI to other metropolitan cities. In fact, it has recently been extended to Delhi. However, the Act only covers to the construction phase of such projects. Thus, for the present Delhi metro project, the Delhi Metro Railway (Operation and Maintenance) Act, 2002 was enacted to provide for the operation and maintenance and for regulation of the working of the metro railway, including the establishment and functions of a metro railway administration. Similar legislation would be required for non-metropolitan cities where the Government of India is concerned, as in Hyderabad, since there is not an adequate legal framework at the national level for metro construction and operation or to deal with private sector participation.

With regard to the privatisation of bus transport, the relevant legislation is the Road Transport Corporations Act, 1950, as amended. As per Section 17A of the Act the Government of India must consent to the corporatisation, and the possible later privatisation, of a State Road Transport Corporation. In addition, the national Motor Vehicles Act sets rules for all vehicles, including public vehicles, and is implemented by both Central and State rules, such as the Karnataka Motor Vehicle Rules, 1989, that set routes. Also, as in Karnataka, there is often State legislation, such as the Karnataka Contract Carriages (Acquisition) Act, 1976, which must be repealed in order for carriage permits to be given to private operators. This has recently been done in Karnataka to allow stage carriage by private operators within a radius of 20 kms. from all towns (district headquarters), except for the city of Bangalore.

Overall Regulatory Framework

Internationally UMT regulation is typically undertaken as part of a wider PPT regulation, which may also include suburban rail, bus and inland water transport services. Recent international experience has shown that controlled competition[26], rather than full deregulation, is the key to more efficient and attractive public transport.

While it could be argued that alternative modes of transport provide effective competition for UMT systems, particularly when the UMT schemes are Accordingly, it is recommended that various provisions governing the UMT sector be consolidated in a national UMT law that, among other matters:

- Provides sufficient authority for PSP in metro construction and operation.
- Authorises transfer of suburban rail assets of Indian Railways to IMTPs and regulation of their operation by IMTAs.
- Authorises licensing of appropriately qualified PPT operators and drivers and of appropriate PPT vehicles by the relevant Municipal Corporation or IMTA (where necessary).
- Ensures that state UMT laws are developed on a consistent basis.
- Such state UMT laws would include matters like:
- Definition of UMT system.
- Functions, powers and duties of policy, regulatory and implementing institutions and the role of PSP.
- Rights regarding land acquisition and control and rights of way.
- Rules concerning economic regulation, including fare setting.
- Rules concerning quality of service regulation, including reference to standards.
- Rules for monitoring and enforcing economic and quality of service regulation, including penalties for failure to comply.
- Transfer scheme to establish IMTPs.
- Establishment of IMTAs, where necessary.

In this regard, it should be noted that there is a draft Karnataka Tramways Act, 2000 that would set up a State-wide Karnataka Tramways Authority to govern concessions, facilitate competition and efficiency and monitor the quality of service of light rail-based UMT schemes within municipal

[26] By controlled competition, we mean, for example, competition for the award of exclusive rights to the market.

boundaries[27].largely under development rather than in full operation, we believe that regulation may be required to:

- To control access to the sector (through the competitive award of exclusive concessions)and to ensure that necessary investment will be provided.
- To control fares for certain customer classes (e.g. the elderly or school children) or journeys, to ensure operation of through ticketing on multi-modal (rail/road) UMT schemes and to monitor application of subsidies.
- To set and enforce technical standards for both investment and operation.
- To set and enforce environmental standards.
- To set and enforce safety standards with respect totrack and, train construction and operation and personnel qualifications.
- To set and enforce customer service standards, mostly with respect to service frequency, timeliness, cleanliness, passenger access and passenger information.

UMT schemes are unlikely to be developed except in the very largest cities and, accordingly, there is little case for creating a separate regulatory institution to achieve economies of scale and promote standardisation. Instead, regulatory control by the relevant ULB through the concession contract seems more appropriate. In due course, if the relevant ULB deregulates bus services, it may be appropriate to establish a PPT regulator, which could assume responsibility for UMT regulation.

We therefore suggest that a comprehensive concession contract be the primary regulatory instrument.

Model regulatory requirements

As part of the output of this TA programme we have prepared a draft concession agreement for UMT. The full text of this draft concession agreement is available on the project website for download. Some of the key issues, which need to be dealt in any UMT concession agreement are highlighted below:

- **Entry.** Grants exclusive rights to operate the rail-based UMT system and any associated feeder bus-ways for the duration of the concession.
- **Levels of competition.** Determines that no competing rail-based UMT system may be established for the duration of the concession.
- **Service standards.** Determines minimum "output" service standards. These service standards should be expressed in terms of required alignment, including station or interchange locations and other key technical parameters, capacity of service, frequency of service, hours of operation and passenger loading. Bidders should be free to innovate within the envelope set by these service standards.
- **Universal service obligation.** Determines any non-commercial services that are required, such as concessionary fares.
- **Environmental standards.** Includes an indication from the SPCB of its willingness to issue project consent and operation consent, subject to any SPCB conditions, and provides a listing of the relevant environmental standards
- **Investments.** Determines any specific investments to be made by the concessionaire either prior to commencing operation or subsequently based on particular milestones (such as passenger capacity achieved).
- **Tariff.** Provides an average tariff stream that is to be held constant in real terms throughout the duration of the concession (ie allows the concessionaire to increase average charges in respect of inflation according to an agreed index) and allows the concessionaire freedom to adjust the structure of charges while respecting this average (and subject to any universal service obligations).
- **Ridership.** Provides a forecast of ridership based on the average tariff stream for the duration of the concession.

[27] At first sight, we are unsure that there will be sufficient workload, at present, to justify such an authority whose role, initially, would be focused on the publicly owned Bangalore metro.

[28] Worldwide, we note that all rail-based urban mass transit systems require subsidy (with the sole exception of Hong Kong which enjoys unique advantages in terms of very dense and affluent population and absence of alternatives).

- **Subsidy review.** Provides a process for review of subsidy to the extent that ridership falls [more than 20%] below forecast over any [three] year period. One option, which would encourage PSP, would be to adjust the subsidy to ensure that it made up exactly the deficit in user charges given the lower ridership. Another option, which is more complex, would be to adjust the subsidy to ensure that the concessionaire achieves a particular rate of return on capital invested over the whole of the concession period.
- **Monitoring.** Determines the process for monitoring of performance of the concessionaire.
- **Penalties.** Determines penalties for breach of conditions of the concession. These penalties should exceed the costs imposed by the breach to discourage breaches and should become increasingly severe in the event of failure to remedy breaches or of repeat offences.

The Municipal Corporation would choose the concessionaire on the basis of the tending party who requests the minimum present value of subsidy stream (determined on the basis of a specified discount rate) to provide the required services with the forecasted ridership. However, this approach will attract PSP only if tenderers believe that the Municipal Corporation has the financial resources and the will to provide the subsidy, even if ridership falls significantly below forecast.

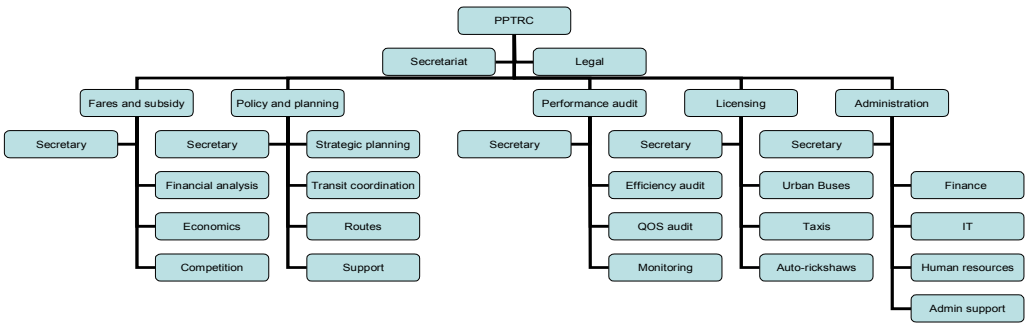
Regulatory agency

As noted above, we believe that UMT is best regulated by concession and does not itself warrant establishment of a regulator. However, we consider that PPT regulators could be established for the major urban areas when justified by the level of PSP, which is unlikely before significant PSP in urban buses. These PPT regulators could be responsible for economic, technical and customer-service regulation of mass rapid transit, intra-city buses, taxis, auto-rickshaws and, subject to the agreement of Indian Railways, suburban rail services in the relevant areas.

Internationally, we have been unable to find a good model for a PPT regulator that includes economic regulation of rail-based UMT as, given the need for subsidy, most UMT schemes are publicly owned with implicit economic regulation. As a typical example, the:

- Publicly-owned Bay Area Rapid Transit (BART) is responsible for operating a light rail scheme in San Francisco area and for establishing its own fares consistent with its costs, its direct proportion of sales tax and its subsidy allocation.
- Metropolitan Transportation Commission (MTC) is responsible for regional transportation planning and financing for the San Francisco Bay Area, which covers 23 public transit agencies including the BART. Its planning role includes some fare and schedule co-ordination among the various transport modes. Its financing role mainly concerns allocating federal subsidy and state subsidy among competing transportation needs.
- California Public Utilities Commission (CPUC) is responsible for state-wide technical regulation and safety of rail-based UMT including the BART.

Figure 3.1: High-level organisation of Municipal Public Passenger Transport Regulator



In Figure 3.1 we set out a potential high-level organisation structure for a municipal PPT regulatory commission (MPPTRC) drawing loosely on ideas from the MTC concerning subsidy allocation, budget monitoring and performance auditing. The MPPTC includes:

- The Regulatory Commission comprising a Chairman and two members.
- Two Offices reporting to the Commission:

(i) **Secretariat**. Responsible for convening meetings of the Commission and the Advisory Committee, maintaining records, co-ordinating with directorates to provide necessary information for the meetings of the Commission and following-up on customer complaints.

(ii) **Legal**. Responsible for all legal matters including drafting of orders and rules, dispute resolution and imposition of penalties.

- Five Directorates reporting to the Commission:

(i) **Fares and subsidy**. Responsible for economic regulation, including recommending level of subsidy and fares to the Commission and hence the relevant Municipality for approval, and for promoting competition.

(ii) **Policy and planning**. Responsible for providing advice to the Commission and hence the Municipality on integrated PPT in the relevant area.

(iii) **Performance audit**. Responsible for conducting efficiency and quality of service audits on the UMT concessionaires.

(iv) **Licensing.** Responsible for issuing operator and vehicle licences for urban buses, taxis and auto-rickshaws (these functions would be transferred from the relevant Transport Commissioner) and, potentially, for operator and vehicle licenses for the metro.

(v) **Administration**. Responsible for monitoring and ensuring timely progress on all important decisions of the Commission and providing financial, IT, human resources and administrative support

We also show an optional licensing directorate though it may be better to continue to conduct these functions through the regional office structure of the state Transport Commissioner.

We anticipate that the MPPTRC would receive non-mandatory advice from an Advisory Committee chosen to represent various stakeholder interests. This is rather different from the MTC which receives policy direction from a 19 member panel, of which 14 members are appointed directly by local elected officials and the remaining five represent stakeholder interests, and which functions through a number of standing committees, including panel members, with support for the MTC planning and operations staff.

Observations and Conclusions

The following are some observations and conclusions regarding the policy, legislation and overall regulatory framework for the UMT sector in the four Project States:

- None of the Project States have UMT **policies**, though a Draft National Urban Transport Policy has been proposed to guide future action in the urban transport sector at both the national and state level. It is recommended that policy directions expressed in the draft UMT Policy, prepared as a template for application in the Project States, be implemented by the State, directly or through its institutions.
- As mentioned earlier, there is need for enactment of comprehensive legislation, which includes provisions to deal with PSP in UMT. Accordingly it is recommended that state UMT law be enacted [by end 2005] and rules regarding price and quality of service developed thereunder [by end 2007], and further that State Governments work with the GOI to promote development of a national UMT law.
- We note that UMT is best regulated by concession and does not itself warrant establishment of a regulator, unless sufficient PSP has been achieved to provide an appropriate workload, In this regard, the draft concession agreement provided as part of this TA programme may be considered for adoption by the relevant States [by end 2004].
- IMTAs could be established for the major urban areas when justified by the level of PSP, which is unlikely before significant PSP in urban buses. We understand that Andhra Pradesh is considering separating the PPT services in Hyderabad and placing them under a Hyderabad Transport Authority (this would include the buses operated by APSRTC, the MMTS and the Metro (if and when constructed)), and establishing a Hyderabad PPT Regulator to deal with tariffs, route

planning, integration, service frequency and the like.

Cyber Parks - Information Technology (IT) Parks

Two of the Project States- Andhra Pradesh and Karnataka- are at the forefront with regard to information technology commercialisation in India and in the world. They have also been prominent in the formulation of State information technology policies and in the establishment of software and hardware industrial parks to accommodate the needs of computer ventures and back office enterprises.

The Government identifies areas where private sector investments are invited and sets ground rules for private initiatives based on transparency in procedures for selection, implementation on an appropriate BOO or BOOT basis and the setting of an institutional mechanism for such selection.

The present IT incentive package in Andhra Pradesh includes:

- a power subsidy involving a 25% rebate;
- an investment subsidy of $400 per job created;
- exemption from zoning regulations;
- exemption from the Factories Act and the Minimum Wages Act; and
- Government provision of ready-to -use facilities at subsidised rates.

Hi-Tec City in Hyderabad and the Information Technology Parks are major IT project already in operation in Andhra Pradesh. Current projects include Cyberabad and an electronic hardware park of 5000 acres to be located near the proposed international airport.

Gujarat has been actively developing the Infocity Project at Gandhinagar on an area of 150 acres near the Ahmedabad Airport. The project is being implemented by way of BOT concession agreements for parcels of land within that area. Gujarat has both an Information Technology Policy and an Information Technology (IT) Industry Incentive Scheme (1999-2004). Under this Policy public-private partnerships would be encouraged in setting up high tech cities, IT training and educational institutions and in other related economic development projects.

As to incentives, IT products, services and software produced in the State would be given special sales tax treatment. There is also a subsidy on fixed capital investment. A State Venture Capital Fund would be established. Further, the IT Industry Incentive Scheme for the present Five Year Period (1999-2004) establishes the following incentives for Eligible New Information Technology Units:

- Capital incentive subsidy- generally the lesser of Rs. 25 lakhs or 50% of eligible total capital investment;
- Special incentives for projects with a large capital base that will generate large employment opportunities (subsidy of Rs. 25 lakhs for eligible total capital investment of Rs. 50-100 crore to a subsidy of Rs. 100 lakhs for such investment above Rs. 200 crore);
- Turnover incentive of 5% of the eligible turnover in the first year and a maximum of Rs. 50 lakhs per annum in subsequent working years, to reflect the fact that IT investment is high in manpower and low in capital;
- exemption from power cuts;
- connectivity incentive (subsidy of 50% on the rental of data line for three years or for the operating period of the scheme);
- no requirement of NOC from the State Pollution Control Board for such projects.

The High Tech industry in Karnataka dates back to the 1950s beginning with Hindustani Aeronautics Ltd, the Indian Space Research Organisation and the India Institute of Sciences, all of which were established in Bangalore. Electronic City was established in the 1980s and is now in its third phase. The International Technology Park is now being carried out by a Singapore- Tata Consortium. Three additional proposals are being considered- the Biotechnology Park, the Hardware Park and the IT Corridor of approximately 8000 hectares.

Karnataka's first Information Technology Policy dates from 1997. The Millennium IT Policy or Mahithi was prepared in 2000. It was followed by the Millennium Biotech Policy (2001) and the Millennium BPO (Business Process Outsourcing) Policy (2001). The objectives of the Millennium IT

Policy are to reduce unemployment among educated youth, to promote the usage of Kannada in Information Technology, to use e-governance as a tool to deliver government services that are more pro-active and responsive to citizens' needs, to encourage business with non-English-speaking countries, and to maintain the pre-eminent position of both Bangalore and Karnataka in the field of Information Technology.

Under the Mahithi Policy the following incentives are offered:

- capital goods entry tax exemption;
- simplification of procedure for pollution clearances;
- priority as to power and exemption from power cuts;
- urban development- relaxation of floor-area requirements for projects outside of municipal corporation limits;
- incentives for creating employment (rebate on stamp duty or on cost of land);
- labour rules - exemption from some provisions and returns; permitting of flexible-timing)

Madhya Pradesh has both an Information Technology Policy and a draft Science and Technology Policy, the latter dated 23 May 2003. Under these policies, the MP State Economic Development Corporation (MPSEDC) will assist in attracting investments in information technology to the State, along with the MP Agency for the Promotion of Information Technology (MPA-IT). In addition, the MP State Industrial Development Corporation (MPSIDC), in its general role to assist industrial development, will play a major role in the development of information technology parks. The State Government is facilitating the setting up of "Hi Tech Habitats" to promote IT industry in the State.

The MP IT Policy has the vision of creating a "Seamless Society with Global Opportunities" to take advantage of the State's strengths in geographical location and telecom infrastructure. A goal is that MP will contribute 5%-10% of the IT output of India by 2008, with IT literacy in all schools by that same date. The IT Policy is to provide information for citizens and for sub-block level connectivity through the establishment of information kiosks, as well as to help facilitate a single window clearance system. Also there will be increased training for government employees in IT, and the upgrading of courses in the institutes and polytechnics as well as the setting up of a virtual university. Elementary IT course material will be included at the primary school level.

As to results to date, in addition to the Hi Tech Habitats, the MPSEDC has set up a small software technology park at Indore. In addition, the MPSIDC is in the advanced stages of planning for setting up a new IT Park also at Indore. The MPSEDC and the MP Housing Board are jointly conceptualising an IT Park at Bhopal. Further, the State Government is exploring the creation of a separate body to carry out the operations and maintenance of such parks. It is hoped that this will ensure one-stop clearances, speedy approvals and smooth and swift start-ups.

Recommendations and Conclusions

There is no specific IT legislation in any of the four Project States, nor is any required. As noted above, incentives have been given for the sector as part of more general tax and foreign investment legislation. Any given IT project might be pursued using the special economic (SEZ) incentives discussed below.

Special Economic Zones (SEZs)

Special economic zones (SEZs) are established based on the national Export-Import Policy and were introduced by the Exim Policy of 2000-2001 to replace the previous Export Promotion Zones (EPZs). The zones are patterned on similar zones existing in China which give full operational flexibility and provide for the unrestricted movement of goods to and from a zone. SEZs are defined as specifically delineated duty free enclaves to be deemed foreign territory for the purposes of trade operations, duties and tariffs. They may be set up for the manufacture of goods and also for the rendering of services. At present, there are 14 operational SEZs, three of which- Kandla and Surat in Gujarat and Indore in Madhya Pradesh- are located within two of the four Project States. While national government legislation governs SEZs in general, there is also State legislation in three of the four Project States as the State plays a role in their approval and implementation.

The Government of India has already given an in-principle approval for setting up an SEZ in **Andhra Pradesh** near the port city of Visakhapatnam on the east coast of India. An SEZ has also been approved at Kakinada in Andhra Pradesh.

The first SEZ to be approved in the country, under the new SEZ Policy, was in **Gujarat**. On November 1, 2000, the Surat Export Promotion Zone was converted into India's first private SEZ. The Diamond & Gem Development Corporation was the promoter of the Surat SEZ and has attempted to make it a model SEZ for the country. In addition to this, the existing Free Trade Zone of Kandla has been converted into an SEZ and is in operation in the State. Besides, there are proposals to establish three new SEZs at Positra, Mundra and Dahez..

In light of the Central Government's Policy, the Government of **Karnataka** also came up with a policy in relation to Special Economic Zones modelled on the former one. The first SEZ to be established in Karnataka was at Hassan in order to achieve the twin objectives of attracting investments to Karnataka and augmenting exports from the StateThe State Government has initiated action to prepare a detailed techno-economic feasibility study for the Special Economic Zone and also to identify suitable firms to take-up the development of Special Economic Zone. The Karnataka Industrial Area Development Board (KIADB) is promoting the project. As of April 2003, 2,500 acres of land were needed for setting up the SEZ, but the State Government had acquired only 1,663 acres.

In **Madhya Pradesh** a SEZ is in operation in Indore and is reputed to be one of the efficiently run SEZ's in the country.

The present SEZ Policy in that State is Chapter VII of the Exim Policy (incorporated as part of the MP Tenth Five Year Plan (2002-2007)) and the annual Exim Policy for 2003/2004. Chapter VII sets out the tax and economic benefits available to investors in SEZs which are, treating sales to and from such zones as exports and thus not subject to customs/excise duties, as well as providing various exemptions from the Service Tax and income taxes. Further, the Customs Act, 1962, and its implementing Regulations, exempt goods admitted to an SEZ from customs duties, except for export duties. As to income taxes, SEZ units are entitled to a 100% income tax exemption on export proceeds for five years and a 50% exemption for two additional years from the date of commencement of production. Supply of goods to an SEZ from a Domestic Tariff Area (DTA) will also be eligible for the exemption granted for information technology, as discussed above.

Chapter VII also deals with administration of SEZs. An SEZ may be set up in the public sector, in the private sector or as a joint public-private project or a project by the State Government, in each case under the administrative control of a Development Commissioner. Each SEZ is monitored by a committee headed by the Development Commissioner and also including the relevant Customs official. Under the 2003-2004 Policy, a Units Approval Committee is established.

There is a national Draft Special Economic Zones Bill, 2002 which would consolidate the policy regarding SEZs. That legislation is aimed at reducing delays that slow down the implementation of SEZs, including delays in land acquisition and infrastructure development. The Draft would also reform and simplify relevant labour laws, as well as provide precise definitions of "developer" and of "infrastructure facilities". The latter definition specifically includes roads, bridges, ports, airports, the generation and distribution of power, residential, industrial and commercial complexes and telecom, as well as water supply and sewerage systems and any other facility of a similar nature as may be notified by the Central Government. This broad definition should help to attract potential private investors.

The Draft SEZ Bill also contains provisions regarding the procedures necessary to establish an SEZ and regarding the role and functions of the Board of Approval. That Board shall establish an SEZ Development Board to exercise the powers under the proposed law and to secure the development of the Special Economic Zone in accordance with guidelines issued by the Board of Approval. The Bill also establishes the Unit Approval Committee as the single window clearance for granting all approvals and clearances for the establishment and operation of units in the SEZ. Finally, the Bill states that,

except as otherwise specified, any goods exported or imported from an SEZ are exempt from all Central taxes, duties or cesses. Stamp duties and such legislation as the Banking Regulation Act, 1949 and the State Industrial (Special Provisions) Act, 1985 would also not apply to SEZs.

In addition to the proposed national legislation, each of the Project States except Andhra Pradesh has passed legislation in relation to SEZs or is in the process of doing so. However, Andhra Pradesh does have a detailed policy document regarding such zones as well as instruments of delegated legislation under various state tax statutes granting exemption from various State level taxes and levies including sales tax on inputs supplied to units in Zones, electricity duty and tax and a 50% exemption from payment of stamp duty and registration fee. Further, the powers of the State Commissioner of Labour are delegated to the Development Commissioner, and no Environmental Impact Assessments are required for SEZs. The Andhra Pradesh Industrial Infrastructure Corporation (APIIC) is designated as the nodal agency for SEZ development in the State. Currently it is overseeing the development of an SEZ at Achutapuram.

Gujarat is in the process of enacting the Gujarat Special Economic Zone (SEZ) Act, 2003, although the text of the Act and its notification are not yet available. The Act is based on the State SEZ Policy, which is in turn based on the national SEZ Policy. The designated Development Commissioner is the single point clearance for all permissions, including environmental clearances. Tax exemptions are similar to those described above for Andhra Pradesh with the exemption from payment of electricity duty for ten years only, and exemption from VAT and purchase taxes, as well as for registration and stamp duties. As in other states, the powers of the State Labour Commissioner are delegated to the Development Commissioner

Karnataka has enacted an SEZ Bill which was passed on 8 August 2003 but was not yet notified. As with the national Draft SEZ Bill, that Bill has provisions dealing with the declaration and establishment of an SEZ, the setting up of an SEZ Development Board and of a Unit Approvals Committee. In addition, the Units Approval Committee is given powers as a single window clearance body. The procedure for the selection and appointment of the Developer and his functions are specified. There are also provisions regarding land acquisition, the power of the Governor to declare any SEZ as an Industrial Township Area, and regarding the generation of electricity, and development of minor ports, roads, bridges and transportation and tourism under the SEZ concept. There are exemptions from all State and local taxes and levies. Also, as in the other States, the powers of the State Labour Commissioner are delegated to the Development Commissioner for a specific SEZ. The Karnataka State SEZ Policy provides specifically for adequate water supply and continuous power supply to such zones. The State Government will constitute a Committee for the review and development of SEZs. The Karnataka Industrial Area Development Board (KIADB) is designated as the nodal agency for SEZ implementation.

Madhya has enacted legislation in relation to SEZs.However, that legislation (The Indore Special Economic Zone (Special Provisions) Act, 2003) applies only to the existing Indore SEZ. This Act is similar to the other State Act discussed above with regard to tax and duties exemptions and the powers and functions of the Development Commissioner. The Developer is given the power to fix rates and charges within the Zone. The Act also stipulates that the Zone may be notified as an Industrial Township. In addition, the Madhya Pradesh Labour Laws (Amendment) Bill, 2003 would amend various State labour laws to give benefits to SEZs by restricting or excluding their operation there. The MP SEZ Policy also states that the State Government shall make available land required for the Zone through the acquisition of private land, and simplify the obtaining of various environmental clearances. The MP State Industrial Development Corporation is identified as the nodal agency for the development of SEZs in the State.

In summary, it is too early to establish the success of SEZs in the four Project States. Indore in Madhya Pradesh and Kandla and Surat in Gujarat are already in operation but no SEZs are yet in operation in Karnataka and Andhra Pradesh. The concept of SEZ is a very broad one, including not only export-import activities in an industrial township as under the previous EPZ concept but

also supporting infrastructure, such as housing, ports, and telecommunications.

Water Supply and Sewerage

Background

Privatisation of water has been attempted in several States in India, but it has proven difficult to set tariffs that meet costs and to avoid wastage of water. In the following paragraphs, we list some of the PSP initiatives in the water supply and sewerage sector, noting that Tamil Nadu has been at the forefront with the Tiruppur Area Development Programme Water Supply and Sewerage Project, the first water project in India to be executed through a project-specific public limited company for water and sewerage, with equity participation from the major beneficiaries, the State Government and the Central Government and financial institutions. In addition, the Tamil Nadu Water and Sanitation Pooled Fund, set up with assistance from the USAID (FIRE) Project, will provide funding to other such projects in the State through State Government grants and user contributions in relation to the IBRD-assisted Tamil Nadu Urban Development Fund.

In **Andhra Pradesh** the present programme of the Hyderabad Metropolitan Water Supply and Sewerage Board (HMWSSB) – responsible for water supply and sanitation in the twin cities of Hyderabad and Secunderabad - includes private contracts for all construction works, including small works by call for tender from a list of registered contractors, purchase of water by mobile tankers, and management contracts for operation of sewage treatment plants for either one year or three years. There have been several unsuccessful efforts, including the Krishna Bulk Water Supply Project (1995), which was to be a BOT Project, but failed when the State Government could not meet the gap between bulk water supply cost and the average user charge. In addition, a concession or management contract was proposed for water supply for Hyderabad, but was shelved when the HMWSSB employees gave notice to strike. As regards the Visakhapatnam Industrial Water Supply Project, which is a public-private venture to provide water to the Municipal Corporation, the existing steel plant and the proposed Pharmacity SEZ, the feasibility study of Phase II has been completed but is pending financial closure.

In **Gujarat** the Gujarat State Drinking Water Infrastructure Corporation Ltd. (GSDWIDL) has identified possible PSP projects as part of the construction of the bulk water supply Sardar Sarovar Scheme. With regard to PSP in the distribution of water, Ahmedabad has already had an extensive internationally-funded water and sewerage project, which pioneered the use of municipal bonds without a State guarantee. It is now proposed to carry out pilot projects in ring-fenced areas in West Ahmedabad and Surat for a period of 3-5 years, for which private water operators will be contracted to manage the network during the demonstration period. The management contract would provide for benchmark improvements in technical standards and commercial outputs.

In **Karnataka**, the private sector has been involved in certain projects in Bangalore for provision of services relating to urban water supply and sewerage. A pilot project for the private contracting of five water service areas with funding from the Government of Japan is scheduled to commence shortly. In addition, two water treatment plants are currently under private sector management, five sewage treatment plants owned by Bangalore Water Supply and Sewerage Board (BWSSB) are under management contract to five separate contractors, leakage repairs are carried out by private contractors selected by annual competitive tender in each of the divisions of the city, and water pumping is to be outsourced. For other urban areas, there are no such projects yet but the World Bank's -assisted Urban Water Supply and Sanitation Project has a pilot scheme for PSP by management contracts in the cities of Hubli-Dharwad, Gulbarga and Belgaum.

Madhya Pradesh appears to have no current plans for PSP in water supply and sewerage services, though it has acknowledged that these activities are suitable for PSP both in investment and in operation and maintenance.

Policy

All four Project States have general policies in this sector but only Karnataka has specific water and sewerage policies. Below is a summary of policies.

Andhra Pradesh does not have a specific State policy with regard to water supply and sewerage. However, provision of drinking water is a primary consideration of the present Tenth Five Year Plan, as part of the goal of "Health for All". To improve water supply availability, the State Government is interested in promoting PSP to improve the overall efficiency of the water supply system. Concerning sewerage, there has been a rural sanitation programme in the State since 1983 to provide good sanitation facilities, and the HMWSSB is presently considering a centrally funded project for abatement of pollution with regard to urban sewerage. In addition, water supply, treatment and distribution, sewerage and drainage, and waste management are among the listed infrastructure sectors for private participation with the assistance of the Andhra Pradesh Infrastructure Authority under Schedule III of the IDEA 2001. Andhra Pradesh considers that an independent State-wide regulatory institution should be developed, modelled on the lines of the Andhra Pradesh Electricity Regulatory Commission, to conduct economic and quality of service regulation.

Gujarat does not yet have a comprehensive policy for water and sewerage but the GIDB has prepared a draft policy, including a legal and regulatory structure for the sector. In fact, Gujarat proposes a stand-alone independent regulator for urban water supply and sewerage services and plans to implement this before opening the sector to PSP. The major focus in Gujarat has been on the reduction of water losses in the transmission and distribution system, and the augmentation of water resources, especially in water-deficient areas. Gujarat intends to achieve PSP in water supply and sewerage, initially through management contracts for operations and maintenance and later through concessions for investment and operations and maintenance. In addition, water storage, water supply and sewerage systems are included in the GIDA 1999 as types of projects that come under the Act for potential PSP.

As noted above, **Karnataka** is the only Project State with specific policies in the water sector. It prepared its "Rural Water Supply and Sanitation in Karnataka: Strategy Paper 2000-2005" in 2000, its "State Water Policy" in 2002 and its "Urban Drinking Water and Sanitation Policy" in 2003. It now recognises the need for a consolidated water and sanitation policy which brings together all relevant policies and which addresses gaps. The Urban Drinking Water and Sanitation Policy encourages PSP in the sector and the setting of tariffs that permit full cost recovery. A sector strategy and action plan will be developed to implement these objectives. The Policy provides that urban local bodies shall be responsible for water supply and sewerage. However, the State Government will continue to be responsible for formulating policy, setting minimum tariffs, setting minimum service standards and monitoring service provision by such bodies, as well as ensuring the provision of the resources necessary to meet those goals. Karnataka proposes a stand-alone State Water Council (SWC) responsible for administration of initially urban, and later potentially rural, water supply and sewerage policies and activities and monitoring sector development, which could act as a regulator until such time as an independent or multi-utility regulator is warranted for the sector.

Madhya Pradesh does not have a specific water supply and sewerage policy but is in the process of devolving operation and maintenance functions in the water sector to local bodies, as part of the implementation of the 74th Amendment to the Constitution regarding the transfer of functions to the local level. However, this new structure for the water sector does not specifically call for PSP, nor does the loan presently being negotiated with the ADB for urban water supply projects in the State include such participation. That said, the "Policy Thrust for Economic Development Report, 2001" expressly states that water supply and sanitation are infrastructure activities suitable for PSP both in terms of investment and in terms of management contracts. We note that there is now under consideration a Madhya Pradesh Public Utilities Commission to act as a single regulator for utilities, including water, though the work on that proposed regulatory framework has not yet begun.

As part of this TA programme, we have prepared a draft consolidated water supply and sanitation policy for Karnataka, which brings together the various policies for the sector and seeks to address their gaps. [29] This draft policy may be applied in the other Project States with appropriate modifications. The key objective of this draft policy is to ensure provision of quality water and sanitation services to people that want them and are willing to pay for them and to ensure provision of basic water and sanitation services to all. Its key features are:

- To require the State to formulate rules, procedures and guidelines on all aspects of water resource management;
- To plan and implement water resources projects on an integrated multi-disciplinary basis for each hydrological unit;
- To prioritise water uses giving drinking water top priority;
- To establish a system of water rights along with suitable enforcing mechanisms. Such water rights provide secure and enforceable ownership of surface water and ground water to help attract private investment;
- To limit public investment in water and sanitation to the creation of public facilities, addressing problems of market failure and protecting community interests;
- To encourage PSP in all aspects of water and sanitation services and allow any appropriate mechanism for PSP in water and sanitation services and to require:
  (i) New public water schemes [except municipal schemes] with command area over [5000ha] to be implemented by the private sector or under public private partnership; and
  (ii) Existing public water schemes [except municipal schemes] with command area over [5000ha] to be gradually transferred to the private sector or to public private partnership.
- To achieve stakeholder participation in planning, developing and managing water and sanitation infrastructure at the lowest appropriate level.
- To increase water and sanitation charges for urban and rural users in a phased manner:
  (i) Initially, the level of charges will cover at least the operation and maintenance charges of providing services and the structure of charges will penalise excessive consumption and wastage of water; and.
  (ii) In the longer term, the level of charges will cover operations and maintenance costs, debt service plus a reasonable return on capital and the structure of charges will reflect underlying long-run marginal costs of service.
- To require ULBs and Gram Panchayats (GPs) to achieve 100% metering and to adopt volumetric pricing within [five] and [ten] years respectively;
- To confirm that ULBs will responsible for urban water supply and sanitation services from water catchment to waste water treatment and that GPs will be responsible for rural water supply and sanitation services, including ground water recharge;
- To hold service providers (including ULBs, Panchayat Raj Institutions (PRIs), KUWSDB and BWSSB and their successors) responsible for checking the quality of drinking water and sanitation services and for controlling the use of water to prevent wastage and pollution;
- To continue to support appropriate development of surface water [and ground water] irrigation but to focus increasingly on efficient use of water and to prioritise expenditure;
- To establish a State Water Resources Board (SWRB)[30] for multi-sectoral water planning, water allocation, planning of water development programmes and resolution of water resources issues. The SWRB will also prepare and update a Karnataka Water

[29] The draft policy takes into account the GOI's National Water Policy, 2002, the Government of Karnataka (GOK) Karnataka Ground Water (Regulation for protection of sources of drinking water) Bill, 1999, the GOK State Water Policy, 2002, the Second Karnataka Rural Water Supply and Sanitation Project (Jal Nirmal Project), the GOK Urban Drinking Water and Sanitation Policy, 2003, and the iDeCK Strategy and Implementation Plan for Urban Drinking Water and Sanitation Sector, draft Report, September 2003. The full text of this policy can be downloaded from the project web page.

[30] We believe that the SWRB should report to the Chief Minister to avoid any institutional issues, which might otherwise limit its effectiveness, although the draft policy is silent in this regard.

Management Plan providing directions on water allocation and management for the short-term, medium-term and long-term;

- To establish a State Water Resources Data and Information Centre responsible for a state of the art information system containing data on surface and ground water availability and use;
- To establish a River, Stream and Tank Bed Authority to remove and prevent encroachments and prevent the occurrence of man made floods and droughts;
- To establish a State Water Council (SWC)[31] ;
- To confirm that Karnataka Rural Water Supply and Sanitation Agency (KRWSSA) will continue to plan and monitor rural water and sanitation projects at state level;
- To restructure the Water Resources Department to accommodate the new arrangements;
- To control access to the sector through the competitive award of concessions, leases, management contracts and similar instruments (described collectively as concessions in the remainder of this list) to ensure only appropriate qualified reputable firms can provide service;
- To control the price and quality of service through the form of regulation as recommended in the section on 'Regulatory Framework' below:
- To create a state level regulatory institutions within the SWC, until such time as an independent or multi-utility regulator is warranted for the sector:
- (i) To approve award and revoke of concessions by municipalities;
- (ii) To conduct economic regulation under the terms of the concession; and
- (iii) To conduct quality of service regulation under the terms of the concession.
- To create regional (or potentially municipal) level regulatory institutions to conduct quality of service regulation under the terms of the concession when a critical mass of PSP has been achieved; and
- To incorporate a detailed time-bound action plan for implementation of the above policy.

Tailoring for other Project States

As none of the project states has such a well-developed water supply and sewerage policy, we believe the above policy for Karnataka can be adopted by the other project states mutatis mutandis. Changes will be necessary for all the other project states to reflect the differences in their water supply and sewerage implementing institutions and their plans for regulatory institutions.

Specifically, concerning regulatory institutions, we suggest:

- Delete references to a regulator initially within the State Water Council.
- For Andhra Pradesh insert references to a stand-alone State-wide economic and quality of service regulator modelled along the lines of the APERC to be implemented in due course;
- For Gujarat insert references to a stand-alone State-wide economic and quality of service regulator modelled along the lines of the GERC to be implemented as soon as practicable; and
- For Madhya Pradesh insert references to a water supply and sewerage division within the proposed Public Utilities Commission.

Legislation

Water supply, sewerage and solid waste management are subjects, which are to be local responsibilities based on State legislation under the 74th Amendment to the Constitution adopted in 1992. Even before the passage of that Amendment, the States had generally enacted legislation that gave authority over water supply and sewerage to municipal corporations under the relevant Municipal Corporation Act. Later, special water and sewerage boards were established at the State level to carry out those functions, while solid waste management remained with the municipal corporations. In addition, each State has a State Pollution Control Board established under the national Water (Prevention and Control of Pollution) Act, 1974, which now has been given similar authority over air pollution.

[31] If the SWC is to accommodate both urban and rural water and sanitation, again we consider that the SWC should report to the Chief Minister to ensure that any inter-departmental or other institutional issues do not limit its effectiveness

Environmental Assessment aspects remain state-level responsibilities and are well defined in SPCB documentation.

In **Andhra Pradesh** the responsibility for providing water supply and sanitation is with the respective local bodies based on the relevant municipal corporation statute (generally the Andhra Pradesh Municipal Corporations Act, 1994), except for Hyderabad and Secunderabad, as mentioned earlier, where the responsibility lies with the HMWSSB based on the Hyderabad Metropolitan Water Supply and Sewerage Act, 1989. These Acts give the State Government powers that allow PSP in the water sector, including those regarding the setting of water and sewerage tariffs and metering.

Gujarat implements water and sewerage services through a wide variety of institutions. Surface water is supplied by the Sardar Sarovar Narmada Nigam and by the Department of Water Resources while ground water is extracted by many local bodies, by private individuals, and by the Department of Water Resources (through the Gujarat Water Resources Development Corporation Ltd). The Gujarat State Drinking Water Infrastructure Company, the Gujarat Water Supply and Sewerage Board and other institutions own transmission networks for the bulk supply of water.

As to relevant legislation, powers are granted to local bodies under the relevant municipal corporations legislation- the Bombay Provincial (Gujarat Amendment) Municipal Corporation Act, 1999 (for Ahmedabad and Surat) and the Gujarat Municipalities Act, 1963 for other municipalities. In addition, there is a Gujarat Water Supply and Sewerage Board, established under its own legislation, which provides bulk water supplies to larger ULBs and the Gujarat Urban Development Corporation, which are responsible for distribution and sewerage, and distributes water supplies in smaller ULBs and rural areas.

Karnataka implements water supply and sewerage services largely through the BWSSB in Bangalore, the Karnataka Urban Water Supply and Drainage Board (KUWSDB) in other urban areas and the Rural Development and Panchayat Raj Department (RDPRD) in rural areas. The KUDD has the power to regulate in the water sector, particularly with regard to the setting of tariffs. In addition, the Karnataka Urban Infrastructure Development and Finance Corporation (KUIDFC) assists urban bodies in the State in the planning and finance of urban infrastructure as well as providing technical assistance for the implementation of such development.[32] It also mobilizes funds from international agencies and other external agencies and is currently responsible for two ADB-assisted projects in the urban development sector and will be the nodal agency for the proposed Karnataka Water and Urban Management Project.

With regard to relevant legislation, the Bangalore Water Supply and Sewerage Board Act, 1964 and the Karnataka Urban Water Supply and Drainage Board Act, 1973 created the BWSSB and the KUWSDB, respectively, as special purpose bodies, which replaced the general powers granted to municipal corporations under the State Municipal Corporation Act. In practice, the KUWSB is primarily concerned with constructing water supply and drainage facilities, and then transferring them to the concerned local body. In most cases, operation and maintenance is undertaken by that body. Within that framework, the BWSSB will become the asset owner and regulator in the Bangalore Metropolitan Area, with all of the investment, operation and maintenance activities conducted by the private sector under management contracts. In this regard, it may be noted that the BWSSB has been recognized internationally for its metering and collection policies, although subsidization has not been completely eliminated.

It should be noted that **Madhya Pradesh** is the only Project State without a Water Supply and Sewerage Board Act. It is also the only Project State with a separate Water Act to implement the 74th Amendment and to devolve control of water to the local level - the MP Sinchai Prabandhan Me Krishkan Ki Bhagidari Adhiniyam, 1999. The Act provides for a three-tier structure in rural areas, consisting of water user associations (WUAs), Distributing Committees and Project Committees The definition of "water user" under the Act is broad and includes all kinds of uses of such

[32] A similar urban infrastructure finance corporation to serve as an intermediary to carry out water projects and other urban projects is also being established in Andhra Pradesh.

irrigation water, but does not cover urban water The Act is under the management of the Madhya Pradesh Water Resources Department, which is generally responsible for the construction of new water supply schemes. When completed, these schemes are then transferred to local bodies.

For urban drinking water and sewerage, the legal base is the Madhya Pradesh Municipal Corporations Act, which empowers local urban bodies/municipalities to take on operation and maintenance of water systems in their area of jurisdiction. The responsible authority is the Housing, Environment and Urban Administration Department (HEUAD). The Public Health and Engineering Department (PHED), formerly responsible also for urban water, is now responsible only for rural water but does still provide technical support to HEUAD for utility water in urban areas.

In addition, the MP Peya Jal Parirakshan Adhiniyam, 1986 gives the District Collector concerned the power to declare water scarcity areas in case of emergency in order to maintain or increase the supply of water to the public or to secure its equitable distribution or secure water to meet the need of the public, Thus a possible private sector participant would not be ensured that he would receive water in case of emergency.

Recommendation

Given the above, we suggest that a state water law be enacted that includes:

- Priorities and policy concerning multiple uses of water (potable, industrial, irrigation, electricity generation, navigation etc)
- Functions, powers and duties of policy, regulatory and implementing institutions.
- Co-ordination amongst policy and regulatory institutions.
- Rights of policy, regulatory and implementing institutions.
- Rules concerning economic regulation, including charges for water and waste water services.
- Rules concerning quality of service regulation, including reference to standards.
- Rules for construction, operation and maintenance of the water system, and specific rules for PSP in each such aspect.
- Rules for monitoring and enforcing economic and quality of service regulation, including penalties for failure to comply.

We suggest that the water law be as comprehensive as possible to provide greatest comfort to a potential private investor.

Overall Regulatory Framework

Of the four states, only Gujarat has made significant progress on independent water sector regulation[33]. Here, consultants to the GIDB have prepared a draft regulatory structure for the urban water sector.

Given the potential for monopoly abuse and the need for public health and environmental controls, we consider that regulation is necessary across all services in the water and sewage supply chain:

- To control access to the sector (through the competitive award of concessions) to ensure only appropriate qualified reputable firms can provide service.
- To control the price and quality of service:

(i) Economic regulation will be required for both water and waste water services for all customer classes.
(ii) Technical regulation will be required for setting and enforcing quality standards concerning coverage, water pressure and related matters.
(iii) Standards for raw water quality and for waste water discharges are well established in every state and are administered and enforced by the SPCBs, ideally with participation from river basin representatives to help with enforcement.
(iv) Public health regulation will be required for setting and enforcing quality standards for drinking water.
(v) Customer service regulation will be required for both water and waste water services and for all customer classes.

While there is some possibility for direct competition in raw water supply and treatment (as

currently borewells often provide alternative water supplies) and, possibly, waste water treatment (as there could be multiple operators of duplicated facilities at a single site), in practice, in the medium term, there is unlikely to be effective direct competition in the water and waste water chain. Accordingly, we think that economic regulation should cover all elements of the chain:

- Water:

(i) Raw water abstraction and raw water treatment.
(ii) Water transmission and distribution.

- Sewerage operation:

(i) Waste water collection.
(ii) Sewage treatment and disposal.
(iii) Sludge treatment and disposal.

We envisage that "output" quality of service measures along the following lines will be required:

- Technical:

(i) Coverage: percentage of population covered by water, sewerage and sewage treatment services, quantity of supply and hours of service.
(ii) Continuity: number of planned and unplanned interruptions to water and waste water service and number of incidents of restrictions imposed on water use.
(iii) Water pressure.
(iv) Leakage.
(v) Meter coverage.
(vi) Number of incidents of sewer flooding.

- Environmental:
  - (i) Raw water quality.
  - (ii) Condition and maintenance of water delivery system.

(ii) Waste water discharge quality.
(iii) Sludge discharge quality.

- Public health: drinking water quality.
- Customer service:

(i) Response times to connection requests;
(ii) Response times to billing enquiries.
(iii) Response times to customer complaints.
(iv) Failure to keep appointments.

Concerning regulatory institutions, we make the following suggestions as set out earlier in the draft policy for Karnataka:

- State level regulatory institutions be created initially

(i) To approve award and revoke of concessions by municipalities.
(ii) To conduct economic regulation under the terms of the concession.
(iii) To conduct quality of service regulation under the terms of the concession.

- When a critical mass of concessions has been awarded, regional (or potentially municipal) level regulatory institutions be created to conduct quality of service regulation under the terms of the concession.

The objectives of these recommendations are:

- To separate clearly policy, regulatory and implementing roles. Accordingly, new regulatory institutions are necessary to avoid the problem of self-regulation if one of the implementing institutions takes the regulatory role. Gujarat considers this issue warrants establishment of an independent regulator as soon as possible.
- To achieve some degree of standardisation of approach to PSP as, ultimately, there are likely to be many water supply and sewerage concessions in each state. We anticipate that the state level regulatory institution would provide this standardisation through approval of concession award.
- To address potential skills and capability gaps at municipal level. We doubt the capacity of municipalities (particularly smaller municipalities) to adequately oversee private operators and, accordingly, we believe that, initially, a state level institution and, later, regional institutions should conduct quality of service regulation. We stress that, in general, we prefer more local accountability and we would anticipate that, in due course, municipalities with the capacity would undertake quality of service regulation.
- To avoid the proliferation of regulatory institutions which could occur if all regulation were carried out at municipal level.

We suggest that a comprehensive concession contract be the primary regulatory instrument. As part of the output of this TA programme, therefore, we have prepared a draft concession agreement for the sector, (Volume 4), which takes account of the model regulatory requirements specified below.

Model Regulatory Requirements

We outline below model regulatory requirements focusing on the key issues and identifying measures, which may mitigate impediments to PSP:

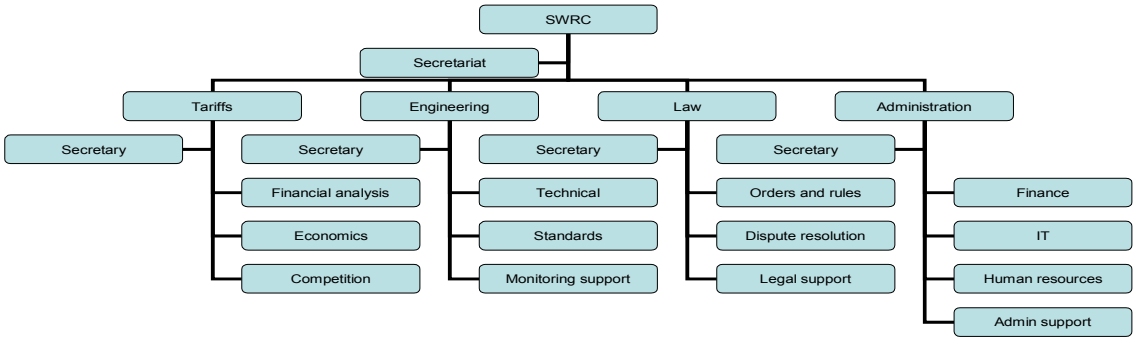
- **Entry.** PSP should be welcomed in all elements of water supply and sewerage and by all modalities. However, initially, management contracts for operations and maintenance and, perhaps, limited investment are more likely to be successful than concessions which require significant investment.
- **Levels of competition.** Competition will be limited to competition for the market rather than competition within the market. The bid documents for the competition to award the market to a particular service provider need to contain a well-documented baseline of existing asset condition and service levels to attract serious bidders. This may require the award of a management contract, prior to award of the concession, to establish this baseline.
- **Service standards.** The regulator should determine minimum "output" service standards. These service standards should be expressed in terms of percentage of population covered by water supply and sewerage services [by area], litres of potable water per person per day, hours of service, continuity, percentage of services metered, pressure and quality of water, consistent with relevant World Health Organisation, Central Public Health Engineering and Environmental Organisation and Bureau of Indian Standards physical, chemical, bacteriological and virological guidelines. Such standards should ensure that the water supplied is clear, palatable, odour-free, neither corrosive nor scale forming, and free from pathogenic organisms or minerals which produce undesirable physiological effects.
- **Universal service obligation.** There should be an explicit obligation to provide a minimum "life-line" quantity of potable water for all.
- **Environmental standards. Based on potable water quality standards, established in Indian legislation (www.cpcb.org),** The SPCB should define for the service provider theminimum potable water quality standards and the quality control measures needed to be applied. The service provider must be completely familiar with CPCB standards and actions needed for bringing systems up to standard. This particularly important for potable water supplies, which if substandard large scale gastrointenstinal disorders and possibly much more serious disease outbreaks are likely.Derogation should be limited to a time period within which the service provider can implement remedial measures in the shortest time possible since either water or sewage works malfunctions have serious immediate impacts and lead to costly remedial actions. Where remedial measures involve significant investment, for example in a sewage treatment plant, the service provider cannot be held responsible for failure to implement if the relevant municipality has not made available funds for the investment. However if the investment is directly the result of a substandard installation, in contravention of SPCB specifications and guidelines, which are very explicit, the provider must pay all costs and penalties. If this is not the case the municipality should be penalised to the full extent of the law.
- **Investments.** The service provider or the relevant ULB or PRI will make investments. The regulatory arrangements should ensure that the service provider is remunerated adequately for any investments it makes through the user charges and any subsidy from the relevant ULB or PRI.
- **Tariff.** The regulator should analyse submissions made by the service provider of its projected costs for a [three] year period to determine

(i) Minimum levels of user charges that cover at least the operations and maintenance costs of water supply and sewerage service provision to retail customers to be fully implemented according to a defined charge path within [three] years.

(ii) Minimum levels of user charges that cover at least the operations and maintenance costs of water supply and sewerage service provision to bulk supply customers to be fully implemented immediately.

(iii) Subsidy amounts to fund the difference between the investment and operating costs (including depreciation and a reasonable rate of return on capital employed) of an efficient service

Figure 3.2: High-level organisation of State Water Supply and Sewerage Regulator



provider and the revenues raised through user charges.

- **Tariff and subsidy review.** The regulator should repeat its analysis to determine minimum levels of tariffs and subsidy amounts every [three years].
- **Monitoring.** The regulator should define the process for monitoring of performance of the concessionaire.
- **Penalties.** The regulatory arrangements should prescribe the penalties for breach of conditions of the concession. These penalties should exceed the costs imposed by the breach to discourage breaches and should become increasingly severe in the event of failure to remedy breaches or of repeat offences.

Regulatory Agency

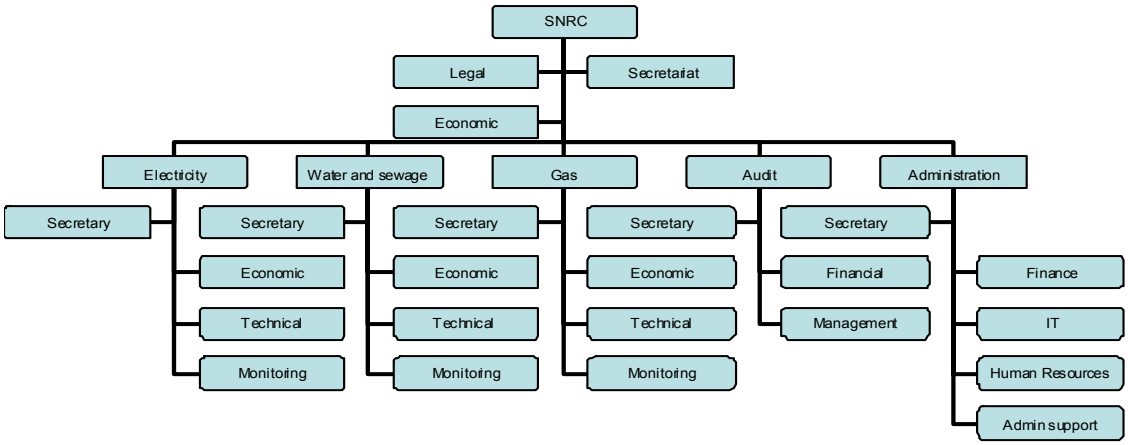
On balance, we consider that network regulators should be established at state-level by extending the existing SERCs. These network regulators would be responsible for economic, technical and customer-service regulation of electricity, water supply and sewerage and gas. However, we recognise that some states may prefer to establish a stand-alone regulator given the particularly sensitive and complex issues in the water sector.

In this section, we present organisational structures for a stand-alone water supply and sewerage regulator as preferred by Andhra Pradesh, Gujarat and Karnataka and for a multi-sector regulator incorporating water supply and sewerage regulator as preferred by Madhya Pradesh.

In Figure 3..2 we set out a suggested high level organisation structure for a state water supply and sewerage regulatory commission (SWSSRC) modelled on the APERC. It includes:

- The Regulatory Commission comprising a Chairman and two members.
- Secretariat reporting to the Commission and responsible for convening meetings of the Commission and the Advisory Committee, maintaining records, co-ordinating with directorates to provide necessary information for the meetings of the Commission and following-up on customer complaints.

Figure 3.3: High -level organisation of State Network Regulator



- Four Directorates reporting to the Commission:

(i) **Tariffs**. Responsible for economic regulation including setting and monitoring tariffs and promoting competition.

(ii) **Engineering**. Responsible for technical regulation including technical licensing and setting and enforcing standards.

(iii) **Legal**. Responsible for all legal matters including drafting of orders and rules, dispute resolution and imposition of penalties.

(iv) **Administration**. Responsible for monitoring and ensuring timely progress on all important decisions of the Commission and providing financial, IT, human resources and administrative support

We anticipate the total staff complement (excluding commissioners) would be about 40 in line with the SERCs. The staffing would comprise some 25 professional staff (economists, lawyers, engineers, accountants, HR and IT professionals and the like) and 15 support staff (personal assistants, clerical assistants, receptionist, telephonist, messengers, caretaker, security and the like). The annual salary costs would be some Rs 7 million based on broad salary levels for professional staff and support staff of 15000-20000Rs/month and 3000-10000Rs/month respectively. We base this estimate on the assumption that, initially, the SWSSRC becomes responsible only for water supply and sewerage regulation for a few [say up to five] larger cities. Later, as its coverage of water supply and sewerage increases, the SWSSRC will need to establish regional quality of service regulatory offices with corresponding increase in staffing.

We have not included a directorate for customer service as we assume that the SWSSRC would have limited direct interaction on specific customer complaints. We assume it would merely receive (audited) performance data on complaint handling from the service providers and take appropriate action in case of widespread or persistent complaints.

In Figure 3.3, we set out a suggested high level organisation structure for a state network regulatory commission (SNRC) incorporating electricity, water supply and sewerage and gas modelled loosely on the New Jersey Board of Public Utilities (NJBPU). It includes:

- The Regulatory Commission comprising a Chairman and two members.
- Three Offices reporting to the Commission:

(i) **Legal**. Responsible for all legal matters including drafting of orders and rules, dispute resolution and imposition of penalties.

(ii) **Economic**. Responsible for advising on policy and analysing and recommending on general economic and competition issues, including user charges (in close co-ordination with the relevant directorate).

(iii) **Secretariat**. Responsible for convening meetings of the Commission and the Advisory Committee, maintaining records, co-ordinating with directorates to provide necessary information for the meetings of the Commission and following-up on customer complaints.

- Five Directorates reporting to the Commission:

(i) **Electricity**. Responsible for economic regulation including setting and monitoring tariffs and promoting competition and technical regulation including technical licensing and setting and enforcing standards.

(ii) **Water supply and sewerage**. Responsible for economic regulation including setting and monitoring tariffs and promoting competition and technical regulation including technical licensing and setting and enforcing standards

(iii) **Gas**. Responsible for economic regulation including setting and monitoring tariffs and promoting competition and technical regulation including technical licensing and setting and enforcing standards

(iv) **Audit**. Responsible for financial and economic efficiency auditing of the regulated utilities.

(v) **Administration**. Responsible for monitoring and ensuring timely progress on all important decisions of the Commission and providing financial, IT, human resources and administrative support

Again it does not include a directorate for customer service unlike the NJBPU.

A SNRC can be formed by enhancement of the SERC with consolidation of the existing tariffs and engineering directorates to form the power directorate and addition of extra directorates as water supply and sewerage and gas become subject to its regulatory control. Initially, an extra 15 professional staff and five support staff, representing an additional annual salary cost of some Rs 4 million, would be required for each of the water supply and sewerage and gas sectors, based on the assumption that, initially, the SNRC would be responsible only for water supply and sewerage regulation for a few larger cities.

Observations and Conclusions

To summarise, we note that the regulatory/enabling environment does not exist in water supply and sewerage sector to ensure that the cost of investment can be recouped through user charges, nor is there the political will to ensure that such cost-based tariff structures are implemented. India, however, is in not alone in this situation. Other jurisdictions have experienced the same limitations with much the same result. The problems of balancing costs and charges, and of efficient management and leakage, make such PSP in the near future unlikely beyond operation and maintenance contracts.

3.3 Effect of Other Relevant Laws

This section provides a brief discussion of legal issues that are common to all or most of the infrastructure sectors.

3.3.1 Foreign Investment Legislation

India does not have specific legislation to regulate Foreign Direct Investment (FDI). The relevant policy has been set out in the Industrial Policy Statements issued under the Industries (Development and Regulation) Act, 1951 as well as the FDI Policy and regulations laid down under the Foreign Exchange Management (FEMA) Act, 1999. FEMA also governs various aspects relating to foreign exchange management, such as disinvestments of original investment, foreign technology collaboration agreements, repatriation of profits, and acquisition of immovable property by foreigners.

Under the above framework foreign investment in India may be made in an Indian company with or without prior Government approval. The sectors where investment is allowed without prior Government approval, are termed as sectors where investment is permitted through 'automatic route'. The FDI Policy provides information on whether investment in a given sector would be permitted through the automatic route or otherwise. In addition it also prescribes the maximum extent to which FDI would be permitted in different sectors. 100% FDI is allowed in power, roads and ports, and urban mass transit through the automatic route. In the airport sector any investment exceeding 75% would require the approval of the Government.

[34] We note that Tamil Nadu enacted model local government legislation in 1996- the Unified Local Bodies Act- but it has not been carried out in practice.

[35] It may be pointed out that Maharashtra has a proposed Water and Waste Water Regulatory Commission (MWRC) that would be the first in India.

The nodal agency for approving FDI is the Foreign Investment Promotion Board (FIPB), currently under the Ministry of Finance. Foreign companies can conduct business in India through liaison/representative offices, project offices, wholly owned subsidiaries or joint ventures. FDI can be in the form of new investment or investment in an existing Indian company. At present, the project office is the most widely used entry route for infrastructure projects. Such project offices may be temporary/site offices but in that case they are specific to that particular project only.

The Report of the Steering Group on Foreign Direct Investment of the Planning Commission of India recommended that existing exit barriers for foreign investors, such as regulatory approvals required for the sale of shares by one foreigner to another foreigner and the sale of shares from a non-resident to a resident, be removed. It also suggested that any entry barrier to FDI in any sector must be explicitly justified. It is hoped that the recommendations of this Report will be implemented in the near future.

3.3.2 Tax Legislation

In India, the tax system is considered not just as a source of revenue but also as an instrument for bringing about far-reaching economic reforms. Taxes can be broadly divided into direct taxes and indirect taxes. The major direct taxes are the Income Tax, the Wealth Tax, and the Gift Tax. The major indirect taxes are the Customs Duty, the Central Excise Duty and the Sales Tax. Indirect taxes are levied by both the Central Government and the State Government and account for about 60% of the total gross taxes collected.

With regard to the income tax, although tax rates have been reduced in the last several years, the statutory corporate rate in India of 36% is still relatively high for Asia when compared with the tax rates in other countries of the region. For example it is 15% in Hong Kong, 26% in Singapore and 28% in Malaysia. Foreign companies are taxed on income by way of dividends, royalties and technical services. Dividends are not taxed in the hands of the shareholder except under a tax treaty.

Income tax incentives are used as instruments for promoting specific economic activities, including infrastructure funding. There is an exemption from taxation of income from dividends and interest on long term capital gains with regard to such funds. In addition, there is such an exemption for investments in the form of shares or long term finance in any enterprises set up to develop, maintain and operate an infrastructure facility. Further, income from deposits with or in bonds issued by a public company formed and registered in India with the main objective of carrying on the business of providing long-term finance for urban infrastructure shall not be included in total income.

With regard to indirect taxes, customs duties are governed by the Customs Tariff Act, 1975. The Finance Bill, 2003 reduces the peak customs duty to 25% and also reduces the applicable duty on raw materials and semi-finished goods so as to encourage the export of finished goods. Further, the Project Import Scheme sets a flat rate of duty on all capital goods imported for a project rather than having them separately classified and assessed. The Central Excise duty now has a three-tier structure of 8%, 16% and 24%. Both the number and level of rates has been reduced in the last 10 years as India moves gradually toward replacing excise duties with a VAT on manufactured goods. However, although there has been convergence of tax rates and an accompanying curtailment of exemptions, tax administration still continues to be complex and distortions in the application of taxes is still high. Also, a tax on services was introduced in 1994 to broaden the indirect tax base. That tax rate was just increased from 5% to 8% and ten additional services added, including technical and testing analysis, maintenance and repair services, commissioning and installation services, and business promotion which may affect private sector participation in infrastructure.

As to sales taxes, the central sales tax has just been reduced from 4% to 2% and is proposed to be eliminated over time. State sales taxes range from 7% to 16%. With regard to VAT, its implementation at the Sate level planned for 1 June 2003 has been rescheduled due to opposition from retailers.

Different States have different incentives to attract investment in the form of exemptions, waivers, deferrals and refunds. Other important State taxes include excise duty on specific goods, turnover tax, purchase tax, registration fee and stamp duties, motor vehicles tax, passengers and goods tax, profession tax, entertainment duty, and octroi (where still in force).

3.3.3 Competition Legislation

As part of its economic reform efforts, India is in the process of implementing the Competition Act, 2002. That Act reflects the increased emphasis on promoting competition by prohibiting trade practices which cause appreciable adverse effect on competition within markets in the country. It can have an important impact on the openness of such markets to outside participation, especially foreign investment. The Act would replace the Monopolies and Restrictive Trade Practices (MRTP) Act, 1969, which was considered to have become obsolete with regard to the need to shift focus from curbing monopolies to promotion of competition. The Act was based on the recommendations of a High Level Committee headed by Mr. S.V.S. Raghavan in May 2000. That Report mentioned a number of problems that should be dealt with in such legislation, including repeal of the Sick Industries Act, amendment of the Industrial Disputes Act to provide an easy exit for non-viable firms from legal liabilities, elimination of the rules of the Industries (Development and Regulation) Act 1951 except as to location and environmental protection, and divestiture of Government shares and privatisation of enterprises not related to national defence . The new Act does generally follow the principles set forth in the Committee Report. Unfortunately, only parts of the Act areyet in force. The establishment of the Competition Commission of India(CCI) has not yet taken effect although rules for the selection of the Chairman and Commission members were notified in April 2003. The old MRTP Act has not yet been repealed.

The major feature of the new Act is the establishment of the Competition Commission of India (CCI), a quasi-judicial body, whose goal is to eliminate practices having an adverse effect on competition, promote and sustain competition, protect the interests of consumers, and ensure that freedom of trade is carried out by all participants in the markets of India. The Central Government may issue directions on policy matters to the Commission and reverse its decisions when it is considered necessary to do so.

The Commission shall have a Principal Bench and Additional Benches, as well as one or more Merger Benches. It shall look into violations of the Act based either on its own knowledge or based on complaints received from the Central Government, State Governments or statutory authorities. The Commission may then pass orders granting interim relief or imposing penalties. With regard to violating enterprises, the CCI may levy a penalty of not more than 10% of the average turnover for the last three financial years. It can order the division of dominant enterprises. It also has the power to order the breakup of mergers and amalgamations that adversely affect competition. Appeals from such orders lie to the Supreme Court. The Commission may order its Director General to carry out investigations for it. Another important feature of the Competition Act 2002 is that it allows other regulatory authorities such as the Telecom Regulatory Authority of India and the Electricity Regulatory Commissions to seek its opinion if they deem fit on any matter which they feel fall within the subject matter of the Act.

With regard to anti-competitive behaviour, the Act provides a general definition and defines prohibited arrangements, including anti-competitive agreements, abuse of dominant position and combinations. An anti-competitive agreement is one that is likely to cause an appreciable adverse effect on competition in India. The principles and variables are set forth which are to be considered in determining whether an appreciable adverse effect on competition is achieved and whether an enterprise enjoys a dominant position in an industry. The latter includes a discussion of the relevant market, both geographic market and product market. With regard to combinations, size limits are set which prima facie are determined to be combinations under the Act.

Thus the Competition Act, 2002 establishes rules on anti-competitive agreements, abuse of dominant

position and combination which generally reflect common practice in the world with regard to practices that stifle competition in markets except with regard to the question of compulsory prior notification. It is too early to see how effective the enforcement of the Act will be when it is in full force. However, the Act is a sign to private investors, especially potential foreign investors, that India will be more open to them than it has been in the past.

3.3.4 Labour Legislation

Labour law in India is a field of concurrent jurisdiction of the Central Government and the State Governments. However, the Central Government controls labour in vital industries such as railways, mines and defence-related industries. In addition, Part III (Fundamental Rights)and Part IV (Directive Principles of State Policy) of the Constitution have implications for labour laws. Further, India has ratified 39 ILO conventions, of which 37 are in force. The Report of the II National Commission on Labour 2002 emphasises the need to rationalize and simplify the existing labour laws to produce a comprehensive social safety net to replace the present set of labour laws which result in rigidity in the economy and discourage investments.

The following are the relevant labour laws, which might affect private sector participation in the infrastructure sector.

- Apprentice Act, 1961;
- Contract Labour (Regulation and Abolition) Act, 1970;
- Employees' Provident Funds & Miscellaneous Provisions Act, 1952;
- Employees' State Insurance Act, 1948;
- Equal Remuneration Act, 1976;
- Factories Act, 1948;
- Industrial Disputes Act, 1947;
- Industrial Employment (Standing Orders) Act, 1947;
- Inter-State Migration Workmen (Regulation of Employment and Conditions of Service) Act, 1979;
- Maternity Benefit Act, 1961;
- Minimum Wages Act, 1948;
- Payment of Bonus Act, 1965;
- Payment of Gratuity Act, 1972;
- Payment of Wages Act, 1936;
- Sales Promotion Employees (Conditions of Service) Act, 1976;
- State Level Shops and Establishments Legislations ;
- Trade Unions Act, 1926;
- Workmen's Compensation Act, 1923.
-

The key features of the above laws can be found in Volume 2 of this report series.

The necessity of labour reforms in India is generally seen in the context of the ability to retrench a redundant work force when the business or project becomes unviable. The duration, types and other conditions of employment and matters including the outsourcing of work are also important. Another issue relates to the entitlement of contract labourers to get absorption in the permanent services of the establishment upon the abolition of contract labour. Pursuant to the announcement in the 2001/2002 budget that labour laws would be reformed, a Group of Ministers examined the issues but has not yet come up with a final proposal. Among the laws selected for review, the most contentious were the reforms proposed to the Industrial Disputes Act, 1947, the Contract Labour (Regulation and Abolition Act), 1970 and the Payment of Wages Act, 1936Also, certain state legislation on Shops and Establishments creates difficulties in carrying out the round the clock work in an establishment.

Some of the Project States have issued policies meant to ameliorate the situation. Thus Gujarat issued a 1998 policy for amicable settlement of disputes by management and representatives of labour through proactive action of the Labour Department. Its Industrial Policy for the year 2003 also plans to put in place a number of labour law reforms, including flexibility of labour laws in SEZs and industrial parks and a Single Business Act for self-certification through accredited consultants. Andhra Pradesh has amended its labour laws to attract investment, including self-certification and flexibility in work hours and holidays. Madhya Pradesh has proposed simplifications in labour laws for SEZs, as well as permitting inspections through accredited agencies following best international practice.

3.3.5 Land and Land Acquisition Legislation

Land and land acquisition legislation is a very important aspect regarding successful private sector participation in infrastructure projects. The ownership of land and its transferability is a primary question raised by potential private investors. Almost all infrastructure projects in India raise the issue of land acquisition due to the high population density. The transfer of large areas of land and/or right of way in or over land or right of use of land is a necessity for such projects. The rights of persons who now own or use that land must be determined for that purpose.

The rules regarding acquisition of property is a concurrent right of both the Central Government and the State Governments under the Constitution. Article 31-A provides that no land acquisition law may be challenged as arbitrary. Thus such laws are very powerful. In most infrastructure projects, the land for the project is transferred from the State Government to the developer from private landowners by means of the provisions of the Land Acquisition Act, 1894. However, there are also separate State laws for land acquisition for specific purposes such as the MP Housing Board Act, the MP Municipalities Act, and the Karnataka Industrial Development Areas Act, 1966.

The Land Acquisition Act, 1894 provides the template for most of the subsequent enactments. It provides the procedure to be followed for land acquisition/expropriation, both the normal procedure and the procedure for urgent possession. Originally, the Act did not define the "public purpose" for which land could be taken but such a definition was added by a 1984 amendment. Specified public purposes include the planned development of land for the pursuance of any scheme or policy of Government and for a corporation owned or controlled by the State. Yet the 1984 amendment does not codify the criteria on the basis of which a determination of public purpose shall be tested. In general, the Government concerned has the discretion to acquire land under the Act for any public purpose. The judiciary does not normally interfere with the exercise of this discretion once it is shown that the condition precedent of a public purpose has been satisfied. Court cases since 1984 have held that a change in public purpose after the land was acquired did not vitiate the acquisition proceedings and that land acquired for one public purpose could then be used for another public purpose. However, in the 1990s courts have also began to consider issues of rehabilitation and resettlement and other issues related to ensuring that the persons affected are beneficiaries of the project.

The Land Acquisition Act, 1894 also sets rules for the determination of the amount of compensation payable to the landowners for the taking by the District Collector, and a procedure necessary before the issuance of an acquisition order. Delays during the land acquisition process are endemic since there is no defined manner in which Collectors can be made accountable for delays in the passing of such an order. In some cases, the concerned developer has opted for direct purchase of the land concerned. However, that leads to increased cost if it becomes known that the developer is seeking that land. Furthermore, the developer who wishes not to rely on the State Government must also confront the State land record access and land record verification systems, both of which are deficient and can be the source of many problems

3.3.6 Loan Security Legislation

Granting security to loans is a very important requirement imposed by lenders on borrowers in the infrastructure sector as well as in other areas of lending and investment. There is no one piece of legislation, which comprehensively covers loan security creation. The law governing that area is found in several laws. In addition, there is a lack of a full-fledged bankruptcy law in India.

With regard to mortgages and charges, the Transfer of Property Act, 1882, as last amended in 2002, is the primary legislation. In addition, Part V of the Companies Act, 1956 provides rules regarding their registration. Order XXXIV of the Civil Procedure Code, 1908 gives certain important procedural aspects relating to the foreclosure, sale and redemption of property subject to mortgage.

Bailment and pledge are covered by the Contract Act of 1872, as amended. Provisions are provided for the pledging of shares following their

dematerialisation under the Depositories Act, 1996. However, it must be understood that the Contract Act does not seek to provide a comprehensive framework for the creation of a security interest. Thus it is possible for parties to contractually create for themselves any combination of security interests to meet their needs. Hypothecation is a common kind of security interest in India but it is not specifically mentioned in any of the provisions of the Contract Act.

The law relating to promissory notes, bills of exchange, cheques and other negotiable instruments is codified under the Negotiable Instruments Act, 1881, as last amended in 2002. The 2002 amendment redefined "cheque" to include "cheque in an electronic form". An important 1989 amendment adding Chapter XVII to the Act made dishonour of cheques a criminal offence.

Stamp Acts and the Registration Act, 1908, as amended, form an important complement to the above substantive acts. The levy of stamp duty is divided between the Central Government and State Government as follows:

- The Central Government is given the power to levy stamp duties on bills of exchange, cheques, promissory notes, bills of lading, letters of credit, transfer of shares, debentures, proxies and receipts; and
- State Governments may levy a stamp duty in all other cases.

The Registration Act, 1908 sets the basic rules for registration of transfer of rights to land. Such registration is compulsory also for gifts of immovable property and for leases for any term exceeding one year. However, other Acts that deal with the specific subject matter of certain documents, such as trusts and mortgages, also mandate their registration.

In order to facilitate the enforcement of security interests and thus strengthen the lending process, the Central Government in the last decade has enacted two important laws- the Recovery of Debts Due to Banks and Financial Institutions Act, 1993, and the Securitisation and Reconstruction of Financial Assets and Enforcement of Security Interest Act, 2002. Under Section 17 of the first Act, the Debt Recovery Tribunal was established to have jurisdiction over an application for recovery of debts due to banks and financial institutions rather than the civil courts in most cases. An Appellate Tribunal was constituted to enter appeals from the orders of the Debt Recovery Tribunal.

The Securitisation Act provides for securitisation, asset reconstruction and enforcement of security interests. Enforcement of such interests is a major concern of this TA Project. The prime attraction of the Act is that it enables secured creditors to enforce any security interest created in their favour without the intervention of a court or tribunal. Such a creditor may go against the secured assets or against the business of the borrower. The Act is new so its impact on the legal framework in actual practice still remains to be determined.

A related issue is that of collection of loans in the case of a sick company. As noted above, India does not yet have a full-fledged bankruptcy law. Issues relating to insolvency and the revival of sick companies comes under the Sick Industrial Companies (Special Provisions) Act, 1985. However, the procedures and formalities of that Act have led to endemic delays by the Board of Industrial and Financial Reconstruction (BIFR), the quasi-judicial body responsible for rehabilitating or winding up such companies. A proposal has been made to repeal that statute and set up a National Company Law Tribunal under the Companies Act, 1956 to carry out the powers of the BIFR and of related bodies, but it is not yet implemented. Thus this remains a major problem..

India has made a major effort to keep its legislation modern with regard to loan security, especially with the Recovery of Debts Act and the Securitisation Act. However, stamp duties and registration charges remain high and not uniform across all States and proper bankruptcy provisions have not yet been enacted.

3.3.7 *Dispute Settlement Legislation*

Private sector participation in infrastructure requires a well-developed mechanism for the resolution of disputes arising out of concession agreements, or any other such agreements, between the private

investor and the relevant government body with whom the agreement is entered into. As part of this TA programme, we have examined arbitration and conciliation as they exist in India, these two forms of alternate dispute resolution (ADR) being perhaps the most-often used, both in India and in other countries, to settle commercial disputes. The law relating to arbitration and conciliation in India, in general, and in the four Project States, in particular, is discussed in sub-chapters 7.1 to 7.4.

3.4 Conclusions

At the beginning of this Chapter, we set out the individual elements that constitute the regulatory framework for PSP in infrastructure and highlighted certain guiding principles for putting into place such a framework. Thereafter, we examined the regulatory framework which exists in each of the four Project States with respect to PSP in infrastructure in general and reviewed sector specific policies and laws, to identify gaps and constraints, if any, to increased PSP in the relevant sectors. In addition, some legal issues that cut across individual sectors were discussed to assess the effect of other relevant laws on infrastructure projects.

The key proposed changes for enhanced PSP, in each of the four Project States, both for infrastructure in general and for the relevant infrastructure sectors, including any additions or modifications to policy, legislation and overall regulation previously discussed in this Chapter will be revised in Chapter 8 in the context of our plan for future action with regard to the implementation of such proposed changes.

4

Fast Tracking the Private Sector Development Process

We have stated earlier that the process of developing bankable projects is the most critical area requiring further thought and support in all states. If planned projects do not come to fruition, the infrastructure development is delayed, and much time and money can be wasted.

4.1 Introduction

This chapter reviews the process of PSP in infrastructure in the four States and presents recommendations to accelerate and improve it. It presents a Project Cycle for PSP projects, and focuses mainly on the early phases of this Cycle.

One of the principal findings of this review is the shortage of bankable projects, and the need for government financial support to compensate for insufficient returns and risks to private capital to achieve financial closure . In spite of low, inaccurate, or unknown financial internal rates of return (FIRRs), state governments have continued to "market" or "keep alive" a shelf of investment projects in the hopes that private investment would appear. In several cases, state governments entered into a Memorandum of Understanding or other tentative agreements with developers without determining the FIRR and whether the project was bankable. As some of our case studies show, some projects were successful in attracting private investment, but financial closure for these projects did not occur without substantial direct government financial support in the form of loan guarantees, equity contributions, or other government funding. We conclude that more effort is required in the early phases of the Project Cycle to assess project bankability and the extent of government financial support required for financial closure.

In the case studies, the "gestation" period between project identification and project execution was excessive, typically a few years, and in some cases the project did not make it to the execution stage within 5 years. A significant amount of state government capital and human resources are expended on these projects to keep them active. It is not clear whether the desire to keep these projects "afloat" is due to inertia, lack of realistic expectations, or for some other reason. Many of the assumptions used to designate these projects as PSP opportunities change over time. The pre-feasibility and feasibility studies initially done for projects with long gestation periods can be misleading: often out of date; and based on economic, project revenue, legal, regulatory and other private sector risk assumptions that are overly optimistic and constantly changing. Due to the high cost of pre-feasibility and feasibility studies, these assumptions are not up-dated to reflect the changing economic return environment, and the project continues to be promoted despite being not viable for private investment.

We believe that much more effort is needed to screen projects early in the Project Cycle, both to determine the potential government contribution required to ensure bankability and to select the appropriate mode of PSP, in order to avoid wasting scarce government capital and human resources on projects that will eventually wither away. This is in accordance with best international practice for PSP projects, and is followed in countries such as the UK, Ireland, Australia, and South Africa.

Best practice has progressively been evolving in since the 1990s to take into account early in the project cycle the extent of government financial support and the need to modify or change the PSP mode based on the initial results of pre-feasibility studies. As we discuss in further detail in this chapter, these pre-feasibility studies use three primary criteria to evaluate PSP options:

- whether the project is affordable;
- provides sufficient 'value for money"; and
- transfers sufficient risks to the private sector.

These criteria first evolved in the UK and have become the standard for PSP project analysis in Ireland, Victoria State Australia, the Netherlands and the Republic of South Africa. Box 4.1 below provides further details on the definition of these terms and how they are applied to PSP projects in the South African context.

The choice of PSP mode is potentially very wide, as is exemplified in the Gujarat Infrastructure Development Act (GIDA), and the Andhra Pradesh Infrastructure Development Enabling Act (IDEA) discussed in the previous chapter, and in many other policies and legislation relating to PSP in infrastructure in India.

If a PSP project will require substantial government financial support, then more attention needs to be paid to a detailed initial analysis early in the Project Cycle to evaluate the appropriate PSP mode and whether the project is affordable. This should reduce the gestation period of PSP projects and result in a greater focus on bankable projects. To accelerate the PSP process and better utilize government financial support, we recommend later in this chapter that the States establish a "Private Finance Initiative" Unit ("PFI" Unit), preferably

Text Box 4.1: REPUBLIC OF SOUTH AFRICA: PUBLIC FINANCIAL MANAGEMENT LAW AND THE EVALUATON OF PSP PROJECTS

The Republic of South Africa passed a comprehensive Public Financial Management Act (PFMA) in 1998 to improve government efficiency. Included in this law was the creation of a PPP Unit within the Treasury, Ministry of Finance, to approve PPP projects proposed by Government line Ministries and Provinces. The Treasury prepared Regulation 16 to guide line ministries in the preparation of PPP projects.

Regulation 16 presents the policies and steps line ministries and provincial governments have to follow to receive Treasury approval for PPP projects. In addition, the Treasury prepared 26 training modules for the line ministries to implement the "Project Cycle" as defined in Regulation 16. Below we present some of the key policy concepts included in Regulation 16 and elements of Module 4, the Feasibility Study phase of the Project Cycle (which we refer to as the "Rapid Assessment" in Section 4.2).

Regulation 16 Key Policies and Concepts

- What are the tests for a PPP? Whatever the PPP type, structure, payment mechanism, or sources of funding, all South African PPPs governed by Treasury Regulation 16 are subjected to three strict tests: • Can the institution afford the deal? • Is it a value-for-money solution? • Is substantial technical, operational and financial risk transferred to the private party?
- "Affordability" means that the financial commitments to be incurred by an institution in terms of the PPP agreement can be met by funds – (a) designated within the institution's existing budget for the institutional function to which the agreement relates; and/or (b) destined for the institution in accordance with the relevant treasury's future budgetary projections for the institution;
- "Value for money" (VFM) means that the provision of the institutional function or the use of state property by a private party in terms of the PPP agreement results in a net benefit to the institution defined in terms of cost, price, quality, quantity, risk transfer or a combination thereof.

Feasibility Study (Module 4)

To demonstrate affordability and VFM, the line ministries must prepare a feasibility study of the proposed project prior to preparation of bidding documents. The feasibility study has six steps, including a VFM analysis (Value Assessment) which compares the PPP project to a baseline Public Sector Comparable (PSC) project. The VFM analysis must demonstrate that the PPP project has a higher Net Present Value than the PSC. The NPV analysis includes a risk component that quantifies the technical, operation and financial risks that are shifted to the private sector.

Below are the elements of the Value Assessment contained in Module 4. For a more detailed explanation of the VFM analysis, including examples of VFM and risk assessment calculations, please refer to the Republic of South Africa's Treasury website, Public-Private Partnership webpage (www.treasury.gov.za), Module 4, Feasibility Analysis.

Requirements for the Feasibility Study Report: Value Assessment[1]

- **PSC model**
  - Technical definition of project
  - Discussion on costs (direct and indirect) and assumptions made on cost estimates
  - Discussion on revenue (if relevant) and assumptions made on revenue estimates
  - BEE targets
  - Discussion on all model assumptions made in the construction of the model, including inflation rate, discount rate, depreciation, budgets and MTEF
  - Summary of results from the base PSC model: NPV

- **PPP reference**
  - Technical definition of project
  - Discussion on costs (direct and indirect) and assumptions made on cost estimates
  - Discussion on revenue (if relevant) and assumptions made on revenue estimates
  - Discussion on proposed PPP type
  - BEE targets
  - Proposed PPP project structure and sources of funding
  - Payment mechanism
  - Discussion on all model assumptions made in the construction of the model, including inflation rate, discount rate, depreciation, tax and VAT
  - Summary of results from the PPP-reference model: NPV
- **Risk assessment**
  - Comprehensive risk matrix for all project risks
  - Summary of the institution's retained and transferable risks
  - The NPV of all risks (retained and transferable) to be added onto the base PSC model
  - The NPV of all retained risks to be added onto the PPP reference model
- **Risk-adjusted PSC model**
  - Summary of results: NPV
- **Risk-adjusted PPP-reference**
  - Summary of results: NPV, key indicators
  - Sensitivity analysis
  - Statement of affordability
  - Statement of value for money
  - Recommended procurement choice
- **Information verification**
  - Summary of documents attached in Annexure 1 to verify information found in the feasibility study report

Economic Valuation

Another component of the Feasibility Study is the Economic valuation. The purpose of this analysis is to show the economic project flows and how they are distributed to different stakeholders that benefit from the project. Module 4 does not provide an example of an economic valuation, but refers the reader to the available literature for undertaking an economic benefit cost analysis.

under the jurisdiction of the Department of Finance, to assess whether the project is affordable, provides value for money and shifts risks to the private sector. As is shown in Table 4.1 below, several countries with successful PSP programmes have a PFI-type Unit within the Ministry of Finance to assess compliance of PSP projects with these criteria.

Applying these criteria in the early phases of the Project Cycle should accelerate the PSP process by ensuring that the likely government financial contributions required to achieve financial closure are clearly identified and then integrated into the normal budgetary processes.

Table 4.1 Characteristics of "PFI Units" in Selected Countries

ACTIVITIES	**Partnerships UK**	**Ireland IDG**	**South Africa PPP Unit**	**PPP knowledge Center, Netherlands**	**Partnerships Victoria (Australia)**
Organization Structure	Former PFI Unit in the Treasury shifted to a public-private partnership, which is 51% private, 49% public.	Minister of Finance leads the IDG, an interdepartmental committee to promote PPP. Advises government departments on PPP compliance.	Public Financial Management Act establishes the PPP Unit within the Ministry of Finance. Matrix organization staffed primarily with finance and legal experts.	"Think Tank" within the Ministry of Finance that combines government policy and advice to line ministries to promote PPP and approve projects. Incorporates Advisory Council (private sector members) and interdepartmental Steering Group.	Steering Committee appointed by Line Minister to guide PPP development. Unit within the Treasury approves PPP projects and reports results to the Line Ministry.
Activities	Assists line departments etc with PSP projects, and compliance with government criteria, especially government affordability, value for money and risk sharing criteria	Established in 1999. Strong emphasis on training to raise PPP awareness in government departments. Each department responsible for following PPP regulations.	Approves all PPP projects that require any government financial support.. Promotes PPP through Business Development unit.	Promulgates PPP regulations for government departments; assesses PPP quality, value added, and ensures projects comply with government policy	Steering Committee appoints external advisors to prepare PSC comparator (including risk analysis). Treasury approves Project Brief for Procurement and Award
Primary PPP evaluation tool	In-house expertise to evaluate compliance of PPP with government regulations.	Promotes awareness of value for money and risk transfer criteria for PPP projects.	Prepared comprehensive manuals illustrating the step by step PPP approval process.	Value for money (VFM) as demonstrated in PSC vs. PPP [36]	External advisors prepare VFM analysis using PSC, Budget Impact and Risk Transfer criteria.

[36] . PSC is the "Public Sector Comparator" that evaluates the NPV of a PPP vs. the NPV of the project as a public undertaking. The PSC concept was developed in the UK's PFI Unit and has become best practice in PFI Units in South Africa, Ireland and Victoria.

The remainder of this chapter is divided into four parts as follows:

- A description of the Project Cycle for PSP projects
- The key issues at each stage in the Project Cycle
- Description of a Rapid Assessment Methodology for selecting the appropriate PSP option
- The role of the proposed PFI Unit, followed by four sections describing how our proposals for a PFI Unit might operate in the four States.

4.2 The Project Cycle

There is no standard PSP process that is followed by other countries with an active PSP programme, but there are common characteristics in most smooth-running programmes. We have drawn on this international experience in making our recommendations below. At the end of the sub-section we give some international examples by way of comparison.

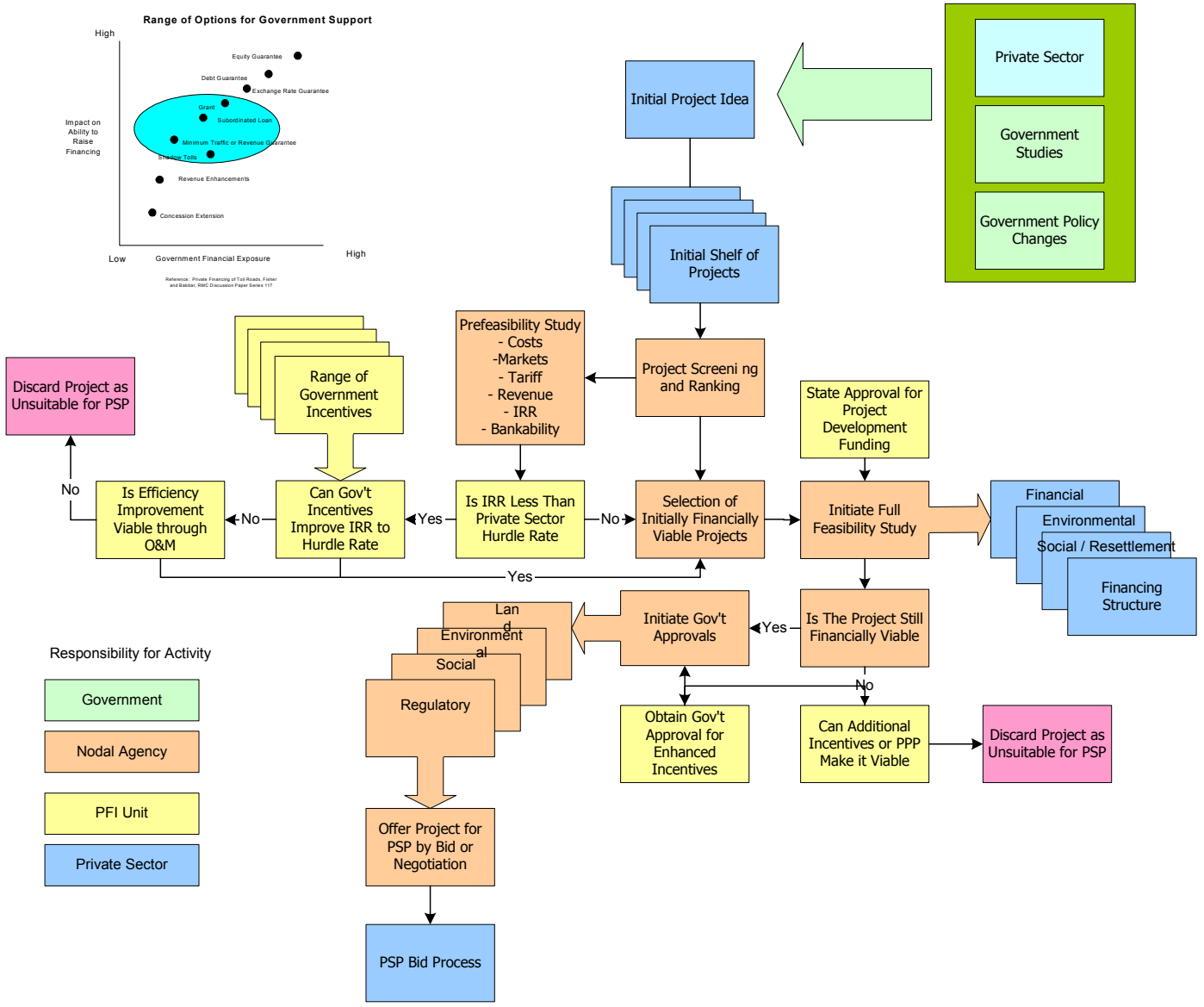
The process for PSP project development that we recommend for the States is illustrated in Figure 4.1 below. This process can be divided into five stages which together we refer to as the Project Cycle. The stages are:

- Project identification: the generation of initial project ideas and an initial shelf of projects.
- Evaluation of PSP mode: project screening and Rapid Assessment, leading to a decision on whether the project is suitable for PSP, and, if it is, the appropriate PSP mode. An important factor that is considered at this stage is the amount of government financial support that is likely to be required in order to ensure the commercial viability of the project and whether the government can afford this support. We elaborate later in this chapter on this critical stage.
- Project Preparation: more detailed engineering and cost data that are input into a comprehensive financial feasibility analysis and preparation of bidding documents. The extent of the engineering and details of the cost estimates will depend on the particular PSP tendering process selected for the project.
- Private developer selection: qualifying bidders, determination of award criteria, bidding process, evaluation and selection, negotiating with first placed tenderer, finalisation of project documents and contracts.
- Project Implementation: final clearances/approvals and financial closure, followed by implementation of the project.

In comparison, the UK, which was in many ways the pioneer of many forms of PSP in investment projects, currently has a six stage "Gateway Process":

- Gate O - Strategic Assessment of the business need at the start of the project.
- Gate 1 - Business justification: evaluation of the business case, once such an outline case is in place, to assess its robustness and to make recommendations for improvements where necessary.
- Gate 2 - Procurement strategy: assessment of the project's potential for success and ability to proceed, prior to an invitation to tender.
- Gate 3 - Investment decision: examination of the processes to select a supplier, and establishment of the appropriateness of the investment decision prior to a contract being awarded.
- Gate 4 - Readiness for service: examination of the robustness of business delivery, and whether there is a basis for evaluating ongoing performance.
- Gate 5 - Benefits evaluation: ensuring delivery of the benefits as set out in the initial business case.

Figure 4.1: Process For Project Development



To take another example, the South African PSP programme (which is labelled Public Private Partnerships or PPPs) has drawn extensively on international experience. The multi-stage Project Cycle can be summarised as follows:

- Project inception: broadly similar to our project identification.
- Feasibility study following which there is initial Treasury approval. If government financial support is considered, the project must be affordable .
- Procurement which is divided into three stages with Treasury approval required after each stage:
  - Preparation of procurement process, bidding documents and draft PPP agreement;
  - Bidding process and preparation of value for money report;
  - Negotiation with preferred bidder and finalisation of PPP agreement management plan.
- Development, delivery and exit: broadly similar to our implementation stage.

4.3 Key issues in the PSP process

In the following paragraphs we set out the critical issues that arise at each of the five stages in the Project Cycle, based on our field work in the four States (including the case studies), and best international practice. Our recommendations are aimed at good governance, and the ultimate objective of achieving the successful implementation of bankable PSP projects.

4.3.1 Project Identification

Project identification may be made by a variety of line departments and other government agencies. Some States have also generated a shelf of projects through the preparation of a general policy for PSP in infrastructure sectors such as Vision 2010 in Gujarat. One of the most important criteria in identifying potential PSP projects should be the likely bankability of the project, which implies that a private sector developer will be able to earn a satisfactory financial rate of return. In Gujarat, the driving factor for selecting candidate PSP projects in Vision 2010 appears to be its relative importance in promoting economic development. The focus on the infrastructure-economic development "linkage", which is fairly vague and subjective, rather than the risks associated with the financial rate of return is a major shortcoming. However, Vision 2010 is currently being updated in a way that should remove these deficiencies as is described later in section 4.5.2.

4.3.2 Evaluation of PSP mode

This essential step is not formally undertaken in any of the States. Instead projects tend to proceed directly from identification to preparation. As already explained we believe that this is a weakness in the present processes, and have therefore focused on this stage in the Project Cycle in Section 4.4 below. In particular we recommend that a "Rapid Assessment" should be carried out at this stage before proceeding to the more costly project preparation stage.

4.3.3 Project preparation

We have already referred in Chapter 2 to the absence of sufficient project preparation being a major impediment to implementation of the PSP programme. The two most critical issues at the project preparation stage are the scope and thoroughness of the preparation before going out to tender, and the availability of funding to undertake the scale of preparatory work required. The two issues may well be connected in some cases.

If projects are not prepared to an adequate level of detail, the tender process will either fail to attract bidders, or the scale of competition for the tender will be low with the result that the outcome is not as beneficial to the government as it should have been. An example of inadequate preparation is given by the Gujarat case study in Volume 5. In general, a Detailed Project Report should be prepared, together with a thorough identification and allocation of the risks and careful preparation of the bidding documents.

It is also desirable at the project preparation stage to obtain some of the necessary clearances and

approvals that will be required for project implementation. The general principle that should be applied is whether the public or private sector is best placed to secure a particular clearance. A major issue in many cases is land acquisition which can take a private sector developer many months or even years to secure (see the Karnataka case study in Volume 5). One of the important factors that potential bidders will take into consideration in deciding whether or not to bid, will be the scale of clearances and approvals that will be required before financial closure, and the potential bidders' perception of the difficulty of obtaining them.

In all major PSP projects, the government should engage specialists to advise and to prepare most of the documentation required at the project preparation stage. There is a substantial supply of financial, engineering and other consultancy advice available in the private sector both in India and internationally, and a heavy reliance on such advisers is widespread international practice. The skills and capacity that should be built up in government are described in the next chapter.

A major implication of the need for thorough preparation, combined with engaging extensive advice from the private sector, is that the cost of the project preparation stage can be substantial. However, it is a false economy to skimp on this stage for the reasons already given. The consequence is the second major issue identified above, namely the availability of funding to undertake the preparatory work (see for example the Andhra Pradesh case study in Volume 5).

The adequacy of project development funding should be assessed at each phase of the Project Cycle. Line ministries should justify annual budget allocations for the project preparation phase only after approval of the proposed Rapid Assessment that we recommend (see Section 4.4).

4.3.4 Quantum Of Funding Needed

It is essential that the project development cycle is adequately funded. A variety of sources exist for project development support in the various states. Some states, (Punjab) have allocated fixed taxes to this purpose. Other States (Gujarat) fund project development from the nodal agency budget. However, the amount of funding needed for project development varies dramatically with the size and the complexity of the project. For example, a large development such as the Bangalore – Mysore Corridor Project has taken 9 years and has clearly been very expensive. Other projects which are relatively straight forward are less expensive. The following rough guidelines can be used for budgetting.

Project Activity	Percentage of Capital Cost
Project Planning	1%
Feasibility Study and Detailed Design	5%
Environmental Assessment, Resettlement and Land Acquisition	20 to 30%
Supervision of Construction	6%
Engineering Monitoring	1%

We have recommended that an option for improved funding would be the establishment of a rolling fund to be administered by the States and the Central Government based on a project development loan from the Asian Development Bank. This will need further study but a draft terms of reference for such a loan is attached as Appendix D.

4.3.5 Project developer selection

The key principle that should be adopted at this stage of the Project Cycle is the transparency of the bidding process. Without transparency, potential bidders will be discouraged from bidding, and the opportunities for rent-seeking will be increased, with serious consequences for the efficiency and effectiveness of the project. In general, the procedures followed for tendering in the four States are reasonable, but further measures should be taken either to increase transparency or to improve the present procedures.

There are a number of governance and other measures that can be taken to help to create a transparent process:

- The full bidding process to be followed in all PSP projects should follow best international practice, and should be set out in detail in Rules issued by the Government under appropriate legislation such as an infrastructure development law. Of the four States, the GIDB has prepared some draft Rules, but these have not yet been issued.
- A Committee should be established to conduct the whole bidding process comprising relevant officials from government and one or two experts from outside government. A useful model to follow is given in the draft Rules for Gujarat.
- The tender documents should set out clearly the basis on which the evaluation of tenders will be carried out.
- The first part of the evaluation of the bids should include not only the technical evaluation, but also the capability of the bidder to achieve timely financial closure, and, where project finance is required, the availability of the funding facility must be clearly demonstrated at the time of bidder selection. The case study for Madhya Pradesh in Volume 5 refers to the problems that arise if this is not done.
- Wherever possible, the basis of the final evaluation of qualifying bidders should be reduced to a single parameter (eg a price or the percentage subsidy required) in order to minimise any scope for subjectivity in the selection process.

4.3.6 Project Implementation

There are generally two phases in project implementation:

- Final clearances/approvals and financial closure
- Implementation of the project.

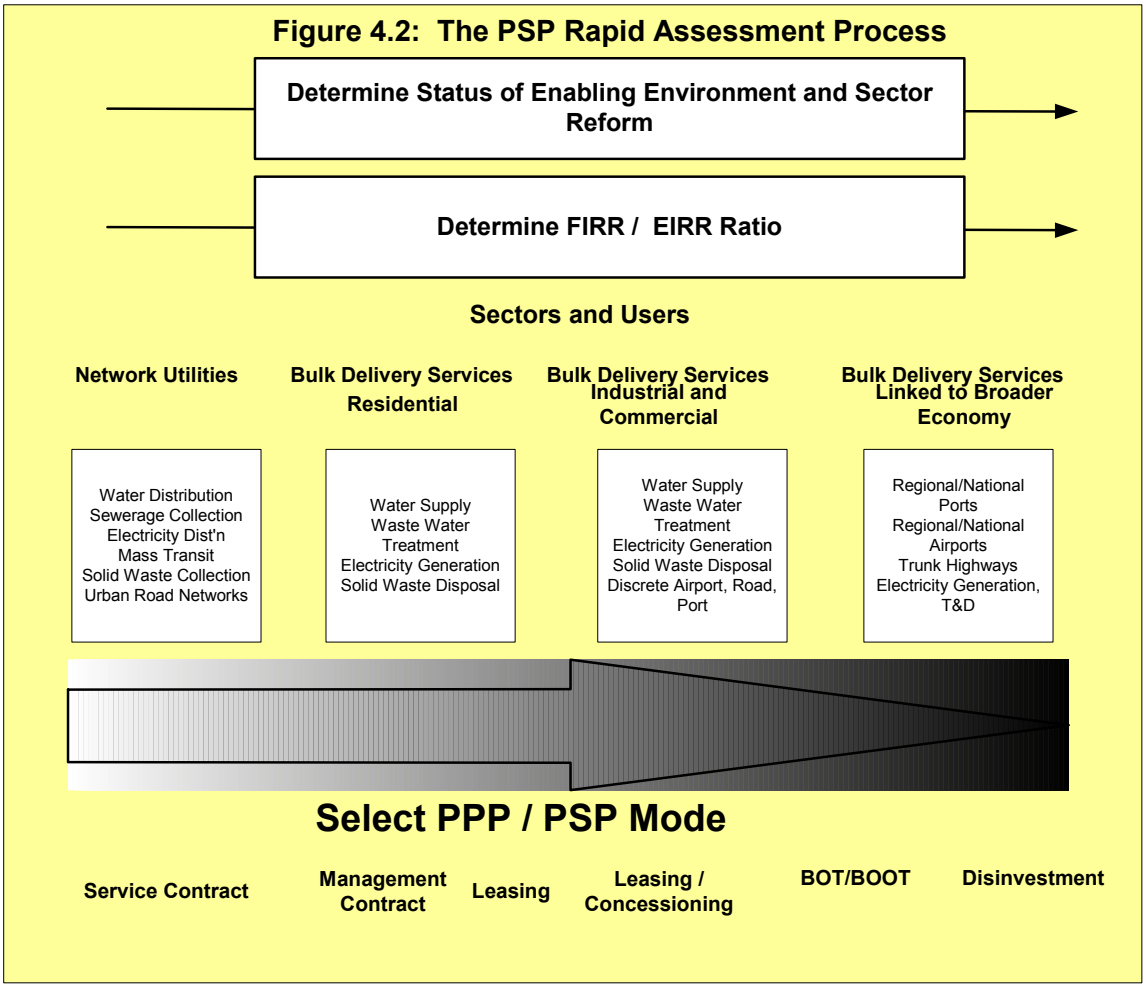
While the project implementation stage is largely the responsibility of the developer, there are some important tasks for the government to perform. In the first phase the critical task is to ensure that the process for securing the final clearances and approvals proceeds as smoothly and efficiently as possible. Speeding up the process is not only beneficial for project implementation, but also reduces the scope for rent-seeking by those granting the clearances and approvals. We recommend in Chapter 5 our proposals for a single window agency to perform this task. In contrast, financial closure is the responsibility of the developer alone (although it should remain an important factor in the developer selection process as discussed above).

When implementation starts, the essential task of government is to monitor the provisions of the concession agreement and other contractual arrangements to ensure compliance. The main source of difficulties arises from different interpretations of the contracts, or the activation of clauses like force majeure which are not clear-cut.

As far as possible such disputes should be resolved between the contracting parties through common sense, although ultimately there may be the need to go to arbitration. The scope for disputes can be minimised by well-drafted concessions/contracts, and we have therefore prepared example concession agreements for use by the States (see Volume 4). These agreements take account of international best practice. We set out in Chapter 5 our proposals for the institutional arrangements for contract monitoring, and our proposals for arbitration and dispute resolution in Chapter 7.

4.4 Selecting the Appropriate PSP Option using a Rapid Assessment Methodology

The long gestation period and inability to reach financial closure for many State PSP projects illustrates the need to improve the selection, early in the Project Cycle, of the PSP mode and level of government financial support required to attract private investment. We suggest a "Rapid Assessment" approach for this process, as illustrated schematically in Figure 4.2. This approach is similar to the "Feasibility Analysis" used in South Africa and described in more detail in [Box 4.1]. We use the term "Rapid Assessment" to emphasize the initial evaluation of PSP projects and conceptual level of technical inputs. It should be conducted at the second stage in the Project Cycle, namely the Evaluation of PSP Mode.



The purpose of the Rapid Assessment is to select the appropriate PSP option for a project, and to ascertain an "order of magnitude" estimate of state government financial support required, if any. It is the first step in the project development process and is done prior to final engineering design and a detailed financial feasibility analysis. The Rapid Assessment relies on conceptual, but adequate, project cost and revenue data to make reliable judgments about a project's economic and financial viability. Pre-feasibility studies should be undertaken in sufficient detail to allow for a reasonable preliminary estimate to be made of the project's economic and financial returns (see below). The level of engineering should be sufficiently detailed (up to around 25-40%), to capture potential design elements that can significantly increase costs and radically affect the economic and financial returns. The exact level of "conceptual" and "preliminary" engineering design will depend on the nature of the project, and ultimately is a matter of judgement.

One of the key purposes of the Rapid Assessment is to limit the costs of project development and to reduce the gestation period between project identification and financial close. The Rapid Assessment should enable the critical legal, institutional, technical, economic and financial risk elements to be identified, so that the appropriate level of private investment, if any, can be determined, and the most suitable PSP mode selected, prior to incurring significant detailed engineering, environmental impact and other project development costs. Rather than pursue detailed project engineering, legal, environmental and other studies first and later adapting the project to these findings , the Rapid Assessment attempts to structure the appropriate PSP option and then proceed to detailed studies. This approach should save significant time and lead to more successful PSP projects that achieve financial closure.

We describe the Rapid Assessment analysis under three headings:

- The Status of the Regulatory/enabling environment and Sector Reform;
- The FIRR/EIRR Ratio
- Selection of PSP projects and PSP Mode

4.4.1 Status of the Regulatory/enabling environment and Sector Reform

Assessing the status of the regulatory/enabling environment and sector reform assists PSP project proponents to identify critical project risks. This assessment of risks begins with a legal review that sets the parameters for private participation such as institutional and regulatory considerations; project revenue risks; technical standards; government approvals, etc. Most of the factors will be specific to the project, but it will also be necessary to check on more general regulatory/enabling environment issues. Examples of the more generic factors that are elements of broader project risks include:

- The State economy and fiscal constraints;
- Business Environment – for example, tax incentives, and infrastructure;
- Status of the Financial System;
- Socio-economic and cultural issues, eg consumer attitudes about willingness to pay;
- Economic and technical regulation;
- Local Contracting Capacity;
- Other elements of the regulatory/enabling environment relevant to the project.

4.4.2 The FIRR/EIRR Ratio

The FIRR/EIRR ratio (the ratio of the financial to the economic internal rate of return) provides a comparison between private and social project returns. A low FIRR/EIRR ratio indicates that the project is more "public" than "private" and is unlikely to attract private investment unless the government is willing to provide sufficient financial support to increase the FIRR. The higher the FIRR, the more likely a project will attract private investment. Projects with high FIRRs have a potential capability to support a mode of PSP toward the "head" of the arrow in Figure 4.2 (eg BOT, BOOT etc), whereas projects with higher EIRRs fall closer to the tail (service and management contracts).

The Rapid Assessment uses "conceptual" level data to estimate these returns. The calculations should therefore have a large contingency level, of the order of 25%, to compensate for the conceptual level cost and project revenue information, and a similar quantitative range of assumptions for the EIRR analysis.

EIRR analyses are often standard practice for development bank infrastructure loans. The complexity of the EIRR analysis contemplated for the Rapid Assessment will depend on the type of project under consideration. Major infrastructure projects such as railways and ports may have significant social benefits that are important to quantify and consider in a VFM (value for money) assessment. The objective of the EIRR in a Rapid Assessment is to quantify the social benefits of a project to help decide whether there is sufficient justification to provide adequate financial support to raise the FIRR to an acceptable level for private investors. If the State government does not provide the required level of financial support, then the project structure shifts from forms of PSP involving private investment towards more limited forms of PSP such as service and management contracts.

The methodology for the EIRR at the Evaluation of PSP Mode stage should be relatively simple. It should only aim to capture major social and project costs and benefits to ascertain the extent of government financial support, and to define better project inputs for the VFM analysis (such as technical, operational and financial risks). The Rapid Assessment is an iterative process for testing different estimates of project specific costs, revenues, demand, etc assumptions , combined with the status of the enabling environment (see above), to present the justification for a recommendation either to proceed with the preparation of the PSP project in some form, to consider a government owned and operated project, or drop the project altogether.

The assumptions used for the FIRR and EIRR analyses are a function of the type of project under consideration and the primary project beneficiaries. Figure 4.2 lists several different types of projects and users that imply different assumptions for the

FIRR and EIRR analyses. For example, tariff rates for a PSP water distribution BOT project directed toward residential users are different from the rates used in a bulk water supply project for an industrial site.

The Rapid Assessment should estimate an "order of magnitude" tariff level required for cost recovery of new investment that includes a minimum FIRR, such as 20% . The analysis might then include an acceptable gradual increase in the actual tariff level so that the amount of government tariff subsidy required to achieve the FIRR can be determined. If the level of subsidy required is beyond the capacity of the local government to support, the project has to be modified, possibly by reducing the level of new investment and focusing on efficiency gains to reduce water losses prior to new investments. From an EIRR perspective, extending water supply to households may be projected to generate health benefits to such a degree that the government decides to shift budgetary allocations to the water project from other competing uses. If the EIRR is not sufficiently high, then it may not shift fiscal resources, and may decide to begin with a PSP project that improves the utility's efficiency prior to soliciting private investment.

The Rapid Assessment presented above will vary from project to project. It is not a "cookbook" approach to PSP project evaluation, but a method to assess PSP projects early in the Project Cycle and guide the selection of the appropriate PSP mode and level of government financial support.

4.4.3 Selection of PSP projects and PSP Mode

Based on best international practice for PSP initiatives, we recommend that the following criteria are used to select PSP projects and evaluate the appropriate PSP Mode:

- Impact on the budget;
- Value for money – to ensure that the state receives the highest return for its financial support;
- Risk allocation – to ensure the appropriate level of risk transfer to the private sector.

The criteria should be applied as follows:

- Impact on the budget to the State Government involves the calculation of the FIRR and the extent of government financial support, including equity contributions and their equivalent (such as land transfers), loans, loan guarantees and other contingent financial liabilities; tax incentives; indirect costs (such as improvements to roads, water supply or other related infrastructure), etc.;
- Value for money is essentially concerned with comparing the full whole life costs of provision through a PSP project with provision by the public sector, taking full account of the transfer of risks to the private sector and other relevant factors. Sophisticated ways of making such calculations have been developed (eg in the UK), but we recommend that the assessment should initially be kept as simple as possible in the States;
- Risk allocation between the public and private sectors, covering technical, design, completion, operational, regulatory, legal, project revenue, planning approvals, and other risks. This analysis forms part of the value for money assessment.

The range of potential PSP modes is wide, and is illustrated in table 4.2 for each of the four sectors: roads, ports, UMT and water.

In the following paragraphs we elaborate on the form of PSP mode that is likely to be the most appropriate in the four sectors.

Roads

- District roads / Low volume – O&M only;
- Major District/State Highways – Annuity BOT or Capital Support BOT;
- High Volume State Highways / National Highways – Lease/Concession/SPV/BOT.

Ports

- Multi-use Minor Ports – O&M/Management Contract or Lease of Existing Terminals;
- High Volume Minor Ports – Terminal Lease/SPV/Concession;
- High Volume Single Use – Lease/Concession/BOT/Disinvestment.

UMT

- O&M, Management Contracts;
- SPV/Joint Ventures and Annuity Based BOT on Some Lines.

Water and Sewerage

- O&M, Management Contracts (best option at the moment)
- SPV/Joint Ventures and Annuity Based BOT for some applications like bulk water
- Future potential to grow into leasing or concessions but not yet.

Table 4.2: Range of PSP / PPP Options Appropriate for India in 2004

PSP/PPP Option	Asset Ownership	Operation and Maintenance	Capital Investment	Commercial Risk	Duration	Roads	Ports	UMT	Water and Sanitation
O&M Service	Public	Shared	Public	Public	1-2 Yrs				
Management Contract	Public	Private	Public	Public	3-5 Yrs				
Lease	Public	Private	Public	Private	8-15 Yrs				
Annuity Based BOT	Public	Private	Shared	Public	20 Yrs				
SPV or Joint Venture	Public	Private	Shared	Shared	20 – 25 Yrs				
Concession	Public	Private	Private	Private	20 – 30 Yrs				
Capital Support BOT	Public	Private	Shared	Private	20 – 30 Yrs				
BOT/BOOT	Shared	Private	Private	Private	20 – 30 Yrs				
Divestiture	Private	Private	Private	Private	Indefinite				

4.5 The PFI Unit

As noted earlier, one of the principal findings of this review is the lack of bankable projects and the need for government financial support to compensate for insufficient returns and risks to private capital (low FIRR) to achieve financial closure. More effort is required in the early project development phase to assess project bankability and the extent of government financial support. We recommend that this additional effort should be achieved through the establishment of a Private Finance Initiative Unit (PFI Unit), which, where appropriate, would be under the jurisdiction of the Department of Finance

As noted in section 4.1, this recommendation is in line with practices followed in other countries with successful PSP programmes. The Private Finance Initiative pioneered in the UK was driven initially from a unit in the UK Treasury (equivalent to a Ministry of Finance). South Africa, Ireland, Victoria (Australia), the Netherlands and other countries/states/provinces have established similar units in the national Treasury/Ministry of Finance.

The main role of the PFI Unit in the States would be to oversee the Rapid Assessment at the second stage in the Project Cycle (ie Evaluation of PSP Mode). The Unit would be trained in this technique, but would not be expected to be responsible for the whole exercise. In particular, the agency responsible for the project (eg a line department) should be responsible for collecting and assembling the information and data required for the Rapid Assessment, using consultants and advisers as necessary. The role of the PFI Unit would be to ensure that the Assessment is made to a consistent standard in all cases, and to help determine the appropriate PSP mode and the level of financial support required from budgetary resources. If the PFI Unit is located in the Department of Finance, it will also be able to ensure that decisions on financial support are integrated into the normal budgetary processes.

After the Evaluation of PSP Mode, the PFI Unit would continue to have a watching brief, but would not be directly involved in later stages of the Project Cycle unless the PSP mode or level of government financial support has to be materially reviewed or amended. The PFI Unit would remain at "arms length" from the private developer and simply receive project reports to review for approval throughout the Project Cycle. It would not interact with the developer, but would clarify questions it may have with the relevant line department or other government agency.

The main benefits to be gained from the creation of a PFI Unit on these lines would be substantial cost savings:

- through a reduction of wasted resources on the preparation of PSP projects that are not bankable; and
- potentially through the speeding up of those projects that are bankable. Such speeding up will not only bring forward the benefits of the project, but could also increase the potential number of bidders by reducing the costs of bidding.

These cost savings would be achieved by a focused analysis of all potential PSP projects at the second stage in the Project Cycle to assess bankability, and to identify the level of government financial support required to achieve bankability, so that decisions can be consciously made as to whether such support can be made available.

In contrast with the potential cost savings the cost of such a PFI Unit would be very small. It might comprise only one expert trained in the Rapid Assessment methodology, if the level of PSP activity is low. For higher levels of PSP activity the size of the Unit would be two or possibly three.

The following four sections describe in general terms how a PFI Unit might operate in each of the four States, starting with Andhra Pradesh, followed by Gujarat, Karnataka, and Madhya Pradesh.

4.5.1 Andhra Pradesh

Background

The Government of Andhra Pradesh (GOAP) has a long range plan, Vision 2020, which identifies infrastructure projects that link to economic growth. This is a useful first step in the PSP Project Identification process. GOAP has included some of these schemes in its shelf of PSP projects, such as the Krishnapatnam port, but project implementation

has been slow. This is partially a result of the issue common to all states: insufficient private sector returns and a requirement for substantial government support to increase the returns and/or reduce private investment risk. The proposed PFI Unit would be able to make systematic estimates of a PSP project's impact on the budget resulting from GOAP financial support, and compare this level of support with the social benefits of the project and transfer of risks to the private sector to judge whether the project would provide value for money.

We initially suggested that the PFI Unit in AP should report directly to the Finance Minister, coordinating with the Department of Planning to ascertain the impact of future project financial commitments on the Government's long range financial plans. We discussed this suggestion with the GoAP who consider that any PFI Unit capability should be located in the APIA rather than in the Department of Finance. This alternative has particular merit if the Infrastructure Projects Fund is established as provided for in the IDEA.

The following paragraphs set out in more detail how the PFI Unit might interact with other institutions at each stage in the Project Cycle.

Project Identification and Evaluation of PSP Mode

Like most other states, PSP Projects in AP emerge form a variety of sources, such as Vision 2020, line departments, and government owned corporations and other agencies.

After Project Identification, projects would proceed to the Evaluation of PSP Mode. Pre-feasibility and other relevant information would be the responsibility of the line department or other government agency taking primary responsibility for the project, and this information would be submitted to the PFI Unit for the final analysis and presentation of the Rapid Assessment.

The potential impact of the PFI Unit can be illustrated by referring to the Visak Water Supply project, which was one of our Case Studies. As the Case Study shows (see Volume 5), the PSP mode changed from canal rehabilitation (efficiency gain) to a new pipeline (investment). After this change it was clear that the government would have to financially support the final project design to secure private investment and bank credits. Subsequently, the PSP mode change, which occurred substantially after the canal rehabilitation project feasibility analysis, required a significant amount of GOAP and Visak Municipal Corporation loan and revenue guarantees to reach financial closure. If a PFI Unit were in place, it would evaluate the impact of these contingent liabilities on the GOAP's future budget, and determine if the project's social benefits and risk transfer to the private sector warranted the level of government financial support extended to the project. In the event that the PFI Unit analysis results in the rejection of a major expansion/investment project, it could recommend a shift to an efficiency gain project – something like the reverse of the Visak outcome (ie starting with a pipeline to expand water supply, but ending up with a canal rehabilitation project that reduces water loss).

As noted above, the GOAP's preference is that the proposed PFI Unit should be located in the APIA rather than the Department of Finance. The potential difficulty with this arrangement is that the APIA is not in a good position to assess the impact on the budget (which is an essential part of the Rapid Assessment methodology described in Section 4.4 above), whereas the Department of Finance is.

However, IDEA, 2001 provides for the establishment of an Infrastructure Projects Fund to be administered and managed by the APIA, in order to achieve the objects and purposes of the Act. If such a Fund is established, and is a segregated Fund dedicated, inter alia, to GOAP financial contributions for PSP projects, there should not be any "impact on the budget" for the PFI Unit to evaluate. If the Fund is entirely independent of the GOAP budget and of any GOAP credit support[37], the

[37] If the Infrastructure Fund is truly separate from the GOAP's general fund, a rating agency would evaluate the capacity of the former to repay the PSP related debt. It assigns a credit rating to the Infrastructure Projects Fund debt obligation based on the economic, legal, regulatory, financial management and other factors related to the Fund, not the GOAP's general credit. It would not consolidate the Fund credit analysis with the capacity of the State's budget revenues to repay the bonds. This can only happen if the legal documents for the bond or financing transaction do not in any way use the State's

role of the PFI Unit can be entirely internalised within the APIA. The role of the APIA would be to manage the Fund and to assess the impact of the PSP project on the capacity of the Fund to finance other priority PSP Projects. The location of the PFI Unit in the APIA would therefore be wholly appropriate if such a Fund is established.

Project Preparation

The Project Preparation stage of the Project Cycle would commence only after the appropriate PSP mode and likely level of any government financial support have been agreed. It is also necessary to provide sufficient budget for the preparatory work to be carried out to the necessary standard and level of detail, to ensure that the project attracts serious private sector interest at the tender stage. The funds for the preparatory work can come from the line department's normal budget or from the APIA's Infrastructure Projects Fund (the Fund) if such a Fund is established.

Private Developer Selection and Project Implementation

The main role of the PFI Unit is over by the time the project reaches the Private Developer Selection stage, unless developments take place that materially alter the assumptions concerning the level of government financial support, VFM or Risk Transfer. The PFI Unit therefore needs to continue to be kept informed of progress, especially concerning the likely level of government financial support. However, if the Fund is established and has an independent financing mechanism for PSP Projects, then the managers of the Fund take on this role.

4.5.2 Gujarat

Background

Gujarat has recognized that many of the "shelf of projects" identified in its "Vision 2010" strategy designated for PSP cannot attract private investment. Gujarat has interpreted the lack of interest as a signal to see whether it identified appropriate PSP projects and PSP modes. It also became apparent to the state that many projects will require considerable government financial support, to bolster the returns to private equity and mitigate the risks associated with insufficient demand for project outputs, for example. To address these issues and review its PSP program, Gujarat hired consultants to re-evaluate Vision 2010 and the role of PSP in this vision.

The scope of services for the study includes preparation of a new Vision 2010 base document that identifies focus sectors[38], projects within these sectors, identification of potential PSP projects (using criteria proposed by the consultants), and the extent of government support required for the PSP projects.

The Vision 2010 re-evaluation exercise underway in Gujarat is an excellent first step in Project Identification and the Evaluation of PSP Mode in the Project Cycle. It identifies infrastructure supply and demand requirements within the context of the state's economic growth potential, but with a focus on the FIRR. The next step is to determine potential PSP projects and the extent these projects require government financial support (impact on the budget); provide "value for money" and the degree of "risk allocation" to the private developer. In contrast to the Vision 2010 study, we recommend that PSP Project Selection is not limited to **investment** projects that expand infrastructure, but should also cover projects that improve the **efficiency** of infrastructure service delivery, such as a management contracts in the water supply sector.

Project Identification and Evaluation of PSP Mode

The revision of Vision 2010 described above will provide a start to the Rapid Assessment of potential PSP projects, but is unlikely to complete the Assessment. We discussed with the GoG our suggestion that a PFI Unit should be established in the Department of Finance to undertake such Assessments, and were told that the general analysis envisaged in the Assessments is currently undertaken by line departments and GIDB during

general fund to support debt service payments, or even imply a State guarantee.

[38] These are projects that have "intersectoral linkages" and whether they are "driver" or "linkage" projects. For a further description of these concepts see the original Vision 2010 Report "Gujarat Infrastructure Agenda - Vision 2010"

project preparation. The need for a PFI Unit in the Department of Finance on the lines we propose is not considered necessary, although the Department would welcome some assistance on how it should evaluate specific requests for financial support for projects such as how to assess whether the projections are reasonable. Training in the Rapid Assessment methodology would also be welcomed.

We continue to recommend that Gujarat should introduce an Evaluation of PSP Mode stage in the project cycle between Project Identification and Project Preparation, and would continue to have a preference that the PFI Unit is located in the Department of Finance, in order to facilitate assessments of the impact on the budget. However, we accept that there is a case for locating the analytical capability of the PFI Unit in GIDB (eg to keep within a single body the generic PSP skills to support the overall PSP programme), but, in this situation there would need to be close co-ordination with the Department of Finance to ensure that budgetary issues were taken into account as appropriate.

The potential benefits of a PFI Unit at this stage in the Project Cycle can be illustrated by considering the example of PSP in Gujarat's port sector. We assume that the revised Vision 2010 study will identify potential PSP port projects and the extent of government financial support required to generate private developer interest for the GMB's "Second Global Notice" for PSP in port projects. We recommend that the GMB should not proceed with the Second Global Notice until it reaches a consensus with the GIDB regarding the potential PSP port projects identified in the revised Vision 2010 study.

Once GMB and GIDB reach a consensus regarding project selection and the appropriate PSP mode for port projects, the GMB should undertake a Pre-Feasibility analysis that will enable a Rapid Assessment to be carried out. The PFI Unit should review the Terms of Reference for the Pre-Feasibility analysis to check that the analysis will contain the information it requires to evaluate the project according to its the eligibility criteria. The PFI Unit can then assess the impact on the budget, value for money and risk allocation of each project according to the Rapid Assessment methodology.

Project Preparation

The Project Preparation stage requires a detailed project feasibility analysis and, in some cases, a Detailed Project Report, which are likely to be prepared by consultants. The decision to proceed with the Detailed Project Report should not be made until the Rapid Assessment has indicated that the project is potentially bankable, and the government has agreed in principle to commit budgetary resources to satisfy the project's financing requirements over the life of the private contractual agreement. This is an extremely important decision to attract private sector interest.

Project Preparation entails detailed technical, financial, economic, social, environmental, and other studies that provide a complete understanding of the government's financial role in the project. The detailed engineering report, up to 100% of final engineering design, provides the cost basis for calculation of the project's return and its potential to attract private investment.

At this stage in the Project Cycle, the initial project contract documents should be prepared so that the risk allocation assumptions can be re-evaluated. These initial documents might be a mark-up of the model Concession Agreement or other model contracts available to GIDB or the line department.

Private Developer Selection and Project Implementation

The Private Developer Selection stage begins with the final preparation of bidding documents through to the selection of the private developer. An updated Rapid Assessment would only be required if any of the assumptions made, especially concerning government financial support, require revisiting and possible amendment. By the Project Implementation stage, the remaining financial issue is whether the projections of government's financial support remain realistic.

4.5.3 Karnataka

Background

In contrast to Gujarat and AP, Karnataka does not have a specific "Vision" plan for infrastructure development. As in most other states, specific PSP projects emerge from a variety of sources, although

there has been a greater dependence in Karnataka on unsolicited proposals from the private sector.

We have discussed the PFI Unit concept with the Secretary, Budget and Resource Division (BRD) in the Department of Finance. This division does not have a particular PSP focus, but it approves annual budget expenditures for the line departments or other specialized agencies that may sponsor PSP projects. The Secretary, BRD agreed that it is worthwhile to understand the impact on the budget, value for money, and risk allocation of PSP projects prior to annual budget appropriations for these projects. We also explained the potential link between a PFI Unit's PSP project assessments and a multi-year financial plan for capital and recurrent budget expenditures[39].

We also discussed a possible link between a PFI Unit and the current Fiscal Reform Program funded by USAID, which includes a "FPAC Cell" within the BRD. This may be an opportune moment to incorporate a work plan for a PFI Unit in the context of the Fiscal Reform Program. The areas of potential integration with the USAID program include revenue forecasting, the revenue impact of policy analysis, debt management, and preparation of a budget manual. How the above FPAC Cell activities are organized and relate to the PFI Unit is a subject for further consultation with the BRD.

There are two institutional options for a PFI Unit in the Department of Finance in Karnataka. It can either function as a stand-alone entity under the BRD, or be incorporated into the FPAC within the BRD. We suggest incorporating the responsibilities of the PFI Unit under the FPAC to avoid creating additional management layers. However, the skill set of the FPAC is different from the skills required for the PFI Unit. The PFI Unit will require specific skills related to the analysis of PSP Projects: project FIRR, EIRR, risks, the structure and commercial terms of the contract documents of a PSP project, etc.

The FPAC Cell would therefore require specialized PSP training, but the incremental effort to incorporate a PFI Unit into the Fiscal Reform Program should be relatively simple and inexpensive. This implies either an expansion of the USAID Technical Assistance Program or additional ADB technical assistance support.

The following paragraphs describe how a PFI Unit incorporated under the FPAC might operate at the various stages in the project cycle.

Project Identification and Evaluation of PSP Mode

The role of a PFI Unit or FPAC at these early stages in the Project Cycle would be similar to the role described earlier for AP and Gujarat. The assessment of the impact on the budget takes place today, albeit in an informal way. Decisions regarding GOK budget allocations for PSP projects are made during cabinet and sub cabinet budget and other meetings, but not in the structured way recommended in this chapter. The major difference in our proposal is to formalize the process and move it towards a more "technical" analysis of how the GOK implements its infrastructure policy. It provides a methodology that gives decision makers a complete picture of the impact on the budget.

Karnataka does not have a "Vision 2010" process, but the Fiscal Reform Program it has embarked on includes some of the activities of a "Vision 2010" effort. We recommend that the GOK consider a "Vision 2010" type process that can be incorporated into a Multi-year financial planning activity that identifies potential PSP infrastructure projects and required budget allocations to attract private investment.

Project Preparation

For the Project Preparation stage in the Project Cycle, the FPAC allocates sufficient budget to the line department/specialized GOK entity for detailed project reports to be prepared. By this point, the FPAC should already be satisfied that the PSP

[39] The Department of Finance produced a "Medium Term Fiscal Plan" 2003-04 to 2006-07. It presents the status of various fiscal reforms that are necessary to enhance growth: labour, revenue, expenditure reviews, human resources, pension and other "structural adjustment" types of activities. PSP projects are included as a reform policy to reduce government investment in infrastructure and promote efficiency gains for service delivery. The "Medium Term Fiscal Plan" establishes the policies to improve fiscal performance. The PFI Unit and Multi-Year Financial Planning presented in this chapter are tools to implement these policies.

project (and mode) is affordable in terms of its impact on the budget, provides value for money and allocates risks appropriately between the GOK and private developers. It will only be substantively involved in the project again to the extent that there are changes in the project that materially affect these conclusions.

Private Developer Selection and Project Implementation

The PFI Unit or FPAC would continue to hold a watching brief through these stages in the Project Cycle, monitoring progress against the assumptions that went into the Rapid Assessment.

As part of the Fiscal Reform Project, the FPAC or PFI Unit should have a process that tracks annual PSP Project budget allocations and disbursements. This would form part of the PSP Project monitoring process that is linked to the annual budget to ensure that sufficient funds are available and have been allocated to the project.

4.5.4 Madhya Pradesh

Background

PSP activities in MP are limited primarily to the successful road program. There are no planned PSP activities in the other priority sectors under consideration in the current study.

MP has not identified PSP Projects via a long range "Vision Pan" like Gujarat and AP. However, it is the only state that has a PFI type of unit to ascertain the budget impact of Government of MP (GoMP) financial support for PSP projects: the MP Infrastructure Investment Fund Board (MPIIFB). This board approves government financial support for PSP projects in the road and power sectors, and could potentially form the nucleus of a more developed PFI Unit in MP, if further PSP projects in other sectors emerge.

We discussed with the GOMP the concept of progressively expanding the role of the MPIIFB into a PFI Unit as the level of PSP activity substantially increases in the State. However, the GOMP expressed a preference for a separate PFI Unit, while accepting that the most appropriate department in which to locate the Unit would be the Department of Finance. We believe that the decision made between an expanded MPIIFB and a separate PFI Unit is not critical as long as the unit is in the Department of Finance.

Project Identification and Evaluation of PSP Mode

We expect that the level of government financial support required for PSP projects in order to attract private sector interest may be a significant constraint on the expansion of the PSP programme in MP. Although MP has a substantial PSP road programme, up to 60% of the funding for some PSP road projects comes from the GOMP. If further financial support proves to be an important constraint, the GOMP may want to focus on efficiency gain projects. It may get a better social return on its investment if, for example, it focused more on road maintenance concessions rather than expansion projects[40]. If the MPIIFB were to be developed on the lines of a PFI Unit, it would be able to take an important role in evaluating such trade-offs.

Project Preparation

The critical aspect of the Evaluation of PSP Mode stage in MP will be to ensure that only those projects with sufficient FIRRs, EIRRs and manageable GOMP financial contributions receive budget support for costly Project Preparation. The government agency responsible for Project Preparation would only receive budget resources if the MPIIFB (or PFI Unit) was satisfied that any requirement for financial support was commensurate with the economic return.

Private Developer Selection and Project Implementation

As discussed in the MP Road Program Case Study found in Volume 5, the GOMP uses an efficient competitive Developer Selection process and is successful in implementing these projects in a relatively short time frame. Although it has taken some projects from 12 to 15 months to achieve financial closure after signing of the Concession Agreement, one reason for the delay is the considerable time commercial banks require to

[40] An ADB road sector reform project is currently in progress which should address the issue of the efficient allocation of road funding for maintenance vs. expansion projects.

evaluate the traffic and other risks associated with the project.

4.6 Summary and Recommendations

4.6.1 General recommendations

This chapter reviews aspects of international best practice for achieving a successful PSP programme and applies this best practice to the circumstances in the four States.

We recommend the adoption of a five stage Project Cycle for PSP projects: Project Identification, Evaluation of PSP Mode, Project Preparation, Private Developer Selection, and Project Implementation. We highlight the second stage, Evaluation of PSP Mode, as critical in removing one of the main constraints on increased PSP activity in the States, namely the shortage of bankable projects. At this stage, it is essential to select projects that are worthwhile, affordable, and will attract private sector interest.

We recommend that a Rapid Assessment methodology should be used at the Evaluation of PSP Mode stage. This would apply three criteria: the **impact on the budget** of any government financial support required to ensure the commercial viability of the project, and **value for money** in terms of the costs and benefits, including the **risk allocation** to the private sector.

We recommend the establishment of a PFI Unit, preferably in the Department of Finance, to take responsibility for the Rapid Assessment. The PFI Unit would evaluate the amount of government financial support required, and, in those cases where it is in the Department of Finance, integrate its activities with the annual budget process. It would thereby be in the best position to judge whether the level of government financial support can be afforded, or whether other PSP modes should be investigated to reduce the financial burden on the State. The two main decisions coming out of the Rapid Assessment would be the appropriate PSP mode, together with a realistic estimate of the financial support that will be required to ensure a bankable project. The project would only proceed to the next stage, Project Preparation, if the estimated level of government financial support can be afforded in budgetary terms.

At the Project Preparation stage we emphasise the importance of thorough preparation of the project and the bidding documents to attract a sufficient number of quality bidders in order to obtain the full benefits of a competitive tender. Fully qualified specialists should be engaged to prepare the projects, with adequate funding provided (from the State budget if necessary).

The key principle that should be applied at the Private Developer Selection stage is the transparency of the bidding process. For good governance, we recommend that the process should be clearly set out in Rules issued by the Government and based on best international practice, a Committee should be established to conduct the bidding process, the tender documents should set out the method of evaluation that will be used, and wherever possible the final evaluation of qualifying bidders should be reduced to a single parameter to minimize the scope for subjectivity.

At the Project Implementation stage the essential task of the Government is to monitor the provisions of the concession agreement and other contractual arrangements to ensure compliance.

4.6.2 State Recommendations for PFI Units

Our specific recommendations for a PFI Unit in each State are as follows:

- **Andhra Pradesh**: the GoAP considers that any PFI Unit capability should be located in the APIA rather than in the Department of Finance. This option has particular merit if the Infrastructure Projects Fund is established as provided for in the IDEA. In this situation, the APIA should create a PFI type unit to manage the Fund, and the unit could report to the APIA rather than the Department of Finance so long as the Fund has a funding source that **is totally independent of the GOAP budget and will not require a GOAP guarantee**.

- **Gujarat**: the GoG believe that the analytical capability of any PFI Unit should be in the GIDB rather than the Department of Finance. We accept this arrangement so long as satisfactory arrangements can be made for co-ordination with the Department of Finance so that budgetary issues are taken into account as appropriate.
- **Karnataka**: Organize a PFI Unit under the Secretary of Budget and Resources Division, Department of Finance within the FPAC. Expand the role of the FPAC (or other unit within the Department of Finance, if this is not appropriate), to include Multi-Year Financial Planning, and link the PFI Unit's PSP Project evaluation process into the GOK's annual budget and Multi-Year Financial Planning Process.
- **Madhya Pradesh**: If there is to be a substantial expansion of PSP activity, the Madhya Pradesh Infrastructure Investment Fund Board (MPIIFB) might be expanded into a PFI Unit. The GOMP would prefer in this situation to establish a separate PFI Unit. We believe that the decision made between an expanded MPIIFB and a separate PFI Unit is not critical as long as the unit is in the Department of Finance.

There is no special significance to the location and responsibility of the PFI Unit. However, we believe that the functions generally argue for the unit to be located within the DOF. The existing nodal agencies in AP and Gujarat believe that such functions can be well managed and the required effects achieved from within the structure of the existing nodal agencies. We do not argue strongly against this position but rather suggest that a full review of the options and implications needs to be undertaken prior to the full establishment of the PFI Unit. We have included as Appendix E a draft Terms of Reference for the establishment of a PFI Unit. We believe that the development of such a unit is of significant importance to the Four States and we further believe that a careful and measured development of the unit is justified as outlined in the Appendix E document.

5

Creating a Capable Nodal Agency

In this chapter we deal with the issues and steps involved in developing a capability at the state level to adequately shepherd private projects through the development and implementation process, focusing on effectiveness and good governance.

5.1 Introduction

This chapter assesses the public sector institutional constraints to PSP in infrastructure in the four project States, and makes proposals for their alleviation. It builds on the previous chapters, which review existing policies and legislation for PSP in infrastructure both at the national level and in the four States, including substantial information on the roles and responsibilities of many of the institutions involved in PSP at the State level, and that information is not repeated here.

This chapter should also be read in the context of other parts of the document, and in particular:

- The preceding chapter on Fast Tracking the Private Sector Development Process, which proposes the establishment of PFI Units;
- Chapter 3 which discusses the regulatory framework and regulatory agencies;
- Chapter 6 which covers issues relating to the environment and social resettlement ; and
- The first part of chapter 7 relating to dispute resolution arrangements.

The generic way in which these various elements fit together is illustrated in Figure 5.1, which sets out the major activities at each stage in the Project Cycle, and the main chapter(s) where the issues arising are discussed. The specific details will depend on the sector and the particular characteristics of the PSP project, and also on the adaptations given later in this chapter to take account of different existing structures in each State.

The remainder of this chapter is organised as follows:

- Section 5.2 discusses the conditions for effective institutions for PSP in infrastructure, and for good governance, in order to provide a basis on which to assess the institutional arrangements in each State.
- Sections 5.3, 5.4, 5.5 and 5.6 review the institutional arrangements in Andhra Pradesh, Gujarat, Karnataka, and Madhya Pradesh respectively, both at a general level, and at the level of each of the eight sectors covered by the project. In each section we summarise the present institutional arrangements (at the time of our field work), assess their effectiveness, and make proposals for strengthening them. At the sector level we focus particularly on the four priority sectors for the project, namely roads, ports, urban mass transit (UMT), and water supply and sewerage.

5.2 Conditions for effective institutions and good governance

We believe that there are three broad conditions that determine the effectiveness of any institutional arrangements for PSP in infrastructure, each of which is discussed below in turn:

- Sustained political commitment
- Clear responsibilities during the project cycle
- Single window agency for clearances.

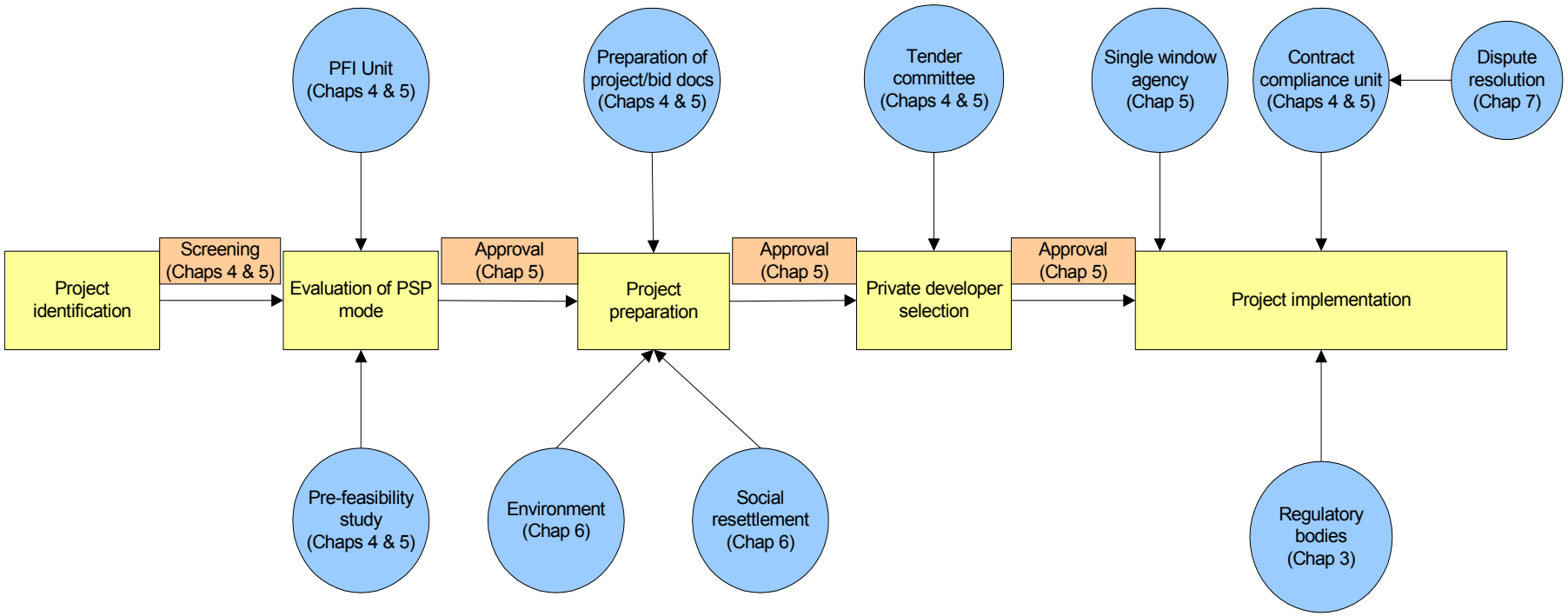
5.2.1 Sustained political commitment

PSP projects are not easy to implement. Generally, there are many policy decisions to make. Most projects require approvals from multiple line departments and other public sector bodies. The larger projects especially take a long time to bring to fruition. Without sustained political commitment over the full project cycle, projects are likely to fail, whatever institutional framework is in place.

The main lessons for the four States are:

- The institutional framework should directly engage support at whatever political level is required to resolve problems and remove obstacles in a timely manner. For larger projects, the implication is, in most cases, that the institutions charged with implementing PSP projects should be seen to act with the support, and the ultimate authority, of the Chief Minister.
- There must be continuity throughout the project cycle. During the course of the relatively short duration of our project, we have experienced numerous changes in staff at the senior level in all States. If the general practice of rotating senior officials every three years or so takes place in the middle of a the project process, it is essential that arrangements are put in place for effective handovers, so that progress on each PSP project can continue in a seamless manner. In some important cases it may be necessary to retain key staff in particular posts for longer than normal, in order to ensure that critical phases of project development and implementation are not compromised. Our experience on this project suggests that the changes in senior staff are not seamless, and that the lack of continuity is a major problem that needs to be addressed.

Figure 5.1 – Main activities at each stage in the Project Cycle



5.2.2 Clear responsibilities during the project cycle

The second condition for effective institutional arrangements is that, at each stage in the project cycle, clear and transparent arrangements are made as to:

- The specific organisation that is responsible for taking particular actions or decisions;
- Who each organisation is accountable to; and
- Effective arrangements are made for accountability.

It is also important to avoid potential conflict of interest difficulties. Regulatory issues should be separated from policy and operations; and during the project cycle, there should be a division of duties between the party giving the approval, the one carrying out the negotiations and project analysis, and the party engaged in contract monitoring (even if all these duties are within a single line department).

The institutional frameworks for PSP in infrastructure vary around the world, and there is no single "ideal" framework. Each country has its own existing institutional structure and traditions, and the appropriate framework for PSP has to take account of such factors. What is important is a clear delineation of responsibilities, the separation of responsibilities where appropriate to ensure good governance, and effective arrangements for accountability. In the following paragraphs we briefly describe different generic frameworks, and then suggest some general principles that might be applied at each stage in the project cycle.

Generic institutional frameworks for PSP in infrastructure

There are three broad institutional frameworks for managing PSP in infrastructure:

- A centralised model with a dedicated unit that is responsible for managing the whole of the project cycle for selected projects (eg larger projects). The unit is typically vested with strong political support, and is responsible for driving the project forward and ensuring that decisions are made in a timely manner.
- Reliance on line departments without any specially constituted central agency responsible for PSP across multiple sectors.
- A hybrid of the two.

Each generic framework has its own strengths and weaknesses. The major ones that generally arise are set out in Table 5.1.

In all these models, there is an underlying

Table 5.1 – Major strengths and weaknesses of generic institutional frameworks

Generic framework	Major strengths	Major weaknesses
Centralised	- Concentration in one body of scarce PSP skills - Build-up of PSP experience - More direct control over the project cycle (which can be linked with high political support)	- Technical skills are in line departments and other public bodies - Potential obstruction by other bodies who feel excluded from the process
Line departments	- Have the specialist technical and sector skills - Have relationships with other stakeholders in the sector	- Shortage of PSP skills - Lack of full understanding of PSP due to public sector mind-set
Hybrid	- Can potentially combine the strengths of each of the other two models	- Potentially unclear division of responsibilities - Tensions between the centre and the line departments

requirement to have appropriate arrangements for speedy decision-making, especially decisions that have to be referred by officials to ministers. In some countries a sub-committee of the Cabinet may be formed.

Some international examples have been outlined already in Chapter 4. Most models are hybrids with varying degrees of control exercised by the central dedicated unit. In the examples given in Chapter 4, the central unit is in the Ministry of Finance, but this model has not generally been followed in the four States, except perhaps in Madhya Pradesh (see later in this chapter for a description of each State model). Andhra Pradesh and Gujarat have established statutory general nodal agencies, while Karnataka has followed a model more biased towards the line department model.

We discuss later the effectiveness of each of these State models and make recommendations for improvements, but it is important to emphasise here that there is no single "right" answer. All models have to be adapted to local institutional arrangements and power structures.

The appropriate institutional model might also change over time, depending on developments in both the PSP programme and the wider political or institutional environment. An example of an evolving and developing institutional model can be illustrated by looking at developments in the UK, which has had probably the longest running organised PSP programme.

The Private Finance Initiative (PFI) in the UK effectively started in the early 1990s, and was primarily driven by the Treasury (equivalent to a ministry of finance in many countries). As the programme expanded, a hybrid model rapidly emerged. Departments with substantial PFI programmes began to develop their own specialist units, and in 1997 a Treasury Task Force was formed to provide departments with highly skilled procurement and project management advice. In 2000 this Task Force was re-established as a public private partnership named Partnerships UK, which is 51% owned by the private sector and 49% by the government.

Substantial PFI programmes are now undertaken by local authorities, and they are supported by a newly created body, the Public Private Partnership Programme (4Ps). In addition the government established an interdepartmental body named the Project Review Group (PRG) to test the quality of local authority PFI projects prior to entering their procurement.

In summary, the role of the Treasury has progressively diminished as the programme has expanded and the expertise in the procuring departments has increased. The Treasury is now only responsible for policy, with the procuring departments primarily responsible for the process, drawing as necessary on a public private partnership for specialist expertise. The initial somewhat centralised model has now evolved into an essentially line department model.

Principles for the project cycle

The project cycle can be divided into the following five stages (see Chapter 4)

- Project identification
- Evaluation of PSP mode
- Project preparation
- Private developer selection
- Project implementation

At each stage, it should be clear what body is primarily responsible for progressing the project, and to whom it is accountable. During our work, the term "nodal agency" has generally been used to indicate such a body. However, the term has been applied to a variety of organisations, and we make the following distinctions in the remainder of this chapter:

- General nodal agency: organisation with a general PSP mandate, such as the Andhra Pradesh Infrastructure Authority (APIA) and the Gujarat Infrastructure Development Board (GIDB);
- Multi-sector nodal agency: organisation which acts as a nodal agency across a number of sectors (but not with a general PSP mandate);
- Sector nodal agency: organisation whose PSP activities are limited to a single sector;
- Project nodal agency: in some cases a special organisation might be set up to act as the

nodal agency for a one-off project (eg new international airport or UMT scheme).

Against this background we discuss some general principles that should guide the most appropriate institutional arrangements at each stage of the project cycle. The principles are aimed at both effectiveness and good governance, but focus only on those aspects that are particular to PSP in infrastructure. An exhaustive discussion of the conditions for good governance is outside the scope of our terms of reference.

Project identification

The initial identification of potential PSP projects might be made by any part of government. There is little merit in restricting the flow of ideas .

Evaluation of PSP mode

This critical step in the process is discussed in some detail in Chapter 4. It is important at this early stage to be realistic about the prospects of a successful PSP project being implemented, as much time and money can be wasted on preparing a flawed project. Turning down project proposals with little chance of success, before serious preparatory work is undertaken, is far more cost-effective than proceeding in hope and tying up scarce resources on a venture that has only a remote chance of coming to fruition.

Chapter 4 recommends that the evaluation of all potential PSP projects that are likely to have financial implications for government, should be based on three criteria, namely impact on the budget (ie project affordability), project value for money, and risk transfer. Further, it recommends that all such evaluations should be reviewed by PFI Units - preferably located in the Finance Department - although much of the information required to make the evaluations will typically come from other line departments or government agencies (including general nodal agencies). In most cases outside assistance from advisers will be required to develop the options and their associated benefits and indicative costs.

After each evaluation has been completed, it should be reviewed by the PFI Unit on the basis of the three criteria, and an assessment made of whether it meets the criteria or not. After a decision has been made at the official level that it meets the three criteria, a final decision should be made at a suitably high level in the government (eg the Cabinet) whether or not to proceed to Project Preparation.

Project preparation

In all four States it is the line department, or other public organisation with relevant sectoral experience, that is the nodal agency for project preparation. Where there is a general nodal agency (ie in Andhra Pradesh and Gujarat), this body's role is limited to facilitation, review, approval, support etc, but not detailed preparation .

The nodal agency for project preparation should have a clear mandate and reporting structure which, inter alia, defines the extent of any delegated authority. Key decisions during the preparatory phase should be taken as appropriate at a suitable level within line departments, or at ministerial level.

While the project nodal agency has primary responsibility for project preparation, it will not itself undertake all the preparation. It is probable in most instances that the detailed preparation will be done by consultants and advisers contracted by the nodal agency. It is also likely that the nodal agency will need to consult with other public bodies during preparation. The formation of a steering committee of interested parties is one approach for ensuring that full use is made of knowledge and experience outside the project nodal agency.

At the end of the preparation stage, it is again essential that the decision on whether or not to proceed to the next stage is taken by the government at a high level.

Private developer selection

The institutional arrangements at this stage should support the measures described in Chapter 4 aimed at ensuring that the bidding process is fair and transparent. It is best that the bid process is managed by a committee comprising representatives from all the main interested parties,

and possibly including an outside expert. Depending on its constitution, this committee might be charged with managing the whole of the bidding process and making the final selection (in accordance with defined rules and procedures laid down by government). Alternatively, the final decision might be referred to a higher authority (eg at ministerial level) for endorsement or otherwise.

Project implementation

As explained in Chapter 4 there are generally two phases in project implementation:

- Final clearances/approvals and financial closure
- Implementation of the project.

We have set out below (section 5.2.3) our proposals for speeding up the process of final clearances and approvals. Speeding up the process is not only beneficial for project implementation (and the attraction of quality bidders), but also reduces the scope for rent-seeking by those granting the clearances and approvals.

Compliance monitoring after financial closure is formally the responsibility of the department which signed the contract on behalf of government. The detailed monitoring should be carried out by persons who are separate from those who were involved in project preparation and the bidding process (even if both groups are in the same line department). It is good governance to maintain a separation between the parties who did the project analysis and negotiations, gave the approval, and those engaged in contract monitoring, for reasons of accountability and transparency. **We recommend that a specific unit should be designated to perform this responsibility for the entire portfolio of PSP projects on behalf of the department.** The detailed work to assess compliance will often be carried out by experts who are contracted for specific tasks (eg independent engineers to check compliance with technical specifications).

5.2.3 Single window agency for clearances

Our third condition for effective institutional arrangements is that there should be a single window agency for all clearances, approvals and consents required by the selected developer. Delays in approval, circuitous approval processes, and overly complex requirements for approval, result in project delays, and can ultimately cause a project to fail, as well as providing additional opportunities for rent-seeking. Part of the solution to this problem is for the nodal agency responsible for project preparation to obtain some of the clearances during the preparatory phase. However, many clearances will remain to be obtained by the developer.

It is important to clarify that the recommendation for establishment of a single window clearance process does not mean that one body will be giving all approvals. It rather means that one body will act as a coordinating agency for the private developer to assist in ensuring that the approvals are processed and cleared in a timely and open way.

What the developer is typically looking for is a single contact point. One of the private developers we consulted gave us a specific model that he would like to be implemented. His concept is that the Single Window Agency (which would be the main line department responsible for the project in his case) would appoint a Project Coordinator for day-to-day liaison with the developer. This Project Coordinator would be of Deputy Commissioner or Joint Director rank. Similarly, all the other departments involved in providing the necessary clearances would each appoint their own Project Coordinator. Each of these Project Coordinators would be responsible for making the necessary arrangements for all the clearances within their department in accordance with an agreed timetable. The main Project Coordinator, who would effectively constitute the Single Window Agency, would have overall coordination responsibility for the whole clearance process. The performance of each Project Coordinator would be assessed against achieving the planned timetable for clearances, or, in the event that the timetable is not being met, reporting in a timely fashion that there will be slippage, together with the reason why there will be slippage.

The Project Coordinators in the other departments would report on a regular basis to the overall

Project Coordinator in the Single Window Agency, who in turn would report to, say, the Principal Secretary in the department. In addition, the Principal Secretary would report on a monthly basis (or more often if required) to a meeting chaired by the Chief Minister or other appointed Minister. This meeting would comprise the presiding Minister; the Minister, Principal Secretary, and Project Coordinator of the line department acting as the Single Window; and a representative of the developer.

The essential features of this model are that:

- clear responsibilities are assigned for monitoring progress in the clearance process,
- there is a regular reporting of progress against an agreed timetable, combined with clear lines of accountability; and
- the reporting goes up to a sufficiently high level to ensure that the necessary actions can be taken to remove unnecessary blockages or bottlenecks.

We have applied these principles in making our recommendations for each State below. We also recommend that the Single Window Agency should establish a complaints office to which the developer can bring any allegations of irregularities in the clearance process.

5.3 Andhra Pradesh

5.3.1 Current institutional arrangements

The Government of Andhra Pradesh (GoAP) is either actively engaged in, or investigating, PSP in all eight sectors. PSP is an integral part of the State's infrastructure provision policy, due to pressures on the State budget and the need to bring in new expertise and management. In August 2002, a general nodal agency, the Andhra Pradesh Infrastructure Authority (APIA) was established. The APIA's authority, role and responsibilities are set out in the Infrastructure Development Enabling Act (the Act), which is discussed at length in Volume 2, and summarised in Chapter 3.

The functions of the APIA are widely defined, but do not include project preparation or day-to-day management of the bidding process. Primary responsibility for project preparation is expected to be carried out by what is defined in the Act as a Government Agency (ie government department, corporation or other body owned or controlled by government) or Local Authority. The Act therefore envisages a hybrid model.

The APIA comprises a Chairman and up to 14 other members, of which six are ex-officio. The Chairman is the Chief Secretary[41], and the ex-officio members are key senior officials involved in PSP in infrastructure (eg Secretaries of Departments and the Managing Director of APIIC). There were five other members when we carried out our main field work in early 2004.

The executive arm of the APIA is the Infrastructure Secretariat. The permanent staff of the Secretariat at the time of the Tripartite Meeting in August 2004 comprised a CEO and one professional, together with support staff. At the start of our project, there were also two full-time consultants from Crisil Infrastructure Advisory (Crisil), but they have since left. We had earlier recommended that the Crisil staff should be replaced by two APIA employees, and that any necessary training of the new staff should be provided by Crisil in the handover; but this recommendation was not implemented.

At the time of our Interim Report, the APIA did not have the authority to take final decisions on any matters that related to either "policy" or "State support", but was required to refer such decisions to a Cabinet Infrastructure Committee[42] set up in 2002. This sub-committee of the Cabinet comprised the Minister of Finance, Minister of Industries, Minister of Roads and Buildings, and, where appropriate, the Minister of the line department responsible for a specific project being discussed. In practice, this arrangement was a

[41] For much of the duration of this consultancy project, the Chairman was an ex-Chief Minister who had been an architect of the APIA concept. This situation changed around the middle of 2004.

[42] This committee appears to have functioned as a "Group of Ministers" rather than as a Cabinet Sub-committee with delegated powers.

substantial limitation on the APIA's powers of decision-making.

Following the elections in April 2004, the Department of Industries was given responsibility for the APIA[43], and the Cabinet Infrastructure Committee was not reconstituted. We were told that the APIA cannot report to a Cabinet Sub-committee because it is not supported by a secretariat in a line department. Instead the APIA can send reports to the Department of Industries, which can then refer matters as appropriate to the Cabinet.

While the present administration may want the APIA to report, at least on some matters, to the Department of Industries, we do not accept the contention that the APIA cannot report to government. Direct interaction between the APIA and the government is clearly provided for in IDEA, 2001. Article 12 of the Act requires the APIA to "submit quarterly reports to the State Government", and Article 61 states that the APIA "shall exercise its powers and perform its functioning under the Act in accordance with the policy framed and guidelines laid down from time to time, by the Government…."

Schedule II of the Act distinguishes between Category I and Category II projects depending on whether the project requires (Cat II) or does not require (Cat I) state support. In practice major PSP projects being pursued by government do require state support, and therefore the distinction is largely immaterial. Schedule III of the Act refers to a restricted list of sectors in which the APIA should be involved, but the definition of sectors allows for others "as may be notified from time to time by Government". The reason for this formulation is because it was decided to exclude from Schedule III those sectors that are Union or concurrent (Union/State) matters. The expectation is that the APIA will be involved in all major PSP projects.

The Act provides for the establishment of an Infrastructure Projects Fund (the Fund), to be administered and managed by the APIA, in order to finance the activities of the APIA and to further the objects and purposes of the Act. Proposals have been prepared to capitalise a Fund (of say Rs 100 crores) through the issuance of bonds in the domestic market. APIA commissioned Crisil to study how to fund the debt service obligations associated with the bonds (assuming that the prospect of project receipts alone would not be sufficient to attract bond investor interest). The study recommended that such debt service should be funded through a cess on liquor, diesel and petrol. Decisions on these proposals remain under consideration by the GoAP.

In the first year and a half of its existence, the APIA primarily performed a facilitating role. It helped to resolve bottlenecks in project preparation or implementation (eg see the case study on the Visakhapatnam industrial water supply project in Volume 5), provided specialist expertise to Government Agencies during the preparation of specific projects (eg Krishnapatnam port), and played a leading role in conceptualising projects (eg the Formula 1 project).

The APIA has tried to perform other roles, but without much success to date. It established a tracking system for PSP projects; but in general the public bodies engaged in project preparation and implementation did not keep the APIA informed of progress, so that the information was typically out of date. It also endeavoured to fulfil its role as a screening body that categorises and prioritises PSP projects; but again the APIA was not necessarily informed about new project initiatives.

The present situation is that the APIA has extensive powers conferred on it under the IDEA, but is exercising hardly any of them. One reason is that the APIA has had difficulty establishing its full authority. It is a new body with very limited capacity for advancing PSP projects. When all decisions relating to policy or state support had to be referred to the Cabinet Infrastructure Committee, there was a perception by some that the APIA was simply adding an extra layer to the decision-making process. Now, the present administration is considering whether the APIA as presently constituted can be made effective, or whether the IDEA should be amended. We discuss later the options for changing this situation so that APIA can more fully realise its potential.

[43] The Department of Industries is not currently represented on the Authority.

The institutional arrangements in Andhra Pradesh at the time of our field work, at both the general level and for each of the eight sectors, are summarised in Table 5.2 in Appendix A. The arrangements for the four priority sectors can be summarised as follows:

- **Roads**: any PSP in State highways, major district roads, or other district roads is the responsibility of the AP Transport, Roads & Buildings Department (AP TR&B). There is also an Andhra Pradesh Road Development Corporation under AP TR&B, but this has not been used as a privatisation cell in the way that the equivalent body has in some other States (eg Gujarat, Karnataka). In urban areas, the responsible bodies are the relevant municipal corporation, urban development authority, or other urban local body, and the AP Municipal Administration and Urban Development Department (AP MA&UD). In rural areas it is the AP Panchayat Raj Department, but PSP in rural roads is unlikely.
- **Ports**: most PSP projects in the port sector are under AP TR&B. However, the Andhra Pradesh Industrial Infrastructure Corporation (APIIC) has acted as the nodal agency for project preparation and bid management for the greenfield Gangavaram Port project.
- **UMT**: the second phase of the Hyderabad mass transit system may be a PSP project, but no decisions have yet been made on how to proceed. There are a number of bodies that could potentially be involved in such a project including the AP MA&UD, the local municipal corporations and urban development authority, and the operator of the phase 1 system. There are some prospects of further UMT PSP projects in Visakhapatnam and/or Vijayawada, but they are more distant.
- **Water supply and sewerage**: the institutional arrangements for water supply and sewerage are complex in all States, as water is a municipal/Panchayat Raj responsibility. There are many bodies that could be involved in PSP in water supplies including AP MA&UD, the Hyderabad Metropolitan Water Supply and Sewerage Board, or other major urban local bodies (including other municipal corporations and urban development authorities). However, the only ongoing PSP project in water supply to date has been developed largely by APIIC, namely the Visakhapatnam industrial water supply project (see case study in Volume 5).

5.3.2 *Effectiveness of institutional arrangements*

The following paragraphs summarise - for each stage in the project cycle - the present institutional arrangements, their effectiveness, and where appropriate propose improvements. Our starting assumption is that the GoAP intends to be proactive in expanding the role of the private sector in developing the State's infrastructure to meet the needs of its people.

An important issue that pervades all our recommendations is the future role of the APIA. Our review in Chapter 3 and Volume 2 indicates that IDEA, 2001, which, inter alia, established APIA, is essentially sound. We therefore recommend that the provisions of that Act should be utilised where appropriate, rather than trying to start again with alternative arrangements which will inevitably take substantial time to establish. We have therefore focused in the following paragraphs on useful roles that the APIA could perform over the next year under the Act as it is currently drafted. In the longer term, the Act might be amended to enable the APIA to exercise more of its latent powers, and we understand that the GoAP is actively considering such amendments. Section 5.3.3 below discusses in greater detail our views on the main issues confronting APIA.

The following paragraphs discuss our proposals for the institutional arrangements in Andhra Pradesh at each stage in the Project Cycle, and conclude with an overall summary.

Project identification

One of APIA's statutory functions is "to prioritise and categorise projects and prepare a project shelf"[44]. This is a potentially valuable role that the APIA can perform, so that scarce PSP skills and expertise are directed to priority projects that have sound prospects for successful implementation. However, we do not recommend that the APIA

[44] IDEA, 2001, Article 10

should try to fulfill this function on its own. APIA does not itself have the breadth of skills required, and it is essential that line departments - and other government agencies as necessary - are fully involved in the process. Instead, we recommend that the APIA should commission a study by consultants, who would work closely with line departments and other public bodies.

The consultants should be asked to identify the infrastructure projects that are appropriate for implementation through PSP over the next five years, based on specific criteria which should be set out in the terms of reference. This general approach has been followed in Gujarat (see below), and is one that has much to commend it. APIA would be the obvious body to appoint the consultants, and to provide the forum in which the consultants' recommendations can be discussed and agreed (at the official level).

We recommend that the decision to conduct the study is made at the highest levels of government in order to emphasise political commitment to increased PSP in infrastructure. APIA's main role would be to oversee the study, and to facilitate consensus-building among all interested parties in order to increase the timeliness and effectiveness of the implementation of the final conclusions that are reached. The APIA would also be consulted during the course of the study along with line departments and other public bodies. At the end of the process the APIA could send to the Department of Industries (in conformity with the present administrative arrangements) the consultants' report and the Authority's recommendations concerning the next steps required.

We have discussed this recommendation with the GoAP which agrees that this would be a good way forward. However, we were told (in August 2004) that a review was being conducted by a Cabinet Committee Group which would cover some of the ground. The GoAP planned to complete this review before commissioning consultants to undertake the fuller study recommended above.

Evaluation of PSP mode

As already explained this is a critical stage in the project cycle if time and money is not to be wasted on unproductive project preparation. In our view it is an area of weakness in all the States, and we have made recommendations on how it should be strengthened in Chapter 4. At present, there are no formal arrangements for evaluating potential PSP projects in the way described in Chapter 4. There is a project conceptualisation stage, which may be carried out by the APIA, or by a line department or other public body, but this is not generally a rigorous evaluation.

We have discussed with the GoAP our recommendations in Chapter 4 for the establishment of a "PFI Unit", and the initial conclusion was that the PFI capability might be better located in the APIA than in the Department of Finance. Location in the APIA would make particularly good sense if an Infrastructure Projects Fund is established, as is envisaged in IDEA, 2001, and if that Fund has a funding source that is totally independent of the GOAP budget and does not require a GOAP guarantee (see Chapter 4, section 4.5.1). If the Fund is not established in this way, then location of the PFI Unit in the APIA will complicate the liaison with the Department of Finance that will be required to assess the impact on the budget (an essential feature of the Rapid Assessment methodology described in Chapter 4). Such liaison would formally be through the line department, but in practice it may be possible to establish informal arrangements between the PFI Unit in the APIA and the Department of Finance that would speed up the Rapid Assessment.

The Rapid Assessments to be made by the PFI Unit should be based on information provided by other public bodies. We suggest that the general principle should be that the line department under which the project falls should be responsible for assembling the information required for the assessments, so that the appropriate line department takes "ownership" of the project from the start. Much of the information is likely in most cases to be provided by consultants and/or financial advisers.

The size of the PFI Unit (whether in the APIA or Department of Finance) will depend on the level of PSP activity. At the level achieved during our project, we propose that initially a single individual should be appointed for this role. Additional staff could then be added if the scale of work justifies it. The skills required by the Unit are financial skills.

Project preparation

There are many potential nodal agencies that could be responsible for project preparation in the various sectors (see Table 5.2 in Appendix A). APIA should play a supporting and facilitating role during project preparation, providing specialist expertise where required, or helping to remove bottlenecks in formal meetings of the Authority or in informal meetings. This is a role that it has already performed successfully (see the Visakhapatnam Water Supply case study in Volume 5).

A nodal agency that is being increasingly used for preparing PSP projects is APIIC. APIIC is 100% Government owned, and is formally under the Department of Industries and Commerce. It was initially established in 1974 to identify areas where industry could be established, and to acquire the relevant land and develop the necessary services (roads, power, water, common facilities etc). Some five or six years ago (arising from its successful development of Hitech City through a PSP project), APIIC became a nodal agency for the development and preparation of other PSP projects, including Gangavaram port, AP SEZ, Pharmacity, and Visakhapatnam industrial water supply.

APIIC is fully self-financing, largely from profits made on sales from its land bank. It is this feature that makes APIIC particularly attractive for the development of PSP projects. In some cases it may also be the signatory of the concession agreement on behalf of the Government, or might take an equity stake (typically in the form of land).

APIIC relies heavily on partners and consultants for technical as well as financial/commercial expertise. In particular they have, since 1999, entered into a number of agreements with IL&FS IDC (a 100% owned subsidiary of IL&FS) to develop prospective PSP projects in Andhra Pradesh. Each agreement is now referred to as a Private Development Promotion Partnership (PDPP), which defines the joint working arrangements for IL&FS IDC and APIIC. Typically, APIIC is the main source of deal flow, and contributes capital for development costs and human resources. IL&FS IDC contributes financial structuring and arrangement expertise, and serves as a "market interface" for the partnership. The duration of each PDPP is temporary, usually spanning the term of a transaction up to financial close. This approach allows for flexible staffing and minimal capital costs in project development. The development costs incurred by both parties are expected to be reimbursed by winning bidders for individual PSP projects.

We recommend that project preparation should continue to be managed by the appropriate line departments, or by other public bodies to which line departments have specifically delegated responsibility. As more PSP projects enter the project preparation stage, it will be important to ensure that in each case there is a single project nodal agency with primary responsibility, and that that project nodal agency has a clearly defined mandate.

It is also desirable to limit the number of project nodal agencies as far as possible, since a sound knowledge of PSP requirements and processes is a scarce resource in the public sector. We recommend that, as far as possible:

- Maximum use should continue to be made of APIIC where appropriate;
- If there is to be a pipeline of PSP projects in a sector (eg roads or ports), a special PSP unit should be established that builds up the skills and experience to manage project preparation and the bid process in that sector (although in most if not all cases, the unit would rely heavily on outside consultants and advisers to undertake much of the work);
- In the case of one-off projects, either APIIC should be used, or APIA should be asked by government to form a steering committee or task force of interested parties to oversee the process.

In all cases APIA should be ready to support other organisations with advice, and to provide a forum within which issues and problems that arise can be resolved (especially those cutting across a number of departments). In some situations the issues may need to be resolved in full meetings of the Authority, but we believe that much can be achieved in smaller and less formal meetings.

Private developer selection

The functions of APIA defined in IDEA, 2001 include "to recommend and approve bid documents, risk sharing principles and bid processes for Category II projects" and "to monitor the competitive bidding process for Category II Projects ….". We propose that APIA should adopt these roles to ensure that there is a standard and transparent bidding process for all PSP projects (or at least all projects over a certain size).

The first step is for Rules to be issued by the GoAP under Article 79 of the IDEA, 2001, covering details of the procedures to be followed in the bidding process, adopting best international practice in the pursuit of full transparency and fairness.

For the institutional arrangements, we recommend that the Rules should provide for the establishment of committees to manage the bidding process (as is planned in Gujarat – see below). The committee would be made up of representatives from the line department and other public bodies concerned with project preparation, the Finance Department, APIA, and possibly an outside expert if appropriate. The role of the APIA would be to try to ensure that the Rules are followed in a consistent way across all PSP projects, and to recommend to government any improvements that might be made to the Rules in the light of practice.

Project implementation

Further functions of the APIA as defined in IDEA, 2001 include "to prescribe time limits for clearances of any project" and "to review periodically the status of clearances and ensure that clearances are accorded within specified time frames……"[45]. However, the GoAP passed in 2002 an Industrial Single Window Clearance Act, which they believe would be suitable to cover the arrangements for a Single Window Agency for infrastructure PSP projects. We agree that the provisions of the Act should cover its extension from industrial to infrastructure projects[46], and agree that it should be used for that purpose so long as the Act is proving to be successful in achieving timely and effective clearances and approvals in cases where is has been used so far.

We do not envisage any role for the APIA after financial closure. Contract monitoring should be undertaken by a unit in the relevant line department or other government agency as recommended above.

Summary of institutional arrangements

An overall summary of the institutional arrangements, authorities and responsibilities as discussed above is given in Table 5.2.

5.3.3 Capacity building and training

In this sub-section we identify the main requirements for capacity building and our recommendations for training. It should be read in conjunction with Chapter 4 which sets out the requirements for the second stage in the project cycle, namely "evaluation of PSP mode". The specific requirements will depend on the PSP programme being implemented, so that it is only possible to set out the general requirements.

We start by discussing issues that are particular to the APIA, followed by our recommendations concerning training.

APIA

If APIA is to take on the roles outlined above – as we recommend it should - there are four general issues that should be addressed:

- Funding
- APIA's authority
- Location of APIA
- Staffing

[45] The latter function goes on to say that APIA can "grant clearances if not granted within the time frames or if denied, as may be specified". Article 11(1) then goes on to give APIA specific powers to grant clearances. However, APIA does not consider that it is appropriate for the Authority to grant clearances, and believes that this power should be kept as a last resort or as a threat.

[46] For example, the definition of industrial undertaking in Art 2 is very broad and there are provisions for many forms of Committees to cover almost any type of project including a "Special" committee in Art 5.

Table 5.2: Overview of proposed institutional arrangements for Andhra Pradesh

	Project identification	Evaluation of PSP mode	Project preparation	Private developer selection	Project implementation
Government (1)	Commission the APIA to organise an independent study of priority PSP projects	Decision-making body on whether to proceed to next stage	Decision-making body on whether to proceed to next stage	Issue Rules under IDEA, 2001 governing the bidding process. Final decision on developer selection based on tender committee recommendation.	Ensure removal of bottlenecks in clearances as necessary. Not involved in contract compliance unless major issues arise
APIA (1)	S-T: Organise the study of priority PSP projects and build consensus of conclusions. L-T: continue to build consensus for priority PSP projects	Supportive role, and forum for recommending whether to proceed to the next stage	Supportive role, and forum for recommending whether to proceed to next stage	Establish tender committees in accordance with Rules to be issued under IDEA, 2001; monitor consistency in application of Rules; recommend improvements	Might monitor progress of PSP projects if requested by government
PFI Unit (2)	Not involved directly	Analysis using Rapid Assessment methodology	Re-evaluation if significant divergences from earlier stage	Might participate in tender committee	No role unless significant change in level of government financial support
Line department/ nodal agency for project (3)	S-T: Main source of information for independent study of priority PSP projects. L-T: main source of new potential projects	Provides/organises pre-feasibility information for PFI Unit (with external advisers)	Preparation of detailed documents for tender process (with external advisers)	Participates in tender committee	Supports clearance process. Responsible for contract compliance through designated unit
Department of Finance (4)	Not involved directly	Assesses impact on the budget as an input into the affordability criterion in the Rapid Assessment	Reassesses impact on the budget if significant divergences from earlier stage	Participates in tender committee	No role unless significant change in level of government financial support
Single window agency (5)	Not involved	Not involved	Not involved	Not involved	Interface between the developer and public administration to ensure timely clearances

Notes

1. Communication between APIA and the Government (ie Ministers) might continue to be through the Department of Industries.
2. Although we have assumed, for the purposes of this table, that the PFI Unit will be part of APIA, we have shown separately its role at each stage of the Project Cycle for clarity.
3. The project nodal agency might be the line department (eg a unit within it), APIIC, another agency reporting to a line department, or even a specially formed Committee.
4. If the PFI Unit were to be in the Department of Finance, the Department would not have a role that is distinct from the PFI Unit; these roles would be combined.
5. The institutional arrangements as determined by the Industrial Single Window Clearance Act 2002.

Some of the proposed roles will require additional **funding**. As noted earlier, the Act provides for the establishment of a Fund, and APIA has prepared proposals for such a Fund. This could resolve the funding issues, but APIA's proposals have not yet been accepted by the government. In the absence of the Fund, there is no short-term solution other than to meet the costs out of the State budget. As the deal flow of PSP projects grows, it may be possible to secure some funding from the concession agreements, but that situation is potentially a longer term solution and cannot meet the immediate needs of APIA.

In assessing **APIA's authority,** we can find nothing in IDEA, 2001 that precludes the APIA from performing the functions we have outlined above. Nevertheless, we acknowledge that amendments to the Act might be helpful in increasing further the effectiveness of APIA in supporting PSP in infrastructure, and note that amendments are being considered.

If amendments are considered, we recommend that the GoAP examines carefully the situation in Gujarat, which is the only other project State with a general nodal agency (the GIDB). A major difference between the GIDB and APIA is that the GIDB Board is chaired by the Chief Minister and includes a number of senior Ministers among its members. In contrast APIA comprises senior officials, which greatly weakens its authority. We suggest that any amendment of IDEA, 2001 might include ministerial representation in the Authority, as well as representatives from all the main line departments involved in PSP in infrastructure (eg including the Department of Industries, which is not currently included).

We also recommend that urgent attention is paid to the issuing of Rules under Article 79 of the Act (and, as necessary, Regulations under Article 78) to cover the bidding process as referred to above, and all other matters that are to be "prescribed" that are not already covered under the Rules and Regulations that have already been issued[47].

[47] Matters defined in the Act as requiring to be prescribed can be found in Articles 17; 19 II (iii), (iv), (vi), (vii), & (ix); 19 III (i) & (iv); 31; 36; 39 (vii); 42 (i); 55; 63 (2); 64 (3); and 65 (1).

If APIA is to increase its regular contacts with line departments and other public bodies, its **location** will become an increasing difficulty. It would clearly be easier for line departments and other public bodies to attend formal or informal meetings with APIA if it was located more centrally.

Staffing: The level of staffing required in APIA is dependent on the extent to which it assumes the roles outlined above, and the timing of the increases in its responsibilities. We recommend the following approach to building up the staffing of the APIA: when a decision is made that the APIA should take on an additional responsibility (eg to develop a "PFI" capability), outside advisers should be recruited to design how the additional responsibility should be performed, and to determine the staffing requirements in the APIA. When agreement has been reached on the design stage and staffing requirements, the same consultants should be retained to help recruit and train the required staff.

To take two specific examples:

- First, consultants may be appointed to establish a PFI Unit capability in all four States. We have suggested above that the "PFI Unit" might initially be a single person, but this could be confirmed by the consultants, and the person(s) selected and trained with the assistance of the consultants.
- The second example is the establishment of a more transparent tender process. Again, we suggest that an expert (or experts) should assist in developing the Rules, and then help to select and train someone to be responsible in APIA for advice and assistance on the procurement process.

If our recommendations are accepted, we envisage APIA growing initially to a technical staff of three or four in the first instance, in addition to the CEO, as follows:

- One expert trained to undertake Rapid Assessments (assuming the PFI Unit capability is located in APIA rather than the Department of Finance), with basic financial skills;
- One expert trained in procurement and the tender process, to help draft the Rules for the bidding process, and then to provide assistance

to those involved in the Private Developer Selection stage in the Project Cycle;

- One or two experts to provide general advice to project nodal agencies on all aspects of PSP projects, and general assistance to the CEO in the fulfilment of the CEO's duties. These two experts would be drawn from applicants with technical, financial or business management skills.

Training

We have recommended that much of the detailed project preparation of PSP projects should typically be carried out by consultants and advisers, as the requirements of PSP projects can vary hugely. Even in cases where a succession of similar PSP projects are planned (eg a succession of road projects), unique features can arise requiring outside expertise to address efficiently. This recommendation is reinforced by the extensive availability of financial, legal and technical advisers in India. However, it is important that all staff directly concerned with PSP projects have a good understanding of the requirements of a successful PSP project.

The main training requirements to support the PSP process outlined in our report are as follows:

- PFI Unit
  - Rapid Assessment Methodology
  - Other training as determined by a separate consultancy
- Nodal agencies involved in project development (APIA, line departments and other government agencies)
  - PSP Process
  - Project Finance Contract Structures and Categories (eg the terms and conditions of a project to make it bankable, ie acceptable to creditors and equity investors)
  - Project Funding Strategies and Risk Allocation
- Contract monitoring units: training using courses run by the International Federation of Consulting Engineers (FIDIC)
- General awareness training.

This training might be undertaken in the following ways:

- We have recommended that there should be a special consultancy to help design and establish **PFI Units.**
- There are many organisations in India that are capable of running the courses for **nodal agencies**. The specific requirements of individuals are likely to vary depending on their background training and experience. In some cases, study tours may be helpful in reinforcing more formal training, but generally such study tours should be organised in other parts of India. Overseas tours are expensive, and we suggest they should only be undertaken in exceptional cases. In selecting staff for nodal agencies (eg PSP cells within a line department or other public agency), care should be taken to select personnel that have the right mind-set as well as at least some of the required qualifications. Financial or technical qualifications can be enhanced by suitable training (eg in financial modelling), but attitudes are unlikely to change.
- As noted above, we are recommending FIDIC for the **contract monitoring** training courses.
- The **general awareness** training that we recommend is to address the widespread lack of understanding of PSP in infrastructure within the State administration. We suggest that one day workshops might be held to increase this understanding, and particularly to highlight the potential benefits that PSP can bring in helping to address many of the infrastructure deficiencies in the State. Organising such workshops could be another useful role for APIA.

5.4 Gujarat

5.4.1 Current institutional arrangements

The institutional arrangements in Gujarat at the time of our field work, at both the general level and for each of the eight sectors, are summarised in Table 5.3 in Appendix A.

The Government of Gujarat (GoG) is either actively engaged in, or investigating, PSP in all eight sectors. Its main accomplishments so far have been PSP projects in ports, power and roads.

Gujarat has a well established general nodal agency, the Gujarat Infrastructure Development Board (GIDB), but the line departments and other public agencies generally retain the lead role in the preparation of PSP projects and in the process for the selection of the developer[48]. Gujarat therefore has a hybrid model.

The GIDB structure comprises a Board, Executive Committee, and Technical Secretariat headed by a Chief Executive Officer (CEO).

The Act establishing the GIDB - the Gujarat Infrastructure Development Act, 1999 (GIDA) - does not specify who should be the Chairman of the GIDB, but the GoG has decided to give it maximum authority by appointing the Chief Minister as the Chairman. Besides the Chairman, there are 18 other Board members including six Ministers, the Chief Secretary, six Principal Secretaries, two Secretaries, a water management expert, the Industries Commissioner, and the CEO GIDB. The Executive Committee is headed by the Vice Chairman of the Board, the Minister of State for Industries. The other 12 members are all senior officials including the Chief Secretary.

We were told that the GIDB's Executive Committee meets about every 1 – 1.5 months[49], but could meet more regularly if the need arose. Decisions on feasibility and pre-feasibility studies over Rs 1.5 crores, sector and policy decisions over Rs 1 crore, concession agreements, selection of developer and final concession agreement, and matters of policy, are all currently referred to the Board. The Board meets as far as possible when required, but in practice irregularly[50]. In practice it is difficult to arrange times when the required members can attend.

The GIDB's Technical Secretariat comprises about 25 staff, of whom about 10 are professionals, organised on a sectoral basis. Most of the staff are from technical backgrounds, but many have financial or business management training as well. The CEO intends to keep GIDB as a reasonably slim organisation[51].

The functions of the GIDB are largely enabling and facilitating, rather than doing. Thus the Act uses terms such as promote, advise, lay down priorities, consider a proposal, elicit information, coordinate and monitor, and assist. Formally the GIDB cannot make decisions on behalf of the GoG, but most such decisions effectively become a formality after approval by the GIDB's Board because of the composition of the Board. The power and authority of the GIDB stems from its membership as much as from its powers under the GIDA.

The present split of responsibilities between the GIDB and the line departments/other public bodies varies across the four priority sectors, but can be summarised as follows:

- **Ports:** PSP projects are largely driven by the Gujarat Maritime Board (GMB) under the overall responsibility of the Gujarat Ports & Fisheries Department. The GMB has a privatisation cell with 5-6 people that is primarily focused on PSP in new greenfield ports. The GIDB's role is largely limited to its statutory powers to give or withhold approval at various stages in the project cycle. Further information is given in the Gujarat case study in Volume 5.

[48] One of the functions of the GIDB is "to undertake such projects as may be entrusted to it by the State Government", but this role has not yet been exercised.

[49] Although under the GIDB's regulations it is required to meet at least every 30 days.

[50] Although under the GIDB's regulations it is required to meet at least every 90 days.

[51] Although we do not know the views of the current CEO, who replaced the CEO throughout most of our study around September 2004.

- **Roads:** the present arrangements are similar to ports. Gujarat State Road Development Corporation Ltd – under the overall responsibility of the Gujarat Roads & Buildings Department - has a privatisation cell (of about 4 people), which leads project preparation and the private developer selection process. The GIDB helps to advise on which projects are suitable for the PSP route, and performs its statutory role in the project cycle.
- **UMT:** in the absence of another suitable public body, the GIDB has taken the lead in initiating studies of potential Integrated Public Transit Systems (IPTSs) in Ahmedabad, Surat and Vadodara, and a Mass Rapid Transit System (MRTS) in Ahmedabad. Steering Committees have been formed in each case - comprising representatives from main stakeholders and the GIDB, together with various experts - with the mandate to identify viable projects, and to evaluate whether any are suitable for PSP.
- **Water supply and sewerage:** the GIDB has again taken the lead because the institutional arrangements in the sector are fragmented and complex, and there is no single body suitable for pursuing PSP projects. The GIDB has initiated a phased strategy, starting with pilot management contracts in West Ahmedabad and Surat, and, if successful, rolling the programme out to other major urban areas. Concessions might follow later, and there are plans to establish an independent water regulator (see Chapter 3). As in the case of UMT, committees have been appointed in West Ahmedabad and Surat to oversee preparation and to take decisions on the first pilots. The initial studies have been funded by GIDB.

The GIDA envisages that Rules will be issued by the GoG covering a number of matters relating mainly to the procedures for the bidding process, but also setting out thresholds for the size of projects below which the approval of the GIDB is not required. Draft Rules have been prepared but not yet (as at August 2004) finalised or issued [52]. The GIDB has therefore been responsible for giving its approval to all PSP projects rather than those above a certain size.

The Rules are important and should be finalised as soon as possible. When they are issued, we recommend that a way should be found to ensure that the Rules on the bidding process are applied to all PSP projects, not just those above the thresholds at which they have to be submitted to GIDB. We have provided our views on how this might be achieved (see Volume 3, item 2).

5.4.2 *Effectiveness of institutional arrangements*

The GIDB plays a central role in PSP in infrastructure in Gujarat. It is now a well established body, having been in existence for several years. During the past few years, it has devoted considerable time to commissioning studies to initiate and plan potential PSP projects. The real test of its effectiveness will be whether the preparatory work results over the next year or two in an increased flow of PSP projects reaching the implementation stage.

The following paragraphs give our comments on the effectiveness of the institutional arrangements at each stage of the project cycle, together with our proposals and recommendations for enhancing them, and conclude with an overall summary.

Project identification

In the past, projects have been identified primarily by the responsible line department or other public body, although the GIDB has also been involved at this first stage in some instances. In particular, the GIDB has tended to get involved if there is no other suitable body to do so (see above for UMT and water supply). However, at the beginning of 2004, the GIDB took an important initiative in appointing consultants (Crisil) to review and update Vision 2010. The purpose of the study is to produce a shelf of PSP projects for the next 10 years, focusing especially on the next 5 years, based on discussions with line departments and other government agencies. As at August 2004, a draft report had been prepared and was being considered by GIDB.

[52] We have provided our comments on the Draft Rules prepared by GIDB (see Volume 3, item 2). We were told in August 2004 that our suggestions had been taken into consideration and revised Rules had been submitted to the Board.

The GIDB has a vital role to play in developing a genuine consensus on the projects that should be pursued, so that widespread political and official commitment can be built up for those projects. One of the potential difficulties encountered by general nodal agencies such as GIDB is the build-up of tensions between the nodal agency and line departments. It is essential that all the main concerned parties buy in to the selection of priorities if project preparation and implementation are to proceed smoothly.

Evaluation of PSP mode

We have set out in Chapter 4 our proposals for the establishment of a "PFI Unit" in the Department of Finance to perform "Rapid Assessments" of potential PSP projects. The two main decisions coming out of these assessments would be the appropriate PSP mode, together with a best estimate of the government financial support that will be required to ensure a bankable project. We believe that it is important that the assessments are made before project preparation, so that the estimated level of financial support is known, and agreed in principle, before more substantial time, money and effort is devoted to the detailed preparation of the project.

The GoG's view is that such assessments are currently undertaken by line departments and/or the GIDB, and there is not at present a perceived need for the establishment of a separate PFI Unit to undertake this role. The Department of Finance only gets involved at the point when a private developer is to be selected, and the necessary budgetary allocations have to be made.

However, the case study we conducted in Gujarat (see Volume 5) indicated weaknesses in the current processes, and we therefore recommend that careful consideration should be given to our proposals in Chapter 4, especially the potential benefits of introducing a new second step in the Project Cycle (ie Evaluation of PSP mode). The project cycle followed historically by GIDB does not have this step but proceeds straight to project preparation after project identification.

If the GIDB/GoG decide to introduce an additional stage in the project cycle along the lines of the Evaluation of PSP Mode described in chapter 4, the next decision is whether to locate the PFI Unit capability in the Department of Finance or the GIDB. In the August 2004 meeting with the GIDB and the ADB, there was a stated preference for the GIDB. However, in earlier meetings with other top officers of the Department of Finance, broad sympathy was indicated for locating the unit in the DOF. The GIDB solution would have the benefit of concentrating general PSP expertise in a single organisation rather than proliferating such expertise, but it would complicate the assessments of the impact on the budget which form an essential part of the Rapid Assessment methodology (see Section 4.4). If a PFI Unit capability is built up in the GIDB, it will be important to establish effective links with the Department of Finance to address the budgetary issues that will arise. Such links may formally have to be through the line departments, but other informal links may be feasible.

As in Andhra Pradesh, the PFI Unit (whether in the Department of Finance or the GIDB) might start with a single technical expert trained in the Rapid Assessment methodology until the level of PSP activity justifies more.

Project preparation

In the case of ports and roads, the nodal agency for project preparation is the GMB and the Gujarat State Road Development Corporation Ltd respectively. To the extent that the GIDB is involved at this stage, its role should be supportive. However, the GIDB must strive to be kept informed of progress and invited to give its views on key decisions and documents, so that there are no surprises when the project proposal is formally submitted to the GIDB for its approval. It should be in the mutual interests of both parties to keep in touch and be able to reach consensus at an early stage.

In the case of the UMT and water supply sectors, we understand that GIDB has been the main player in the early stages of project identification and evaluation of the PSP mode. However, it is not GIDB's mandate to take the lead at the project preparation stage[53], and another public body should

[53] Unless the project is entrusted to the GIDB by the GoG in accordance with the GIDA.

be charged with this responsibility. This might be the Municipal Corporation in the case of the pilot water supply projects, and a municipal body or the Urban Development Department in the case of a UMT project. An alternative arrangement would be to retain the Steering Committee and formally empower it with a remit to prepare the project for submission to the GIDB. The Steering Committee would be the day-to-day decision-maker, supported by consultants, the GIDB and any other expertise required. Although the GIDB might continue to play a major role at the project preparation stage, the role would still be of a supportive nature.

Private developer selection

As noted earlier, the GIDA requires that the GIDB gives its approval to project proposals and proposed concession agreements, in the case of all projects above the thresholds set out in the Rules. If the GIDB has been consulted and kept informed during the project preparation stage, there should be no surprises when the project proposal is submitted to GIDB for approval. In these situations, any comments by the GIDB would be fine-tuning rather than fundamental.

However, delays can occur in securing the approval of the GIDB because of the infrequency of the meetings of the GIDB Board in particular. Some delay may be the inevitable consequence of having senior ministers and officials on the Board (which, as noted earlier, brings its own benefits), but there may need to be some measures to ensure that such delays are not unduly drawn out. We have suggested that the Rules should include a maximum time which the GIDB has to respond to a project proposal, proposed concession agreement, or other such statutory requirement[54].

At present, the nodal agency that was responsible for project preparation continues to be responsible for the process for private developer selection. For example, the GMB manages the bid process for PSP in ports. However, the draft GIDB Rules propose that a Pre-qualification, Bids and Awards Committee (PBAC) should be established to guide the whole private developer selection process. Each PBAC would comprise the Secretary of the concerned line department (Chairman), head of the concerned government agency, the CEO of GIDB or his representative, a representative of the Finance Department, a technical expert, and a representative of the body authorised to grant the concession. We support these proposals and recommend their implementation.

Project implementation

We have recommended that there should be a single window agency for clearances. In the case of Gujarat, we recommend that GIDB should undertake this role, since it has no potential conflicts of interest (which could be the case for line departments or government agencies that are also involved in policy or operations), and since it potentially has the authority to ensure that bottlenecks in the clearance process are speedily resolved. In discussions with the GoG, this recommendation was accepted, and we were told that the GIDB already acts as a single window agency to some extent.

More specifically, we recommend that the role of GIDB, for each project where the private developer has been selected, should be:

- To appoint a GIDB Project Coordinator, who would be the primary point of contact for the private developer;
- The GIDB Project Coordinator should then:
  - Organise the preparation of details of all the remaining clearances required and the timetable for each clearance;
  - Organise Project Coordinators in all relevant government bodies that are required to provide the remaining clearances;
  - Actively monitor progress against the timetable, and report regularly to higher authority within the GIDB;
- GIDB (through its Executive Committee or Board as appropriate) should arrange for action to be taken to remove any bottlenecks that emerge as speedily as possible;
- The GIDB should establish a complaints office that can serve as the recipient of complaints from developers concerning alleged irregularities in the clearance process. Such

[54] The responses that can be given are to recommend, not to recommend, or to return for reconsideration. We assume that reasons would be given for any decision other than full endorsement.

complaints should be logged and professionally dealt with.

This single window agency role is especially important after the private developer has been selected, but we recommend that the GIDB should also perform a similar function in organising and monitoring clearances that are to be secured during the project preparation stage.

We have also emphasised the importance of monitoring the implementation of the project after financial closure to ensure compliance. This role should be performed by a unit in the relevant line department or other government agency as recommended above.

Summary of institutional arrangements

An overall summary of the institutional arrangements discussed above, and the roles and responsibilities of the various organizations involved in developing PSP projects is given in Table 5.3 below.

5.4.3 Capacity building and training

The main training requirements are in the second, third and fifth stages of the project cycle.

Assuming that the GIDB/GoG decides to introduce our **second stage** – Evaluation of PSP Mode - training will be required in:

- Rapid Assessment Methodology
- Other training as determined by the PFI Consultancy.

For the **third stage** of the project cycle, we have recommended that much of the detailed project preparation of PSP projects should typically be carried out by consultants and advisers, as the requirements of PSP projects can vary hugely. Even in cases where a succession of similar PSP projects are planned (eg a succession of port projects), unique features can arise requiring outside expertise to address efficiently. This recommendation is reinforced by the extensive availability of financial, legal and technical advisers in India. However, it is important that all staff directly concerned with PSP projects have a good understanding of the requirements of a successful PSP project.

The nodal agencies for the port and road sectors have already built up a basic understanding of the requirements for a successful PSP project, but some of the staff may benefit from wider exposure to PSP projects and processes elsewhere. Some specific suggestions are made for ports in the Gujarat case study in Volume 5.

In sectors other than ports and roads, there is a more limited understanding of PSP, and we recommend training in the following topics for all new staff that are to be directly involved in the preparation of PSP projects:

- PSP Process
- Project Finance Contract Structures and Categories (eg the terms and conditions of a project to make it bankable, ie acceptable to creditors and equity investors)
- Project Funding Strategies and Risk Allocation.

There are many organisations in India that are capable of running such courses. In selecting staff for nodal agencies (eg PSP cells within a line department or other public agency), care should be taken to select personnel that have the right mind-set as well as at least some of the required technical qualifications. Technical qualifications can be enhanced by suitable training (eg in financial modelling), but attitudes are unlikely to change. In some cases, study tours may be helpful in reinforcing more formal training, but generally such study tours should be organised in other parts of India. Overseas tours are expensive, and we suggest they should only be undertaken in exceptional cases.

For the **fifth stage**, we recommend that training should be provided as required for those engaged in the monitoring of contracts during the project implementation stage. Suitable training is available through the International Federation of Consulting Engineers (FIDIC).

Table 5.3 - Overview of proposed institutional arrangements for Gujarat

	Project identification	Evaluation of PSP mode	Project preparation	Private developer selection	Project implementation
Government (1)	Not involved directly	May be final decision-making body on whether to proceed to next stage	May be final decision-making body on whether to proceed to next stage	May be final decision-making body on private developer selection	Ensure removal of bottlenecks in clearances as necessary. Not involved in contract compliance unless major issues arise
GIDB (1)	S-T: Consensus building of results of Crisil study. L-T: continue to build consensus for priority PSP projects	Decision on whether to proceed to next stage	Supportive role and decision on whether to proceed to next stage	Participates in PBAC and final selection of developer	Act as Single Window Agency. Operates a complaints office.
PFI Unit (2)	Not involved directly	Analysis using Rapid Assessment methodology	Re-evaluation if significant divergences from earlier stage	Might participate in PBAC	No role unless significant change in level of government financial support
Line department/ nodal agency for project (3)	S-T: contributes to agreement on Crisil study L-T: main source of new potential projects	Provides/organises pre-feasibility information for PFI Unit (with external advisers)	Preparation of detailed documents for tender process (with external advisers)	Participates in PBAC	Supports clearance process. Responsible for contract compliance through designated unit
Department of Finance (4)	Not involved directly	Assesses impact on the budget as an input into the affordability criterion in the Rapid Assessment	Reassesses impact on the budget if significant divergences from earlier stage	Participates in tender committee	No role unless significant change in level of government financial support

Notes

(1) Some final decisions on whether to proceed from one stage to another will be taken by the GIDB, but others will properly be taken by the Cabinet.

(2) The PFI Unit might be part of GIDB, but its role at each stage of the Project Cycle is shown here for clarity.

(3) The project nodal agency might be the line department (eg a unit within it), another agency reporting to a line department, or even a Committee specially formed (eg by GIDB).

(4) The roles shown here assume that the PFI Unit is in the GIDB. If it were to be in the Department of Finance, the Department would not have a role that is distinct from the PFI Unit; these roles would be combined.

5.5 Karnataka

5.5.1 *Current institutional arrangement*

There has been some PSP activity, to a greater or lesser extent, in all eight sectors in Karnataka, although in some cases the final outcome may not be PSP (eg the Bangalore Mass Rapid Transit project) or has so far been on a minor scale (eg outsourcing of limited responsibilities in the power sector). Most of this activity has been in response to private sector interest rather than planned by the Government of Karnataka (GOK). An example is the Bangalore-Mysore Infrastructure Corridor project, which is one of the case studies in Volume 5.

The institutional arrangements for PSP in Karnataka at the time of our field work, at both the general level and for each of the eight sectors, are summarised in Table 5.4 in Appendix A. The arrangements are relatively complex compared with the other three States, the main features being:

- The Karnataka Infrastructure Development Department (KIDD) was established in 1996 to determine infrastructure needs in the various sectors, to prepare and evaluate project profiles for selected projects that would seek PSP, and to seek such investment. In practice, its main role has been to assist where necessary, and to act as the nodal agency for PSP projects which do not fall naturally under a specific line department or other public body (eg the new international airport at Bangalore).
- The ultimate decision-making body for PSP projects is the Cabinet for mega projects, and a high level committee for others.
- In 2000 the GOK established the Infrastructure Development Corporation, Karnataka (iDeCK) in conjunction with the Infrastructure Development Finance Corporation (IDFC), the GOK taking a 49% stake. The purpose of iDeCK is to help promote PSP projects.
- As shown in Appendix A -Table 5.4, there are other public bodies that could potentially be involved in PSP projects across more than one sector (KSIIDC, KUIDFC, KIADB, and the Bangalore Agenda Task Force).
- The remaining institutional arrangements are more similar to the other states. In some sectors the nodal agency for project preparation is the line department (eg ports), and in others another public body (eg the Karnataka Industrial Areas Development Board for SEZs). In the water supply sector the institutional arrangements are highly fragmented, as in other States.

Karnataka can be characterised as having essentially a line department model. Neither the KIDD, nor any of the other bodies that do or could operate across more than one sector, can be described as a general nodal agency in the way that APIA and GIDB are. The KIDD could potentially be developed into a general nodal agency, but we understand that that is not the intention of the GOK.

In most cases a line department or other public body is designated as the nodal agency for project preparation, but it might be supported by KIDD and/or iDeCK. KIDD might provide general advice, while iDeCK provides specific transaction support.

At present iDeCK's role in PSP is mainly advisory, although it might on occasions participate through taking an equity stake in a project. It has a close working relationship with KIDD, and the Chairman of the Board is the Principal Secretary in KIDD. It works both for KIDD and for line departments, assisting with project preparation or managing the bid process. No department is mandated to use iDeCK, and typically iDeCK tenders for work as part of a competitive process. Although it is 49% owned by the GOK it is technically a private company. It has about 16 staff, who can generally deal with the financial, commercial and legal aspects of PSP projects. The technical expertise for specific projects is typically bought in.

One of the advantages of iDeCK compared to KIDD is stability of staffing. We were consistently impressed by the quality of the comments received from iDeCK on aspects of this work and the commitment of the senior management of iDeCK to the PSP process.

5.5.2 *Effectiveness of institutional arrangements*

The GOK has been working for some time on a new infrastructure policy to replace the 1997 policy. It

was still under consideration as of August 2004, and it has not been possible to see the draft. However, we have discussed with the GOK some specific proposals for increasing the level of PSP in infrastructure through a more proactive policy by the GOK, rather than relying so much on unsolicited proposals from the private sector. Our recommendations for each stage in the project cycle are given below, followed by a summary.

Project identification

The best way to launch a more proactive PSP programme, and to start to screen a shelf of PSP project priorities, is to commission a study similar to that being conducted in Gujarat (see above). Consultants should be engaged to work with line departments and other relevant public bodies to identify the infrastructure projects that are appropriate for implementation through PSP over say, the next five years, based on specific criteria which should be set out in the terms of reference. Such a study should be commissioned by the Cabinet to give it the highest authority, and to obtain the fullest possible cooperation of all line departments. The executing body could be the KIDD. We recommend that such a study should be commissioned as soon as practicable. Updating studies may later be required at periodic intervals.

Evaluation of PSP mode

Chapter 4 recommends that a "PFI Unit" should be established in the Department of Finance to evaluate all potential PSP projects requiring some form of state support, using three criteria: impact on the budget, value for money, and risk allocation. This PFI Unit would be trained in the techniques of "Rapid Assessments" using these criteria, to aid decision-making on the most appropriate PSP mode and on the level of government financial support likely to be required to ensure that the project is bankable.

While the PFI Unit would oversee the Rapid Assessments, it would not be responsible for assembling all the information required to perform these assessments. Instead, responsibility would lie with the line department under which the project falls, supported as necessary by other public bodies, so that the appropriate line department takes "ownership" of the project from the start. Further assistance may also be required from consultants and/or financial advisers. Decisions on the appropriate PSP mode, and whether to proceed to the next stage in the project cycle, would be taken by the appropriate body (eg the Cabinet), based on the Rapid Assessments prepared by the PFI Unit.

A supporting factor in Karnataka is the current effectiveness and improved governance review underway within the DOF with support from the United States Agency for International Development (USAID). We held positive meetings with the consultants who are working with the DOF on the effectiveness review and the confirmed that housing the PFI Unit within the DOF Budget Planning Department would be supported by their program. Our recommendation therefore, is that it should be in the Department of Finance.

The PFI Unit might start with a single technical expert trained in the Rapid Assessment methodology until the level of PSP activity justifies more.

Project preparation

As explained in section 5.2 above, it is essential that a single public sector body acts as the nodal agency for project preparation. In Karnataka there are many potential bodies that could perform this role, and we suggest that there may be some scope for rationalising the overall institutional arrangements so that the number of nodal agencies for this stage in the project cycle is limited to a manageable number. Specialist PSP skills and experience are scarce in the public sector and should not be spread too thinly. It is also essential that, where more than one public sector body is involved in project preparation, the roles and responsibilities of the different bodies should be clearly defined.

iDeCK could continue to provide assistance with project preparation, but should not be the nodal agency as it is a private sector organisation.

Private developer selection

As explained in Chapter 4 (section 4.3) it is important that the bidding process is as transparent as possible, in order to attract serious quality

bidders and secure competitive tenders that yield the most beneficial result for the people of Karnataka. At present there are no Rules governing the bidding process, and we recommend that this gap should be rectified by introducing a general law on PSP in infrastructure (see Chapter 3), and issuing Rules under the legislation that set out a bidding process that is aligned with best international practice.

We also recommend that these Rules should provide for the establishment of committees to manage the bidding process (as is planned in Gujarat). The committee would comprise representatives from the line department and other public bodies concerned with project preparation, the Finance Department, and possibly KIDD and/or an outside expert. Depending on the membership of this committee, and possibly depending on the size of the project, the committee might be given final decision-making powers, or might be charged with making a recommendation to the Cabinet on the final selection.

Project implementation

As for the other States we recommend that there should be a single window agency (SWA) to facilitate the clearances required before financial closure. More specifically, we recommend that the SWA for each project would be organised as follows:

- The SWA should appoint a Project Coordinator to be the primary point of contact for the private developer;
- This Project Coordinator should then:
  - Organise the detailed preparation of a list of all the remaining clearances required and the timetable for each clearance;
  - Organise Project Coordinators in all relevant government bodies that are required to provide the remaining clearances;
  - Actively monitor progress against the timetable, and report regularly to higher authority;
- The SWA should arrange for action to be taken to remove any bottlenecks that emerge as speedily as possible;
- The SWA should also establish a complaints office to receive any complaints from developers concerning alleged irregularities in the clearance process. Such complaints should be logged and professionally dealt with.

We have also emphasised the importance of monitoring the implementation of the project after financial closure to ensure compliance. This role should be performed by a unit in the relevant line department or other government agency as recommended in section 5.2.2.2.5 above.

Summary of institutional arrangements

An overall summary of the institutional arrangements discussed above is given in table 5.4 below. We have not been able to take account of the new infrastructure policy that was under preparation during the course of our field work, as we have not seen it. The arrangements may therefore be subject to change when this new policy is issued.

5.5.3 Capacity building and training

The main capacity building and training requirements are summarised below for four areas:

- PFI Unit
- Nodal agencies involved in project development
- Contract monitoring units
- General awareness training.

PFI Unit

The main training requirements will be:

- Rapid Assessment methodology; and
- Other training as determined by a separate consultancy.

Nodal agencies involved in project development

We have recommended that much of the detailed project preparation of PSP projects should typically be carried out by consultants and advisers, as the requirements of PSP projects can vary hugely. Even in cases where a succession of similar PSP projects are planned (eg a succession of road projects), unique features can arise requiring outside expertise to address efficiently. This recommendation is reinforced by the extensive availability of financial, legal and technical advisers in India. However, it is important that all staff

directly concerned with PSP projects have a good understanding of the requirements of a successful PSP project. The main areas of such training are:

- PSP Process
- Project Finance Contract Structures and Categories (eg the terms and conditions of a project to make it bankable, ie acceptable to creditors and equity investors)
- Project Funding Strategies and Risk Allocation.

There are many organisations in India that are capable of running such courses. In some cases, study tours may be helpful in reinforcing more formal training, but generally such study tours should be organised in other parts of India. Overseas tours are expensive, and we suggest they should only be undertaken in exceptional cases.

In selecting staff for nodal agencies (eg PSP cells within a line department or other public agency), care should be taken to select personnel that have the right mind-set as well as at least some of the required technical qualifications. Technical qualifications can be enhanced by suitable training (eg in financial modelling), but attitudes are unlikely to change.

Contract monitoring units

For units that are responsible for contract monitoring, we recommend courses that are run through the International Federation of Consulting Engineers (FIDIC).

General awareness training

There is a widespread lack of understanding of PSP in infrastructure within the State administration, which needs to be addressed. We suggest that one day workshops might be held to increase this understanding, and particularly to highlight the potential benefits that PSP can bring in helping to address many of the infrastructure deficiencies in the State.

Table 5.4 - Overview of proposed institutional arrangements for Karnataka (pending new infrastructure policy)

	Project identification	Evaluation of PSP mode	Project preparation	Private developer selection	Project implementation
Government	Commission an independent study of priority PSP projects	May be final decision-making body on whether to proceed to next stage	May be final decision-making body on whether to proceed to next stage	Issue Rules governing the bidding process. May be final decision-making body on private developer selection	Ensure removal of bottlenecks in clearances as necessary. Not involved in contract compliance unless major issues arise
KIDD	Might organise independent study, and be responsible for consensus building of results	Supportive role, or in selected cases line department role (see below).	Supportive role, or in selected cases line department role (see below).	Participates in PBAC	Not involved
Line department/ nodal agency for project (1)	Main source of information for independent study of priority PSP projects	Provides/organises pre-feasibility information for PFI Unit (with external advisers)	Preparation of detailed documents for tender process (with external advisers)	Participates in PBAC	Supports clearance process. Responsible for contract compliance through designated unit
PFI Unit, Department of Finance	Not involved directly	Analysis using Rapid Assessment methodology	Re-evaluation if significant divergences from earlier stage	Participates in PBAC	No role unless significant change in level of government financial support
Single window agency	Not involved	Not involved	Not involved	Not involved	Interface between the developer and public administration to ensure timely clearances

Notes

(1) The project nodal agency might be the line department (eg a unit within it), another agency reporting to a line department, the KIDD, or even a specially formed Committee.

5.6 Madhya Pradesh

5.6.1 Current institutional arrangements

The institutional arrangements in Madhya Pradesh at the time of our field work, at both the general level and for each of the eight sectors, are summarised in Table 5.5 in Appendix A.

Of the four priority sectors, there has only been PSP in roads. There are no ports in Madhya Pradesh, and there are no plans for any UMT projects or for any PSP in water supply and sewerage. Of the other sectors, there is ongoing activity in SEZs, IT parks and the power sector.

The institutional arrangements for PSP are relatively simple compared with the other three States. The main features are:

- There is no general nodal agency although the the Madhya Pradesh State Industrial Development Corporation (MPSIDC) and the MP Road and Bridge Corporation (MPRBC) are under the same senior management and effectively act as a nodal coordinating agency. Under the previous government there was a Madhya Pradesh State Economic Development Council which planned and monitored public and private projects. PSP projects over Rs 10 crores were referred to the Council, but it is currently dormant pending a decision by the new government whether or not to reconstitute it.
- PSP in the roads and power sectors was largely driven by severe budgetary constraints. The main policy decisions and choice of PSP projects have been taken by the Cabinet.
- The programme of PSP in roads is broadly modelled on the national programme (see case study in Volume 5). There is a sector nodal agency for project preparation and private developer selection, the MP Road and Bridge Corporation (MPRBC), which is under the line ministry (the MP Public Works Department).
- A Fund (the MP Infrastructure Investment Fund Board, or MPIIFB) has been established to finance PSP projects. So far the Fund has been used for PSP in roads, but in principle it could be used in other sectors.
- The SEZ and IT park programmes are being developed by MPSIDC, which reports to the Department of Industries and Commerce, and was originally established in 1965 for the purpose of industrial promotion. The Corporation has a head office in Bhopal and five wholly owned Audyogik Kendra Vikas Nigams (AKVNs) in major cities (including Bhopal). The AKVNs are the implementing bodies, and the Indore AKVN is involved in developing an SEZ and IT park.

5.6.2 Effectiveness of institutional arrangements

These institutional arrangements effectively follow the "line department" model described earlier. These arrangements are broadly satisfactory for the current level of PSP activity in the State. The only priority sector in which there has been PSP activity is roads, which is the subject of the Madhya Pradesh case study in Volume 5. As set out there, the institutional arrangements for the road PSP programme generally work well, and we do not recommend any changes (although the case study in Volume 5 makes other recommendations). The nodal agency for project preparation and private developer selection is the Madhya Pradesh Rajya Setu Nirman Nigam Ltd (MPRSNN), also referred to as the RBC. This is under the Public Works Department PWD), and acts as an agent for the implementation of the PSP programme. Funding is provided through the MPIIFB.

The main institutional issues in Madhya Pradesh will arise if the PSP programme is extended to new sectors. In Chapter 4 (section 4.5.4.1), we have suggested that, if there is to be a substantial expansion of PSP activity, the MPIIFB might be expanded into a PFI Unit, although the GOMP has expressed a preference to establish a separate PFI Unit. We believe that the decision made between an expanded MPIIFB and a separate PFI Unit is not critical as long as the unit is in the Department of Finance. Generally, we recommend that the GOMP should follow other successful international examples (see Chapter 4, section 4.1) by focusing on the Department of Finance for co-ordinating and organising any PSP expansion programmes. Our

specific recommendations for each stage in the project cycle are given below, followed by a summary.

Project identification

If the political will exists to expand the PSP programme, we recommend that the government should start by commissioning a study by consultants to identify the infrastructure projects that are appropriate for implementation through PSP over say, the next five years, on the lines of the study being conducted in Gujarat (see above). Such a study should be commissioned by the Cabinet to give it the highest authority, and to obtain the fullest possible cooperation of all line departments. We suggest that the executing body for the study should be the MPSIDC/RBC with support from the Department of Finance.

Evaluation of PSP mode

As set out in Chapter 4, the PFI Unit in the Department of Finance would evaluate all potential new PSP projects requiring some form of state support[55] (using a Rapid Assessment methodology), in order to aid decision-making on the most appropriate PSP mode, and on the level of government financial support likely to be required to ensure that the project is bankable. While the PFI Unit would oversee the Rapid Assessments, it would not be responsible for assembling all the information required to perform these assessments. Instead, responsibility would lie with the line department under which the project falls, supported as necessary by other public bodies, so that the appropriate line department takes "ownership" of the project from the start. Further assistance may also be required from consultants and/or financial advisers. Decisions on the appropriate PSP mode, and whether to proceed to the next stage in the project cycle, would be taken by the appropriate body (eg the Cabinet), based on the Rapid Assessments prepared by the PFI Unit.

As stated above, the MPIIFB might be expanded to undertake this role in all sectors, or a separate PFI Unit might be established. If it is to be a separate Unit, it would probably start with a single technical expert trained in the Rapid Assessment methodology until the level of PSP activity justifies more.

Project preparation

For new sectors, project preparation should be the responsibility of the line department, although many of the responsibilities might be delegated to a project or sector nodal agency, as is the current practice in the road and SEZ sectors. In some cases, the choice of a suitable nodal agency may be straightforward, but in the water supply sector, for example, the decision may not be, as the institutional arrangements are fragmented and fairly complex (as in the other States). If the government decided to implement PSP projects in the water supply sector, it may be necessary to constitute a small special cell in, say, the MP Urban Administration & Development Department (since the first projects are likely to be in urban areas).

Private developer selection

As explained in Chapter 4 (section 4.3) it is important that the bidding process is as transparent as possible, in order to attract serious quality bidders and secure competitive tenders that yield the most beneficial result for the people of Madhya Pradesh. At present there are no Rules governing the bidding process, and we recommend that this gap should be rectified by introducing a general law on PSP in infrastructure (see Chapter 3), and issuing Rules under the legislation that set out a bidding process that is aligned with best international practice.

We also recommend that these Rules should provide for the establishment of committees to manage the bidding process (as is planned in Gujarat). The committee would comprise representatives from the line department and other public bodies concerned with project preparation, the Finance Department, and possibly an outside expert. We suggest that final decisions (at least on major projects) should be taken by the Cabinet based on recommendations from the Committee.

Project implementation

As for the other States we recommend that there should be a single window agency (SWA) to

[55] Except that the road sector might be excluded from these general arrangements if funding continued to be provided by MPIIFB, and the PFI Unit was separate from MPIIFB.

facilitate the clearances required before financial closure. More specifically, we recommend that the SWA for each project would be organised as follows:

- The SWA should appoint a Project Coordinator to be the primary point of contact for the private developer;
- This Project Coordinator should then:
  - Organise the detailed preparation of a list of all the remaining clearances required and the timetable for each clearance;
  - Organise Project Coordinators in all relevant government bodies that are required to provide the remaining clearances;
  - Actively monitor progress against the timetable, and report regularly to higher authority;
- The SWA should arrange for action to be taken to remove any bottlenecks that emerge as speedily as possible;
- The SWA should also establish a complaints office to receive any complaints from developers concerning alleged irregularities in the clearance process. Such complaints should be logged and professionally dealt with.

We have also emphasised the importance of monitoring the implementation of the project after financial closure to ensure compliance. This role should be performed by a unit in the relevant line department or other government agency as recommended above.

Summary of institutional arrangements

An overall summary of the institutional arrangements for an expanded PSP programme, as discussed above, is given in Table 5.5 below.

5.6.3 Capacity building

Institutional strengthening and capacity building for the road sector in Madhya Pradesh (including any recommendations relating to MPRSNN), are currently being addressed by a separate ADB technical assistance project. Our recommendations below do not therefore cover the road sector.

The main capacity building and training requirements for an expanded PSP programme outside the road sector are summarised below for four areas:

- PFI Unit
- Nodal agencies involved in project development
- Contract monitoring units
- General awareness training.

PFI Unit

The main training requirements will be:

- Rapid Assessment methodology; and
- Other training as determined by a separate consultancy.

Nodal agencies involved in project development

We have recommended that much of the detailed project preparation of PSP projects should typically be carried out by consultants and advisers, as the requirements of PSP projects can vary hugely. Even in cases where a succession of similar PSP projects are planned (eg a succession of road projects), unique features can arise requiring outside expertise to address efficiently. This recommendation is reinforced by the extensive availability of financial, legal and technical advisers in India. However, it is important that all staff directly concerned with PSP projects have a good understanding of the requirements of a successful PSP project. The main areas of such training are:

- PSP Process
- Project Finance Contract Structures and Categories (eg the terms and conditions of a project to make it bankable, ie acceptable to creditors and equity investors)
- Project Funding Strategies and Risk Allocation.

There are many organisations in India that are capable of running such courses. In some cases, study tours may be helpful in reinforcing more formal training, but generally such study tours should be organised in other parts of India. Overseas tours are expensive, and we suggest they should only be undertaken in exceptional cases.

Table 5.5 - Overview of proposed institutional arrangements for Madhya Pradesh for an expanded PSP programme

	Project identification	Evaluation of PSP mode	Project preparation	Private developer selection	Project implementation
Government	Commission an independent study of priority PSP projects	Final decision-making body on whether to proceed to next stage	Final decision-making body on whether to proceed to next stage	Issue Rules governing the bidding process. Final decision-making body on private developer selection	Ensure removal of bottlenecks in clearances as necessary. Not involved in contract compliance unless major issues arise
Department of Finance	Might organise independent study, and be responsible for consensus building of results	Involved through PFI Unit (see below).	Might perform supportive role.	Participates in PBAC	Not involved
PFI Unit (1)	Not involved directly	Analysis using Rapid Assessment methodology	Re-evaluation if significant divergences from earlier stage	Might participate in PBAC	No role unless significant change in level of government financial support
Line department/ nodal agency for project (2)	Main source of information for independent study of priority PSP projects	Provides/organises pre-feasibility information for PFI Unit (with external advisers)	Preparation of detailed documents for tender process (with external advisers)	Participates in PBAC	Supports clearance process. Responsible for contract compliance through designated unit
Single window agency	Not involved	Not involved	Not involved	Not involved	Interface between the developer and public administration to ensure timely clearances

Notes

(1) separate unit), we have shown its role at each stage of the Project Cycle separately from the Department of Finance for clarity.

(2) The project nodal agency might be the line department (eg a unit within it), or another agency reporting to a line department.

In selecting staff for nodal agencies (eg PSP cells within a line department or other public agency), care should be taken to select personnel that have the right mind-set as well as at least some of the required technical qualifications. Technical qualifications can be enhanced by suitable training (eg in financial modelling), but attitudes are unlikely to change.

Contract monitoring units

For units that are responsible for contract monitoring, we recommend courses that are run through the International Federation of Consulting Engineers (FIDIC).

General awareness training

There is a widespread lack of understanding of PSP in infrastructure within the State administration, which needs to be addressed. We suggest that one day workshops might be held to increase this understanding, and particularly to highlight the potential benefits that PSP can bring in helping to address many of the infrastructure deficiencies in the State.

5.7 Summary and Recommendations

This chapter assesses the public sector institutional constraints to PSP in infrastructure in the four project States, and makes proposals for their alleviation, focusing on effectiveness and good governance.

5.7.1 Conditions for effective institutions

There is no single or "right" institutional structure for PSP in infrastructure. International models vary, and any model imported from elsewhere must be adapted to reflect local institutional arrangements and power structures. We have presented three generic models, each of which has its strengths and weaknesses. Whatever model is chosen, there are three broad conditions that determine the effectiveness of the institutional arrangements:

- **Sustained political commitment**: PSP in infrastructure will not be possible without political support from the highest level, sustained over the project cycle. A particular issue that needs to be addressed in all States is poor continuity resulting from the regular turnover of senior staff.
- **Clear responsibilities during the project cycle**: at all stages there should be clear and transparent arrangements as to the specific organisation that is responsible for taking particular actions or decisions; who each organisation is accountable to; and effective arrangements for accountability. We have set out the main principles that should guide the most appropriate institutional arrangements during each stage in the Project Cycle. There should also be a separation of responsibilities between policy, operations and regulation; and, during the project cycle, between approval, project analysis and negotiations, and contract monitoring.
- There should be a **Single window agency for clearances** to assist the selected project developer with clearances and approvals. Effective arrangements within the single window agency require clear responsibilities to be assigned for monitoring progress; regular reporting of progress against an agreed timetable, combined with clear lines of accountability; and reporting to a sufficiently high level to ensure that the necessary actions are taken to remove unnecessary blockages or bottlenecks.

We have assessed the arrangements in each State against these three conditions, and our main findings are summarised below.

5.7.2 Andhra Pradesh

The APIA was established in 2002, but is not being utilised effectively. Since it has wide powers of benefit to the PSP process, we recommend that it should be retained and utilised.

There are a number of useful functions that the APIA could perform in the short term to expand the role of the private sector in developing the State's infrastructure, in particular:

- The GoAP should request APIA to commission a study by consultants to identify the infrastructure projects that are appropriate for

implementation through PSP over the next five years, working closely with line departments and other public bodies. The APIA would organise the study and provide the forum within which a consensus can be built on the way forward.

- As noted in Chapter 4 (section 4.5.1), the recommended PFI Unit might be established in the APIA, particularly if an Infrastructure Projects Fund is established, and if that Fund has a funding source that is totally independent of the GOAP budget and does not require a GOAP guarantee.
- APIA should continue to play a supporting and facilitating role during project preparation, providing specialist expertise where required, or helping to remove bottlenecks in formal meetings of the Authority or in informal meetings.
- Rules should be issued under IDEA, 2001, setting out the procedures for the bidding process to ensure full transparency and fairness, and providing for the establishment of a committee to manage the bidding process. The role of the APIA should be to monitor consistency in application of the Rules, and to recommend any improvements.

The number of organisations with lead responsibility for project preparation should be limited as far as practical by using APIIC where appropriate, and building up special units only if there is expected to be a pipeline of PSP projects in a sector.

The provisions in the AP Industrial Single Window Clearance Act, 2002 should be used to provide a Single Window Agency for infrastructure PSP projects, so long as the Act is proving to be successful in achieving timely and effective clearances and approvals in cases where is has been used so far.

The initial professional staffing required in the APIA to fulfil the functions set out above is 3-4 in addition to the CEO. If the PFI Unit were to be in the Department of Finance it may initially only require a staff of one technical expert until the level of PSP activity increases.

Training requirements are set out for the PFI Unit, nodal agencies involved in project development (APIA, line departments etc), contract monitoring units, and to increase general awareness.

5.7.3 Gujarat

The GIDB is a well established body that has devoted considerable time to commissioning studies of potential PSP projects. The real test of GIDB's effectiveness will be whether this work results over the next year or two in an increased flow of PSP projects reaching the implementation stage.

GIDB's draft Rules (on which we have commented separately in Volume 3) should be finalised and issued as soon as possible.

We support the proposals in the draft Rules for the establishment of a Committee (PBAC) to guide the private developer selection process. The Rules on the bidding process should be applied to all PSP projects, not just those above the thresholds for submission to GIDB (see Volume 3, item 2 for how this might be achieved).

The GIDB should play a strong consensus-building role to ensure that the outcome of the Crisil study is wide agreement on the PSP projects that should be pursued.

The GIDB should change its project cycle to include the Evaluation of PSP Mode stage between project identification and project preparation, and should establish a PFI Unit to conduct Rapid Assessments at this stage. Preferably the PFI Unit should be in the Department of Finance, but we accept that it might be in the GIDB (which is understood to be GoG's preference).

The GIDB should perform the single window agency role set out in section 5.2.3, and should also establish a complaints office.

The PFI Unit might start with a single technical expert trained in the Rapid Assessment methodology until the level of PSP activity justifies more.

Training requirements are set out for the PFI Unit, nodal agencies involved in project development, and contract monitoring units.

5.7.4 Karnataka

The GoK's approach to PSP in infrastructure has been largely reactive, but we have discussed with the GOK some specific proposals for increasing the level of PSP through a more proactive approach.

A new infrastructure policy has been under preparation by the GOK, but we have not seen it and our recommendations may therefore be subject to change when the new policy is issued.

A more proactive approach should start with a study by consultants to identify the infrastructure projects that are appropriate for implementation through PSP over the next five years, working closely with line departments and other public bodies. The study should be commissioned at a high government level and might be organised by KIDD.

A PFI Unit should be established in the Department of Finance to fulfill the role set out in Chapter 4, section 4.5.

Rules should be issued by the GOK (under the general law on PSP in infrastructure recommended in Chapter 3), setting out the procedures for the bidding process to ensure full transparency and fairness, and providing for the establishment of a committee to manage the bidding process.

There may be scope for rationalising the institutional arrangements for project preparation so that the number of organisations with primary responsibility is limited to a manageable number.

An effective single window agency should be established in the case of all PSP projects (on the lines of section 5.2.3 above), and a complaints office established.

The PFI Unit might start with a single technical expert trained in the Rapid Assessment methodology until the level of PSP activity justifies more.

Training requirements are set out for the PFI Unit, nodal agencies involved in project development, contract monitoring units, and to increase general awareness.

5.7.5 Madhya Pradesh

The PSP institutional arrangements in Madhya Pradesh are relatively simple compared with the other three States, because the scope of PSP in infrastructure has been more limited. The main PSP activity has been in the road sector, for which the institutional arrangements are effective, and capacity building is being addressed by another ADB funded project.

If there is the political will for an expanded PSP programme, we recommend that the GOMP should follow other successful international examples by focusing on the Department of Finance for co-ordinating and organising such a programme. Since the MPSIDC/RBC is a major sectoral nodal agency, the Department of Finance could also work though those agencies to undertake the review of projects suitable for an expanded program.

An expanded PSP programme should be launched with a study by consultants to identify the infrastructure projects that are appropriate for implementation through PSP over the next five years, working closely with line departments and other public bodies. The study should be commissioned by the Cabinet and might be organised by the Department of Finance.

A PFI Unit should be established in the Department of Finance to fulfill the role set out in Chapter 4, section 4.5.

Project preparation should be the responsibility of the line department, although many of the responsibilities might be delegated to a project or sector nodal agency, as is the current practice in the road and SEZ sectors.

Rules should be issued by the GOMP (under the general law on PSP in infrastructure recommended in Chapter 3), setting out the procedures for the bidding process to ensure full transparency and fairness, and providing for the establishment of a committee to manage the bidding process.

An effective single window agency should be established in the case of all PSP projects (on the

lines of section 5.2.3 above), and a complaints office established.

If the PFI Unit is separate from the MPIIFB, it might start with a single technical expert trained in the Rapid Assessment methodology until the level of PSP activity justifies more.

Training requirements are set out for the PFI Unit, nodal agencies involved in project development, contract monitoring units, and to increase general awareness.

6

Environmental and Social Issues

In this chapter we deal with the critical issues of environmental clearance and resettlement and rehabilitation of affected people. We also discuss issues of social impacts, including the impact on women, children and HIV/AIDS. The environmental and resettlement issues are fluid, since revisions of policy and legislation are under way in India. Current conditions are discussed here.

This chapter is designed to be used by PSPs, Nodal Agencies, PFI Units and any proponent needing guidance and a roadmap to the Indian EC and Social Impact Analysis process.

6.1 Environmental Regulations and Institutional Framework

6.1.1 Central and State Governments: General

All environmental clearance at the central level rests with the Ministry of Environment and Forests

(MOEF). It implements four key laws and associated rules, standards, and regulations.

MOEF has four main divisions: Central Pollution Control Board, Forestry, Wildlife and Environmental Impact Assessment. At the state level these become distinctly separate entities, with separate directors and little or no mandated coordination, making communication between the divisions difficult.

Key Laws, Regulations and Standards

The GoI has in place four key environmental legal instruments. These are:

- Provision of Water (Prevention and Control of Pollution) Act, 1974, CESS-1977
  - An act setting out the surface and groundwater quality standards for India, including potable water standards. The standards are actually presented in the WQ standards of India, 1994.
- Provision of Air (Prevention and Control of Pollution) Act, 1981
  - An act defining the air quality management in India. This act, in combination with the Ambient Air Quality Standards, defines the permitted levels of pollutants in the air.
- Provision of Environment (Protection) Act, 1986; and
- Environmental Protection Rules, 1986
  - These last two legal instruments define the environmental management and conservation responsibilities of all Indians and government entities.

The preceding four laws, in addition to at least ten rules, regulations and notifications defining the details of these laws, are used by the MOEF to deal with all environmental matters across the country. Of the ten rules, the most relevant for this project are:

- Environmental Impact Assessment Notification, 1994
- Coastal Regulation Zone Rules, 1991
- Hazardous Wastes Rules, 1989 and amended in 2000
- Municipal Solid Waste Management Regulation

The Adequacy of the Environmental Legislation

India's environmental legislation does not (and should not) differentiate between private and public sector proponents. It is the type of project and its scale that triggers a particular course of action. India's environmental legislation is one of the best in South Asia (Rajvanshi, et al., 2001), and recent amendments and proposed upgrading (as described later in this chapter) will raise it to the same level as found in many developed countries. The MOEF's plans to introduce a sectoral and categorical screening and assessment process will speed up project processing and improve transparency of environmental risks for private sector investors.

India's Environmental Laws are well supported by regulations and standards, with little overlap of responsibility or jurisdiction.

The Coastal Regulation Zone Rule is the only law with some ambiguity since it divides responsibility for coastal zone development decision making among three or more levels of government. All major ports (defined by the Ministry of Shipping) are under central control, while all others are administered at the state and district levels. Approvals of minor port projects (some included in this project) require processing by at least two levels of government, leaving room for considerable delays and costs. For more than 10 years the maritime states (including AP, Gujarat and Karnataka) have petitioned the central government to put all control with the state. This has not yet been resolved. The three maritime state nodal agencies interviewed are very aware of this and AP has produced a ports investment brochure including a discussion on environmental approvals and risks.

6.1.2 The Pollution Control Board (PCB)

The functions of the Pollution Control Board are primarily enforcement of standards, compliance monitoring and granting permits for any development that affects the basic resources of air, water and land. Their key regulatory instruments are:

- Provision of Water (Prevention and Control of Pollution) Act, 1974, CESS-1977
- Provision of Air (Prevention and Control of Pollution) Act, 1981

At the state level, the PCB often coordinates environmental approvals through its Certificate For Establishment (CFE) and Certificate For Operation (CFO) process which, in addition to defining preventative actions and mitigation, identifies if and when the EIA process is needed. This in turn triggers the explicit involvement of the Department of Environment (DOE) as well as the EIA Division of MOEF.

The four State Pollution Control Boards (SPCBs) have developed project screening lists, categorizing a large number of project types into several groups according to the environmental analysis required. This categorization, published in the SPCB websites, represents an excellent yardstick of environmental risk for PSPs considering investing.

6.1.3 Environment and Wildlife Divisions; MOEF

At the state level, MOEF is represented by its two divisions: PCB and DOE. These two divisions operate autonomously. The PCB focuses on curbing air and water pollution, while the DOE, with its Wildlife and Forestry divisions[56], attends to ecological resource management and environmental impact control in relation to wildlife, fish, forests and ecology. The DOE is responsible for the environmental assessment (EA) process at the state level.

Schedule I of the EIA Notification (Govt. of India 1994), plus the notification itself, govern the EA functions of the DOE. Projects smaller than a certain size and type, as defined in the schedule, can have EA approval at the state level, or be exempt from it altogether. The MOEF's website www.envfor.nic.in provides specific, step-by-step guidance on the EA requirements for all Schedule I projects.

An amendment to the EIA Notification (April 10, 1997) exempts any highway projects that involve improvement work such as widening and strengthening of existing roads, where the total new land acquisition is less than 10 hectares and less than five kilometres long. Any road scheduled for improvement that passes through or infringes on ecologically sensitive areas, including national parks, sanctuaries, tiger reserves and reserve forests, does not qualify for this exemption. In some states, such as Gujarat, roadside plantations are treated as forest tracts and the State's Department of Forests must provide a "No-Objection Certification" for the conversion of forests before any clearing can take place for construction to begin. A reforestation plan is also required.

Depending on the project details, all temporary sites and operations of construction plants such as hot mix and rock crushing need at least local permits and most likely state permits issued by the SPCB. As well, the proponent is expected to be aware of and comply with GoI water, air and noise standards at all times.

All such standards are found on the PCB and MOEF websites which are: www.cpcb.nic.in and www.envfor.nic.in, respectively.

6.1.4 The Coastal Zone Management Authority: A Special Case for Ports

In 1986 the GoI established its National Coastal Zone Management Authority (an authority within the MOEF) to strengthen and standardize the process of coastal zone development for maritime states. With the Authority came regulations requiring each maritime state (GUJ, AP, and KARNATAKA) to prepare a coastal zone development plan; this was to be essentially a zoning plan, defining what type and where development could go. For example, a port or pier could be placed in a river or estuary only if that location was zoned for industrial-commercial development as defined in the Coastal Zone Development Plan[57] (CZDP).

[56] The names, structure and organizational relationship, in the project states differ, but are easy to find by contacting the SPCBs.

[57] All three maritime provinces (AP, GUJ and KARNATAKA) have detailed CZDPs in place

CZDPs are administered at the local level with District Officers in charge of granting permits, enforcement and compliance. The discretionary powers given to district officials are limited, however, and decisions about developments above a certain size must be made jointly with the state. Ports and shipping fall under the Ministry of Shipping and all major port development is controlled by Delhi. 'Minor' ports, as defined in the Merchant Shipping Act (1958) and later amendments, are controlled at the state level by the Public Works Departments (PWD). Therefore, the decision to undertake a minor port development requires the involvement of three levels of government, at least three agencies and various pieces of legislation. The steps are well known to the state PWD administrators, but need to be more clearly defined for others.

The Ports Division of AP's PWD has initiated this by preparing a ports investment portfolio, which defines priority sites and identifies some environmental issues. It has also, through the State Shore Development Authority (within DOE), prepared coastal zone development plans for nine coastal districts. These plans were approved by the Government of India as stipulated in the CRZ Notification 1991. The authority is entrusted with the task of regulation and enforcement of Coastal Regulatory Zone (CRZ) Notification in the state as per the approved Coastal Zone Development Plans. No such facility was found in Karnataka or Gujarat. All new ports and significant upgrading proposals require full EIAs and CFEs.

For further details investors are urged to consult the following web site: www.envis.nic.in/soer/ap/cme/opce/res/coazonman.htm

6.1.5 EA Clearance and Consents

The EA and EA Review and Approval Process [58]

The Impact Assessment Division of the MOEF plays a key role in processing environmental clearance applications www.envfor.inc.in. The Forest Division and Wildlife Division of the MOEF are often asked to evaluate the environmental studies conducted as part of the overall feasibility study for proposed projects (See Figure 6.1). This is particularly true for projects involving conversion of coastline or forestland or the construction of any facility adjacent to or within wildlife areas.

Project proponents who want to undertake the road projects listed in Schedule I of the EIA Notification, 1994, are required to submit an application to the Secretary of the MOEF, using a standardized form. The application should be accompanied by a feasibility or project report, which includes an Environmental Appraisal Questionnaire; an Environmental Impact Assessment Report and an Environmental Management Plan prepared in accordance with Schedule I and II of the Notification (MOEF 1994). A Public Hearing Report is also required. Rehabilitation plans must also be submitted where large-scale displacement of people is anticipated.

Under the Environment (Protection) Act, 1986, 24 types of projects and industries will require environmental clearance from the Central Government. In addition, any project proposed to be located within 10 km of the boundary of a reserved forest or a designated ecologically sensitive area or within 25 km of the boundary of a national park or sanctuary will require environmental clearance from the Central Government. For all other projects, environmental clearance is obtained only at the State Government level. Clearance is required for the environmental (for site clearance) and pollution control factors a project is likely to affect.

[58] Much of this subsection was taken from Rajvanshi, Mathur, Teleki and Mukerjee. 2001. Wildlife Sensitive Habitats and Roads. Environmental Guidelines for India and South Asia. 220pg. Wildlife Institute of India Derha Dun, India

A No Objection Certificate (NOC) for the site clearance usually involves approval from the concerned State Pollution Control Board. The Consent for Establishment (CFE) and Consent for Operation (CFO), related to pollution control measures, are also issued by the SPCB.

The exceptions to these procedural requirements are projects involving paved roads in the Himalayas, national and state highways less than 5 km long and not involving forest land. These require only state government approvals. Projects not listed in the EA Notification Schedule 1 may still require environmental reporting as well as the CFE and CFO clearances, but these are specified at the state level.

The documents submitted by a proponent are first reviewed by a multidisciplinary staff in the MOEF (Figure 6.1) who may undertake site visits wherever required, interact with the proponent and hold consultations with experts and other stakeholders on specific issues whenever necessary. After this preliminary internal scrutiny by the MOEF, the documents are given to the Environmental Appraisal Committee, which meets regularly to appraise infrastructure projects.

Based on the evaluation of documents submitted by the proponent and other information gathered at the EAC committee meeting and the site visit, the committee will recommend that the project be approved, rejected, or approved with conditions. The recommendations and conditions of the committee are then processed by the MOEF. Any conditions stipulated are binding and must be dealt with by the proponent to the satisfaction of the MOEF before the project can break ground. There is not, however, a legal requirement to submit a completion report in which the proponent certifies that all conditions have been met. In other words, implementation of conditions is based on the honour system. The CFE and CFO process recently adopted by the Pollution Control Boards goes a long way to preventing non-compliance.

In theory, the entire process, from the time all relevant documentation has reached the MOEF, through the EAC Committee evaluation and the subsequent MOEF decision, should take less than 120 days. In practice, this deadline is seldom met. The involvement of several agencies, with communication gaps between them, often results in long delays.

For a project initiated within one of the states, the lead agency will be the State Pollution Control Board. The Forest Clearances and CFEs that must accompany the environmental clearance at the state level are also frequently delayed, despite great efforts being made by all four states to streamline the process. The most likely reason for this situation is that state agencies are not kept informed or consulted during the project's planning stage until the applications for clearance are submitted. Naturally, regulators need time to catch up, ask questions and review the project in the context of what is happening in their jurisdictions. Early proactive communication by the proponent with all regulatory agencies should significantly reduce this bottleneck. If EA documents are poorly prepared, and the proponent has not consulted the MOEF, particularly when sensitive issues are involved, further delays will occur while the MOEF consults experts. If improperly planned and executed, public hearings can also delay decisions. The format and content of an EIA is defined in detail in Schedule II of the EIA Notification (1994), as well as on the following website: www.envfor.nic.in/division/iass/eia/cover.htm .

In summary, any project is subject to two environmental filters: the first is the EIA Notification Schedule I of projects requiring full EIA and the second is the SPCB's categorization lists (where the "Red Category" requires a full EIA and detailed CFE application). Proponents must become fully aware of these two tracks, since each needs specific documentation. During the interview with SPCBs, failure to consult and communicate early in the project development process was the single greatest reason for delays and even rejection of project proposals.

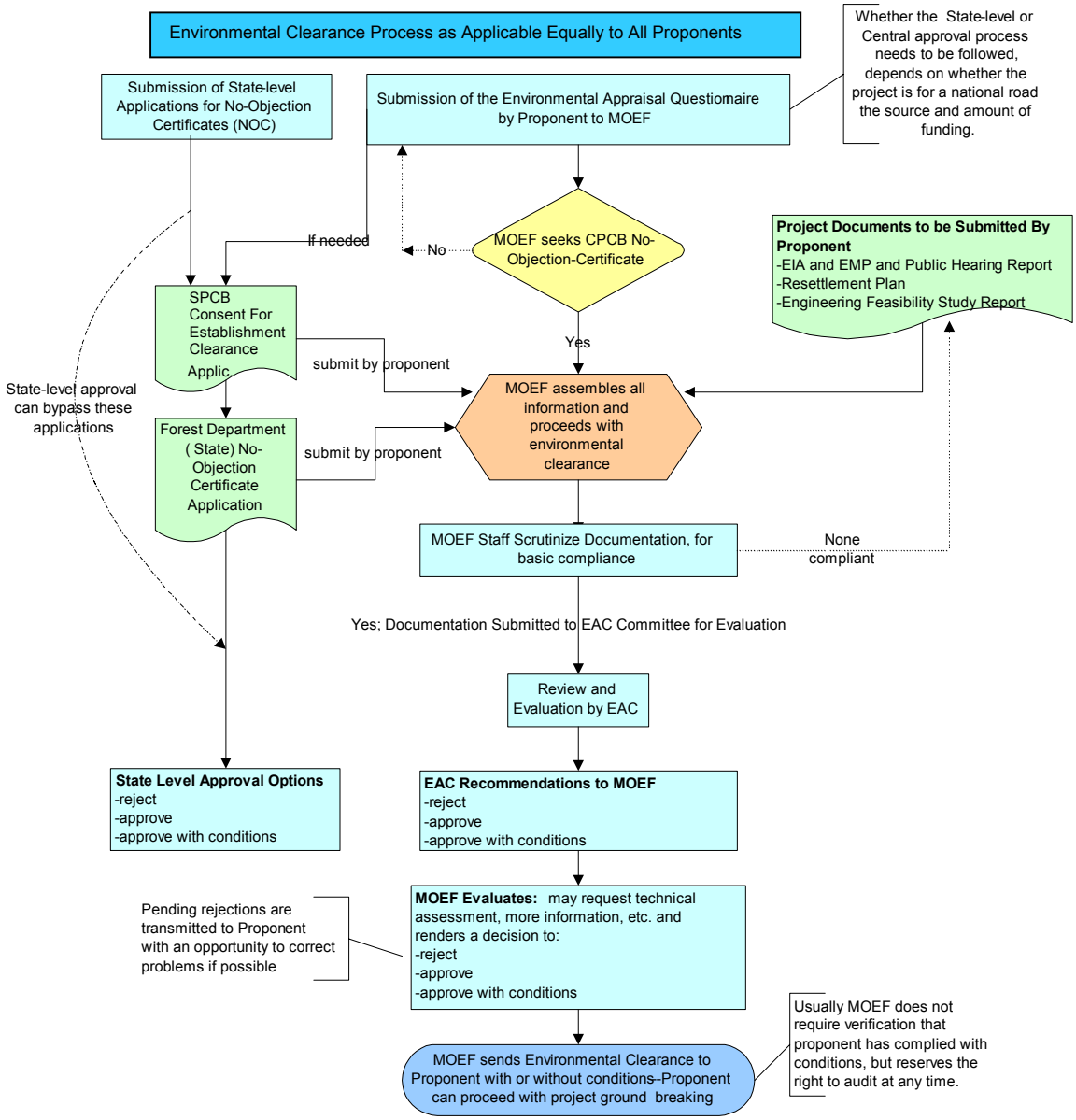


Figure 6.1: India's EA Review and Clearance Process

Consent for Establishment (CFE) and Consent for Operation (CFO)

State Pollution Control Boards are charged with administering the CFE and CFO process. All four states have established step-by-step clearance processes, including categorization of projects and matching them with applications having differing levels of detail. In some states, such as AP, KARNATAKA and GUJ, the forms, instructions and other guidelines are found on the State Pollution Control Board Web sites. The problem is that the forms and clearance processes are significantly different among the four states.

The application for a CFE will usually contain details of the proposed work, its impacts and mitigation measures, as well as engineering solutions such as the predicted emission levels from a facility or rehabilitation of grounds disturbed during construction, etc. In extreme cases—as, for example, any projects listed in the EA Notification Schedule 1 or in the red category of the SPCB's project categorization—the application must include

an EIA and the MOEF clearance letter. Some states, such as AP, have defined and published strict time limits for each step of the process, and have limited the time for processing of a standard CFE application to 60 days. Therefore, if an EIA is needed, such documentation must accompany the CFE Application.

Within 1-1.5 years into the operation of a facility, a CFO inspection is required, where the emission/effluent quality and/or noise standards are measured and compared to those presented in the CFE documentation.

Any non-compliance means the CFO is not granted and owners/proponents must immediately bring the operation into compliance. They are given a second chance to get it right, after which a 'stop operations' order is supposed to be issued until the facility is in compliance.

The Role of Line Departments/Nodal Agencies in the EC process

If a line department such as the DOT is the project proponent, it is responsible for the completion of the entire EC process. If it is a co-proponent with a PSP, the decision on who will lead the EC process is made among the partners. If the line departments or the nodal agencies are not the legal proponents or representatives, they are never involved in the clearance process and are by law restricted from 'facilitating'. As part of good governance, the EC steps need to be undertaken by those who are generating the potential impacts, such that knowledge is gained in the process and consequences of proposed actions are directly felt by the proponent. A consultant is simply an extension of the proponent and represents the proponent. Responsibility still rests squarely with the proponent.

6.1.6 Infrastructure Leasing and Financial Services Ltd.'s Environmental Initiative

Infrastructure Leasing & Financial Services Limited (IL&FS) is the Indian private-public venture organization established to stimulate private sector investment in traditionally public sector infrastructure development. To a degree, it coordinates the four "Nodal Agencies" that will be leading the loan disbursements in the four focal states. IL&FS, the lead agency for this TA, has been developing a pipeline of commercially viable projects in cooperation with the Nodal Agencies, including urban roads, mass transit systems, water and sanitation infrastructure and integrated area development. In doing this it recognizes the need to undertake such work in an environmentally and socially acceptable manner.

Since IL&FS seeks lines of credit from multilateral agencies such as the World Bank, its operations need to be consistent with Bank operational directives. To that end IL&FS decided to use the World Bank's environmental guidelines in conjunction with the regulatory framework in India to develop its own procedures. The guidelines have been published and are available on IL&FS's website, www.ilfsindia.com. The full environmental and social guidelines were completed in 1995 and remain the basis of IL&FS's environmental and social policy, which closely mirrors MOEF's environmental clearance process.

In consultation with the MOEF and through World Bank funding support, IL&FS established ECOSMART (see Sect.6.3.2) as its environmental wing, with a specific mandate to assist private sector investors in meeting environmental clearance requirements, starting with the information assembly and screening stage, and leading to the preparation of EIA ToR for consultants. In 2003 MOEF appointed ECOSMART as the management consultant of The Environmental Information Centre (EIC). It was to act as a not-for-profit clearinghouse for environmental information, servicing all those needing to undertake EAs. Until July 2004 ECOSMART was operating largely with a World Bank grant, at which point it became a self-supporting private sector entity. With continuing control over the EIC, ECOSMART's access to data and relevant mapping will continue as before. It plays a significant role in streamlining the EC process while assuring that technical credibility and compliance are not compromised.

In many ways ECOSMART is a tangible outcome of IL&FS's commitment to environmental stewardship,

and represents much of what is found in their environmental guidelines.

ECOSMART is aware of the PSP project and is eagerly awaiting its completion. It will use the report to further one of its goals, which is to encourage environmental friendly PSP projects nationwide. ECOSMART will also use the guidelines as an environmental roadmap for its clients, thereby meeting a major objective of this work.

6.1.7 EIA, State Project Development and PSP

The proponent, whether private or public sector must follow a clearly defined set of steps; the same steps as defined in Section 1.1.2 and as shown in the flow chart (Figure 6.1). The EA process[59] does not differentiate between private and public sector proponents[60]. In India, private sector investors have the advantage of being able to use IL&FS's in-house environmental expertise to help identify investment risks.

It was clear from the interviews that the four state-level nodal agencies have the knowledge and expertise to assist any investor in finding the key state regulator to work with (almost always the State Pollution Control Board). If an environmentally protected or specially designated area is involved, the DOE also becomes an important participant; a step well known to the nodal agencies.

Therefore, as long as the PSP has an environment unit or hires a knowledgeable consultant, the EA process should go smoothly. Early consultation and disclosure of intent are key in reducing the chances of unnecessary surprises for the regulator.

For the most part, private investors the world-over rely on expert consultants in the field to guide them through the EA process (unless they are large and have their own environment departments). This is no different in India and will be the procedure under this loan. It is unrealistic to think that PSPs will invest in environmental expertise that they use only infrequently, when for less money they can get solid advice on environmental risks and costs, have EAs and monitoring undertaken, reports prepared, and be guided through the entire EC procedure by knowledgeable and experienced individuals. This is the procedure that nodal agencies assumed would be followed and, in fact, is the procedure they recommended to their PSPs; namely, find a good consultant. With the exception of Karnataka, nodal agencies had not developed such consultant lists. Therefore, it will be important that each nodal agency prepare and keep up to date, based on the MOEF consultant roster (as found on the website), a list of qualified (registered) environmental consultants from which PSPs can choose.

6.1.8 India's EC Process Versus ADB's Environmental Safeguards Guideline

India's EC process and the ADB's environmental safeguard guidelines are similar in terms of the steps involved in EA as well project pre-classification (Table 6.1). All ADB projects fall into one of three classes. Similarly, under existing Indian regulations, projects fall into three categories: those requiring a full EA, an abbreviation or summary EA and no EA. The existing EA notification has a list of projects requiring full EA.

As with the ADB process, India's EA steps include scoping, screening, examination of alternatives, definition of impacts, mitigation and monitoring measures, plus the preparation of an Environmental Management Plan (EMP). India does not require that cost estimates of the EMP be provided.

In many respects the Indian EA process is considerably more onerous and consequently more thorough. For example: in order to properly include any sensitive sites, EA study boundaries must extend 7-10 km from a project site or along both sides of a linear development. Further, for a full EA, India requires that primary field data be collected for at least 2 seasonal periods. No such requirements exist with the ADB.

India's public consultation requirement and the ADB's Public Consultation and Information Disclosure requirements are almost identical, with India's being somewhat more prescriptive.

Under India's process, even the information disclosed is defined and the reporting specified.

[59] The conduct of an environmental assessment often includes the preparation of an environmental management plan (EMP), defined in the EA Notification.

[60] This is the case in some developed countries such as Canada and seriously weakens the legislation.

The approval process between the two systems is also similar in that the ADB's safeguards committee reviews the EA and approves, rejects, or approves with conditions. Exactly the same procedures exist in India, where conditions are sent as official instructions, including a timeline for implementation to the proponent.

Often projects which require full EAs also must obtain the Consent for Establishment (CFE) and the Consent for Operations (CFO) from the State Pollution Control Board, therefore introducing a second check during the EC procedure.

India's air, water and noise quality standards are a blend of US EPA and European Community figures, tailored to the Indian condition. For the most part they are realistic, achievable, and meet all ADB guidelines.

In relation to best practice, information disclosure during both the ADB's and India's process is somewhat restrictive, with full documentation and data release not mandated for either system, and little guidance on the type and quality of information to be provided. The Indian process does identify a summary of the EA, while the ADB's guidelines do not.

The reengineering of India's EC procedure, as described in Section 6.3 will significantly improve its flexibility and precision. The new EC process will permit a more exact identification of the potential impacts, then tailor the EC process to that project, through web-based screening exercises. The EA notification will include a much longer list of projects and their classification (See Annex Table B), helping PSPs identify environmental pitfalls from a very early stage. We urge potential developers or proponents to use the process described at the end of this section (for which two tables are provided), to help identify potential environmental risks which can then be tackled jointly by the government and private sector participant.

Table 6.1: Comparison of Government of India (GOI) and Asian Development Bank (ADB) Environmental Safeguard Procedures

Key Steps and/or Outputs	**GoI**	**ADB**
Project Classification	+++	+++
Project Scoping and Screening	++	+
Description of existing environment and bounding	+++	+++
Assessment of alternatives	+	++
Analysis of Impacts and Definition of Mitigative Measures	+++	+++
Preparation of Environmental Management Plan (EMP)	++	+++
Mitigation costing	+	++
Preparation of Environmental monitoring program to match mitigative actions	++	+++
Compliance Monitoring follow up	+	Almost never
Public consultation and Information disclosure • Full EIAs • Lesser EAs	 +++ +	 +++ +++
Environmental Clearance double checking process via the CFE and CFO requirements	+++	None
EIA review and provision of written decisions, including conditions etc.	+++	+++
Adequate air, water, noise standards	+++	+++

Scale: - absent, + = minimal, +++ = Very Good

6.2 State Government Environmental Standards

6.2.1 General Situation Across States

Environmental permitting and approval for any infrastructure development is led by the State Pollution Control Board, in that they issue the Consent for Establishment (CFE) certificate, which allows an entity to proceed with construction and eventually obtain the Consent for Operation (CFO). The latter is based on an inspection of the construction work to confirm that all environmental commitments undertaken during the construction period are in place before operations can commence. The CFO is a very powerful tool in that a SPCB not only examines measures taken during construction, but will also test effluent and emissions to confirm that systems are working according to specifications.

State Pollution Control Boards in AP, Karnataka, Gujarat and MP are large, have well trained staff and follow a consistent and simple process of approvals and documentation. They have all identified when and how the EA process comes into play, namely when projects are either on Schedule I of the EIA Notification (1994), or according to how they are classified by the SPCB. Projects are generally grouped into three categories, depending on the extent of possible environmental problems (based on past experience). For each category there is a specific amount of information which must be assembled and submitted, using forms prepared by the SPCBs. In Andhra Pradesh, the SPCB has prepared an "Outreach Brochure" listing many types of projects and their SPCB category. The APSPCB has also prepared a "Citizen's Charter" which is a user's guide to the services provided by SPCB to proponents. SPCBs are easily contacted on their web sites, making early inquiries by potential investors very convenient.

The MOEF's state-level entities are the DOE in all four states. Their involvement in infrastructure project evaluation is not automatic, unless the SPCB has designed the process such that DOEs are notified when relevant problems arise. AP and Karnataka have in fact set up their processes in this manner; participation, however, is still not automatic.

AP, Gujarat and Karnataka have established state-level Environmental Clearance Committees to handle EA review and approvals. The committees are usually chaired by the DOE, with members from five to six departments, including the SPCB. These committees seem to be active in Karnataka, and to a lesser extent in AP.

As a general rule, first contact with environmental regulators at the state level should be with the SPCBs and, if known sensitive sites exist, the DOE or Wildlife Division as well.

6.2.2 Specific Conditions in Each State

Andhra Pradesh

Andhra Pradesh has established a 'One Stop Window" approach to environmental approvals, with the State Pollution Control Board www.apspcb.ap.nic.in acting as the coordinator. Proponents need only consult with the SPCB and submit all relevant documentation. The SPCB does the rest, even submitting material to the MOEF if needed.

AP has its own noise and air quality regulations which are more stringent that the national regulation. These must be carefully observed.
AP also has a "Green Book" guide to all environmental regulations and standards applying to projects undertaken in the state. The book is available at APSPCB in Hyderabad and at the CPCB in Delhi.

Gujarat

Gujarat is already one of the most industrialized of the Indian States, and one of the most aggressive in welcoming and facilitating private sector investment. As a result the level of environmental degradation, particularly of the wetlands and waterways of South Gujarat, is apparent. The classic development conundrum of relaxed environmental enforcement fostering economic growth, job creation, rising educational levels and overall quality of life improvement, while at the

same time allowing degradation to continue unchecked, is the dilemma facing environmental managers at all levels inside and outside of government.

While Gujarat has all the necessary legal instruments at www.gujenvifor.gswan.gov.in, the implementation and enforcement of these continues to be a problem. It is here investors become trapped when they assume that regulations are there to be avoided, since historically Gujarat has not been able to enforce them, particularly in terms of activities along its 1,600km long coastline.

Gujarat is also notable for being a primary beneficiary of the most environmentally contentious major project in India, the Narmada/Sardar Sarovar scheme. In addition to prospective large increases in the availability of water for irrigation and for domestic and industrial consumption throughout Gujarat, inter-basin transfers from the Narmada system have already allowed significant near-term improvements in water quality of important rivers such as the Sabarmati. The resulting increased discharge in the Sabarmati's urban reach through Ahmedabad, the state capital, has diluted pollution there to the degree that massive investment in waterfront amenity development is now beginning to move forward. But these improvements have come at the cost ecological and cultural assets lost within the reservoir's footprint.

While the Gujarat Maritime Board is foremost an economic development agency, it also necessarily plays a key role in environmental conservation. This is epitomized by the ship breaking facilities in Alang—presently the largest such operation in the world—where private sector lessees of the GMB altogether employ about 50,000 workers. But problems with occupational health and safety and with coastal pollution and disposal of hazardous wastes have become globally infamous and are proving difficult and expensive to resolve in the face of competition from other ship breakers elsewhere in Asia. The enforcement of the requirement for coastal zone development plans, limiting the ease of development will require a change in Gujarat's approach.

Gujarat has a well organized and technically competent SPCB and Department of Environment and Forests. In addition, well-known environmental institutions are also located in the state. Both agencies have extensive websites providing all manner of advice and guidance to any potential developer. The SPCB seems to have initiated a 'single window' CFE clearance process, but it remains unclear how successful this is. Potential investors should contact the Gujarat Sate Infrastructure Development Board for advice or alternatively the GSPCB for direct environmental guidance.

Karnataka

Karnataka has a similar set of regulations provided on its website at www.kspcb.kar.nic.in and in its own environmental handbook, and is likely the most advanced environmentally of all states included in this study. Its DOE and State Pollution Control Board are fully decentralized, have professional staff and computer databases. The KSPCB project categorization is also based on colour categories and rules very similar to AP's.

Madhya Pradesh

During a detailed analysis of the clearance process in MP (1996), about 40% of the consents from the MPPCB, as well as the environmental clearance from MOEF took from 6 to 12 months, instead of the 3 months specified in the guidelines.

The visit by the consultants in 2003 found that while the organizational structure had changed considerably, the CFE clearance process (formerly the No Objection Certification process) continued to exceed recommended time limits.

On paper, MP's procedures relating to environmental clearances have been made simpler, and more transparent. An attempt is being made to set a CFE applications review time limit of 3 months. If necessary, applications presented to different agencies are examined jointly with a view to speeding up clearance. This has been implemented through an Inter-Departmental Committee under the Chairmanship of the Chief Secretary of the Environment Department. The Pollution Control Board, Environmental Planning &

Coordination Organization, and the Town & Country Planning Department, together publish detailed guidelines on the requirements for obtaining environmental clearances. Copies are available with the State Pollution Control Board in Bhopal (www.mppcb.org).

MP also has one of India's major national environmental management training and research institutes, however its use by MP line agencies is poor. Strengthening the communication with this institute would benefit MP considerably and help them in their effort to streamline their environmental clearance process.

Investors in MP, whose projects fall into the SPCB's red or yellow category must submit a composite application using the prescribed form to the Industries Commissioner for site clearance and CFE (as well as for a CFO_1 just before the facility begins operating and CFO_2 within 1.5 years of the start of operations) under the Air and Water (Prevention and Control of Pollution) Act. These applications are considered by the State Level Environment Inter-Departmental Consent Committee headed by the Principal Secretary, Housing and Environment. Necessary approval regarding site clearance is issued by the Industries Department, while the consent for Air and Water in such cases is issued by the MPSPCB. The meetings of this Committee are held monthly but in urgent cases can be called on short notice. For the projects requiring site clearance from the central government, the Consent-Committee only issues a No Objection Certificate if the proposed project meets all state-level environmental standards.

Industrial projects which do not require site clearance do not need the involvement of the Industries Commissioner. The CFEs often contain conditions specifying compliance with certain norms and standards, or the implementation of certain mitigative actions by the proponent. Before the industry begins operations, a CFO must be obtained. The MPSPCB returns 1-1.5 years after operations begin to conduct a compliance audit and issues the compliant industry with the Secondary CFO. MP industrial operations, including Water and Sewer works, have to submit CFO renewal applications every year to the MPPCB. As noted in a 1996 study on the clearance process in MP, the Environmental Planning & Coordination Department of the Govt. of Madhya Pradesh developed a 15-page application form for Environment Appraisal of Industries which has proven difficult to fill in.

6.2.3 Project Environmental Clearance, Cycle and Problems

Andhra Pradesh

The Andhra Pradesh Infrastructure and Investment Corporation (APIIC) appears to be well informed regarding central and state environmental requirements (www.apspcb.ap.nic.in) and likes to take a proactive approach. For example, during the acquisition of land for a project they conduct a Rapid EA or Screening process to identify any serious environmental problems that could put the project in jeopardy (such as a nearby sanctuary), provide warnings on mitigation costs, and outline the overall environmental and social obligations for the developer, should the project go forward. They then make this report available to the investors.

That, coupled with APSPCB's 'single window' approvals approach, has considerably streamlined AP's environmental compliance process.

AP's clearance process, in summary, is as follows:

- A proponent looks at the APSPCB project categorization list and classifies the project;
- The proponent or consultant then prepares the necessary environmental documentation as well as the CFE application which, in the case of a red category project (as listed in APSPCB's project category tables), is a summary of the EIA report and its associated EMP, and submits this to SPCB headquarters;
- The documentation is submitted to the SPCB at the level matching the classifications, e.g., orange category projects to the Zonal SPCB office (there are five in AP) and green to the Regional Office. The SPCB office has a strict timetable for action for issuing the CFE, as described above;
- The CFE contains a summary of findings by SPCB as well as conditions, which the

proponent is expected to meet by the time the Consent For Operation (CFO) is issued;

- If the project is a red category and is on Schedule 1 of the MOEF's Environmental Notification 1994 (and amendments), the EIA, the CFE decision and all required documentation is forwarded to MOEF for a decision. MOEF in turn has a maximum of 60 days to respond. The proponent cannot initiate work until the MOEF clearance and CFE are in place;
- The MOEF's clearance and the APSPCB's CFE, and their respective conditions make up the basic environmental requirements that govern the proponent's and contractor's work. When the project is ready to be commissioned, the SPCB undertakes a CFO audit/inspection, checking compliance with the engineering specifications as agreed to in the CFE, EIA mitigative actions and project design terms;
- If the proponent is in compliance, the CFO is issued. If the proponent is non-compliant a temporary CFO may be issued (depending on the extent of the non-compliance) and a date for a second CFO inspection is established. If the problems are extensive, a CFO will be withheld altogether. If the 2nd CFO inspection reveals continuing problems, the facility or activity is shut down until compliance is confirmed.

Issues remain for AP in two areas:

- Projects that are not in the red category are reviewed and ruled on by the zonal or regional offices of SPCB, whose personnel may not have adequate technical skills or project experience to make practical decisions. This is often made more problematic by Central and state government guidelines which the SPCB offices must interpret. The guidelines define the limits in general terms, but do not provide a step-by-step process for tailoring the guidelines to specific issues. APIIC gave the example of an AP-French joint venture to produce automobile glass and establish a raw materials harvesting site on the coast. The site is within 30 km of a national bird sanctuary and for that reason the proposal was initially rejected. APIIC provided additional data, clarifying that the activity at the site was only for the harvesting of sand, with processing taking place at a location over 30 km away from the sensitive location. With this added information the CFE application was reviewed and approved by the SPCB headquarters.
- The example above underscores the second problem, namely that proponents who are not familiar with the regulations and requirements often provide too general a database and inadequate explanation of the project, despite knowing that (as in the previous example) the project falls into an SPCB category which requires a detailed description of all aspects of the work.

The APSPCB should therefore prepare step-by-step sections for its and MOEF's various guidelines. This could be done by adding a section onto the APSPCB's 2001 Circular No. 1 (on the website). At the same time proponents should make the effort to understand the CFE requirements and be sure they know what is necessary for each category of project. Table 6.2 summarizes the project categorization scheme defined by AP's SPCB.

Gujarat

On its website (www.gujenvfor.gswan.gov.in) the Gujarat DOEF provides an exhaustive list of projects requiring clearances from the Central government, as well as those requiring state-level approvals. In relation to the priority sectors these are as follows:

- Ports, Harbours, Airports (except minor ports and harbours).
- All tourism projects between 200 and 500m. (inshore) of High Tide Line or satellite dish locations with elevation of more than 1000 meters with investment of more than Rs. 5 Crores.
- Highway Projects; except projects relating to improvement work, including widening and strengthening of roads with marginal land acquisition along their existing alignments provided it does not pass through ecologically sensitive areas such as National Parks, Sanctuaries, Tiger reserves, Reserved Forests.

The following projects do not require EA clearance from the central government:

- Any items listed above if the investment is less than Rs. 100 Crores for new projects and less than Rs. 50 Crores for expansion modernization projects (amendment dated 13-6-2002)
- Any item reserved for Small Scale Industrial Sector with investment less than Rs. 1 Crore.
- Any item falling under entry no. 8 of Schedule I, if that product is covered by the notification G.S.R. 1037(E) dated 5-12-89 (amendment dated 13-6-2002)

Proposal for environment clearance for the projects located in critically polluted areas (at present Ankleshwar and Vapi), where there are overwhelming public objections to the proposals and/or the local population or public hearing panel is not in favour of the project, should be routed through the State Government (Environment Department) (MOEF Circular No. J-11011 70 99-IA-II dated 19-11-99). An executive summary containing the salient features of the project both in English as well as the local language along with Environmental Impact Assessment (EIA) must be submitted.

The problem in Gujarat remains the issue of land conversion since they, in contrast with AP and Karnataka, have so far not taken the step to clear the land issue for the developer. While espousing a 'single window' clearance approach, the Gujarat State Infrastructure Development Board still requires the proponent to interact with at least six departments and wait, sometimes more than 6 months, for a decision. The Gujarat Industrial Promotion Board (GIPB) has prepared a common application form for single window clearance, but so far it has not been made available to potential investors[61].

The website listed above contains more details and investors are advised to consult it.

[61] Source: Times of India On-Line, *Gujarat slow in introducing single-window clearance RAJIV SHAH Nov. 2003.*
www.timesofindia.indiatimes.com/cities/ahmedabad

Karnataka

As is the case with the other three states, Karnataka has a well developed environmental permitting and control system, led by the Karnataka State Pollution Control Board (KSPCB). It has extensive and well equipped facilities at several locations across the state. The professional staff is well trained and fully aware of all Indian and state level legislation as it applies to infrastructure development. In KAR, communication between the SPCB and the DOE is achieved through an inter-agency evaluation committee.

Karnataka also uses the project classification system and requires all proponents whose projects fall within the red and orange categories to submit a CFE application plus specific other documentation, as defined by the category. For example, most of the red category projects will require a full EIA, plus review and approval by the MOEF in Delhi.

The central government involvement is viewed as an unnecessary intrusion, since the state considers its environmental clearance and EIA evaluation capacity as good as the central government's. However, central government input is warranted when interstate projects or projects involving nationally owned land are being assessed. Karnataka regulators suggest that in-state projects, such as water and sewer, urban mass transit, or new ports which require full EIAs, should be left to the state[62].

Underpinning Karnataka's environmental clearance process are the five key national legal instruments (same for all four states) listed in Section 2.1.1, as well as the ten or so notifications and rules which specify regulatory details. (See the following website: www.envfor.nic.in/leg/legis.htm)

The KSPCB has prepared the *Handbook on Environmental Laws and Guidelines* (available through the KSPCB in Bangalore), which provides private sector investors with a well-organized roadmap of the environmental requirements of a specific project under consideration.

[62] The exception must be made if central government funds or lands are involved.

Table 6.2: Andhra Pradesh Project Categorization Scheme, As Developed by APSPCB

Category	EIA	EMP	IEE	CFE	CFO	DOE Clear.	Clearance Letter	Public Consult.	Agency
Red + MOEF Sched. 1 + >Rp.100 Crore	X	X		X	X			X	SPC-HQ & MOEF
Red + MOEF Sched. 1 < Rp 100 Crore	X	X		X	X				SPC-HQ & MOEF
Red Category >Rp 100 crore		X		X	X			X	SPC-HQ
Red Category <Rp 100 crore		X		X	X			X	SPC-HQ
Orange Category		X		X	X				SPC-Regional
Green Category				X	X		X		SPC-District
Minor Ports (Coastal Zone Regulations)-new	X	X		X	X			X	SPC-HQ
Minor Ports-upgrading		X		X	X				SPC-HQ
Any projects where forest land conversion						X			Forestry Department

The Karnataka State Road Transport Corporation also has an Environmental Handbook, which highlights environment-transport issues in the state, what the GoK is doing about it and what standards and regulations must be followed when road transport projects are undertaken.

The Karnataka Infrastructure Development Corporation (i-Deck), established to facilitate the public-private sector partnership, is fully aware of the environmental clearance and approval process required to undertake work in the four priority sectors. They have established direct linkages to the KSPCB as well as the Karnataka State DOE. The location and land requirements for any project i-Deck I is promoting have normally been secured, meaning that zoning requirements and land purchases have been obtained, leaving environmental clearances for the private partner to pursue.

Private investors must, however, have the capacity to review and understand the environmental requirements as defined in KSPCB's guidelines, as well as MOEF's EIA Notification (Govt. of India 1994). This will most often be achieved through a technical consultant such as ECOSMART India or EQMS Ltd.

KSPCB, KSDOE and MOEF (www.envfor.nic.in) have extensive websites containing all necessary

step-by-step instructions for private investors. These guidelines, coupled with the handbook, provide the investors with all necessary information for successful CFE and CFO submission.

In general terms, Karnataka's environmental clearance process is almost identical to AP's, thus does not warrant repeating. Investors wishing to review its specifics are advised to access the KSPCB's website at www.kspcb.kar.nic.in.

Madhya Pradesh

Of the four states, MP has the least accessible environmental clearance and approval process. The State Department of Housing and Environment, the nodal environment approval agency, does not have a website, and even the agency description is off-limits on the GoMP website. The MP Pollution Control Board (MPSPCB) website was not in operation as recently as January 2004.

In general MP's clearance process mirrors that of other states, with a single window approach being described in the literature and coordinated by the MP State Industrial Development Corporation Ltd. (MPSIDC). Projects listed by MPSPCB as requiring detailed assessments generally also require MOEF clearance, including a complete EIA report. With EIA clearance in hand, sometimes accompanied by conditions, the proponent must file the CFE application with MPPCB, addressing all items in the form and enclosing all the EIA documentation. Conditions specified in the MOEF review must be addressed in the CFE application to the satisfaction of the SPCB reviewers. It is highly likely that if water, forest or wildlife issues are involved, the Department of Housing and Environment (MP's Environment Department) will become involved through the Inter-Departmental Evaluation Committee.

Based on the consultant's observation, the 'single window' clearance process was not being practiced, making environmental clearances in MP more onerous than in other states.

6.2.4 Who Is Responsible for Preparing the EAs

Whether private or public sector, the proponent, initiator of the project, or a designated specialist consultant acting on behalf of the proponent must prepare the EA materials. Under no circumstance will the MOEF or its state-level units plan and prepare the EA for either a private entity or another line agency such as the Ministry of Transport. This would defeat the whole notion of EA, namely to force developers to learn and work within the bounds of environmental sustainability by having them work through an EA.

If a public agency were to undertake an EA and complete all requirements in preparation for an investment project, specifications based solely on the public sector agency, would have to be adhered to by the private investor. In other words, despite being the owner, the private investor would have little say in the design and operation of the facility, since EC was based on parameters defined by the public sector agency designated to undertake the EA; unless the owner were ready to undertake an entirely new EA to address any proposed changes.

World best practice suggests that nodal or public sector agencies advancing a project may advise private investors on the local environmental assessment process, who to seek advice from and likely environmental pitfalls, but the investor should still lead the EA process.

In preparation for certain types of landuse, such as commercial industrial uses, the nodal agencies can undertake the landuse clearance process and obtain necessary variances in preparation for a PSP investment. Andhra Pradesh indicated a willingness to undertake this work as a contribution to a development opportunity. The risk is that the landuse variance approval does not necessarily lead to PSP in a project, making the expenditure indefensible.

Estimating the cost of mitigative measures, if not done as part of the EA, can also be completed by consultants who usually go on to undertake the mitigation and monitoring.

6.3 Streamlining Environmental Clearance and ECOSMART[63]

Two key steps implemented by the GoI will go far to streamline the EC process. The first is a reengineering of MOEF's EA process at both the central and state levels, and the second is the formation of its Environmental Information Centre and the appointment of ECOSMART India as its manager.

6.3.1 MOEF's Reengineering Of The Environmental Clearance Process

While this TA was being undertaken (for which the environmental task was to identify a streamlined EC process for PSP-type projects) the MOEF was completing its comprehensive EA process streamlining exercise, funded by the World Bank. While the new EC process is not law yet, it will likely become the required procedure within the near future. It has very clear benefits and extensive application to this work. In the following section components of the new process have been presented in the hope that PSP participants will use the approach to complete an environmental scoping of any proposed undertaking.

The current system of environmental clearance begins with a comparison of the proposed project with a list found in the GoI EIA Notification Schedule 1. Any project on that list requires a full EIA. A number of special conditions regarding sensitive site conditions also apply. This list is limited in scope and includes some seemingly benign projects while excluding ones that could have serious environmental effects, such as large scale waterway dredging. Further, the existing EC process depends on a variety of forms and preconditions which, unless handled by someone familiar with the process, becomes a bewildering array of choices, often leading to wasted and misdirected effort.

At the heart of the new framework proposed by MOEF is a screening methodology, based on a multipurpose *Environmental Appraisal Form*, addressing EIA requirements in a much more judicious and comprehensive manner, with levels of assessment varying with the scale and severity of impacts that may result from a project. Each project is reviewed based on site-specific conditions and placed into one of three groups: no EA, a rapid or more general EA (REIA), or a comprehensive or full EIA (CEIA). The use of one form as the starting point for all environmental clearances and to establish the category of a project would ensure that:

- adequate information for carrying out case-by-case screening to determine the requirement of EIA is assembled;
- sufficient information is recorded for carrying out scoping work to establish whether a CEIA or REIA is needed; and
- adequate information for granting clearances such as Consent for Establishment (CFE) and monitoring conditions (in cases where project proposals do not require an REIA) is collected.

Such an approach will vastly improve the clarity of the steps to follow, since the screening document will define the project in point form, permitting easy review and referencing. It will also provide sufficient and holistic information to the decision makers about the project's environmental settings, replacing the requirement for a more detailed (and often difficult to comprehend) EIA for granting of a state-level EC.

The new system also envisages the screening of projects for EIA through an interactive, decision support system available on the MOEF website, in line with MOEF's integrated Environmental Assessment form (currently in the development stage). In this way, project proponents could file their EC applications to the respective government agency through a web-enabled system.

Empowerment of the village panchayat or ward council through the 73rd and 74th amendments to the Indian Constitution to find solutions to problems

[63] Discovery of the MOEF's EC reengineering work, the Environmental Information Center and ECOSMART only came to light nearly 75% into the work, due mainly to the fact that no Nat'l counterpart was assigned to work with the Int'l consultants.

locally, has strengthened the intention to move EC from the national to the state governments. During the consultation process, all four state governments asserted that they want more control over EC, but recognized that where central government land or funding is involved, or where the project is interstate in nature, MOEF should lead. They pointed out that they are better prepared to carry out site-specific project-level enforcement and have all necessary resources at their disposal. Becoming involved after decisions have been made by the central government, as is the case now, makes state regulators much more reluctant to act, or indeed to be involved at all.

The reengineered EC system also hopes to fill the gap left by inadequate and narrow public consultation which frequently excludes those most affected (and often those with the greatest site-specific knowledge).

The proposed scoping system would have mandatory public consultation and disclosure mechanisms, undertaken at various times during the scoping/screening, REIA/EIA work and the operational period of a project. Such consultation would require the involvement of the Central or State Ministries, Regulating Agencies, District Administrative officials, Gram Panchayats, and most importantly all individual stakeholders who are directly or indirectly affected by the project proposal. The scope of the consultation would be directly related to the scale of the project, with comprehensive consultation taking place only with full EIAs.

The New Screening Process

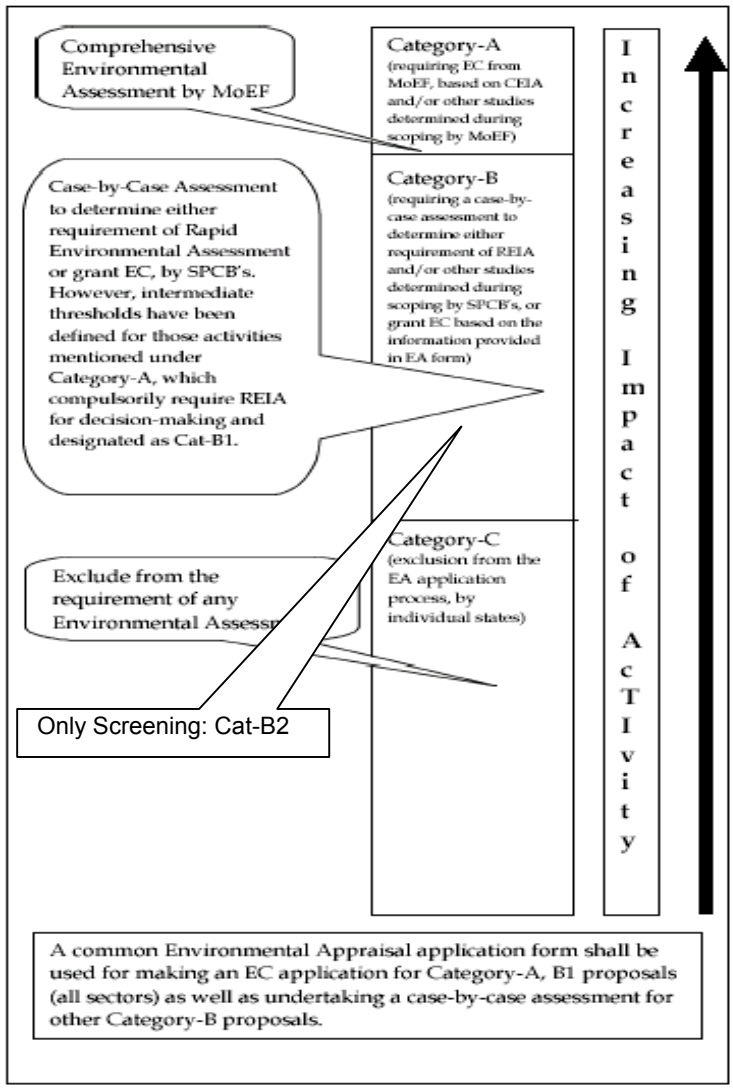
The procedure (see conceptual framework diagram) most likely to evolve is one using four project categorization lists (Appendix B: Tables 2.1 – 2.4). The first being for the type of project that must undergo a full EA and which, due to certain characteristics as defined earlier, must be led by the MOEF. These are referred to as Category A projects (Appendix B: Table 2.1 from Framework Study) and are those found in Schedule 1 of the MOEF's EA Notification, plus others which were considered necessary additions.

A second list, referred to as Category B1 projects (Annex B: Table 2.2 of Frameworks Study), would be those where a full EIA is uncertain and a Rapid EIA or screening process using the standardized form to determine the need for EIA and State-level clearance is applied.

Category B2 projects (Annex B: Table 2.3 Framework Study) would be those that do not require an EIA or REIA, and are subject to only a screening using the Environmental Appraisal Form.

A fourth list, Category C, would be those projects that are considered exempt (Table 2.4 Framework Study), but if unusual conditions arise, must undergo a screening.

Conceptual Framework for Proposed Screening Process



From ERM. 2003. Draft Framework for Environmental Clearance [for India]. www.envfor.nic.in

The referenced tables have been copied from the Framework Study and are provided as an Annex to this report.

The *Environmental Appraisal Form* has not been developed yet, but as a first step the Framework authors prepared a scoping checklist to help proponents pinpoint the key environmental issues associated with a proposed project and the likely severity and duration of impacts. The scoping form provides an excellent foundation on which any EC procedure can be based. It can be filled out by non-specialists, but can only be completed if adequate data are collected.

The scoping form as shown in Table 6.5 below has built-in checks and balances such that undervaluation in one area will show up as an inconsistency in another. We have adapted it to provide more information on impacts by including the rating scale described by the Framework consultants and addressing impact severity and likelihood, which when multiplied together can be used as a scale for significance; 1 being insignificant, 2-5 being minor concern, 6-8 moderately significant, between 9 and 16 highly significant and from 16-25 critically significant. The latter two categories would trigger an REIA at the very least.

It is likely that the EC process proposed in the Framework will be adopted and as such, completing a universal screening form will be the first and in many cases the only step in EC. Once MOEF regulates this approach private investors will need to access the MOEF website and familiarize themselves with the form and its data needs. Fortunately, MOEF has already planned for this change by encouraging the formation of the Environmental Information Centre now under the management of ECOSMART India, an agency familiar with the new process.

Until an interactive *Environmental Appraisal Form* is available, investors seeking direction on the environmental risks of their proposed project and the likely future impact scenario for their project, should complete the scoping form included in this chapter. Equipped with that information they could either continue with the EC process as outlined in the EC checklist (Table 6.4) or contact one of India's accredited environmental consultants for assistance. Potential investors can also go directly to MOEF for assistance, bypassing the scoping form.

6.3.2 ECOSMART India Ltd.

As part of its EC reengineering process and its attempt to make technically credible environmental information available to all proponents needing data, MOEF established its Environmental Information Centre (EIC) in 2003, with large scale environmental datasets assembled for the pilot states of Gujarat, AP and Maharashtra. To operate the EIC, MOEF appointed ECOSMART and instructed them to work toward creating a fully independent client-funded environmental advisor service, with focus on assisting private-public sector partnerships with their ECs.

Through July 2004, EIC and indeed the start of ECOSMART was financed by the World Bank's Environmental Management Capacity Building (EMCB) project. ECOSMART is a wholly owned subsidiary of IL&FS, and is now developing a funding plan for continuation of its work[64].
In one move MOEF, working in consultation with the World Bank and IL&FS, has initiated a bold streamlining effort by proposing to reengineer the EC process, introduce a single application format, establish its EIC, and have ECOSMART manage the EIC's operation and provide value-added through its EA advisory services for private sector investors.

The EIC is designed to provide customized datasets and environmental information required during the EC process as a not-for-profit service; with ECOSMART staff preparing databases, digital and GIS-based maps from available sources in India, all within a two week period.

To remain truly useful and in the spirit of its Bank-funded beginnings, ECOSMART, even after becoming fully private , is keeping the EIC a not-for profit service, accessible to small and large private

[64] For example, ECOSMART is bidding on ADB Technical Assistance projects, and has recently been shortlisted on at least one such project.

sector users, district and local government authorities and NGOs alike.

6.3.3 Competing Workshops: Deciding Not To Hold an Environmental Workshop

After an unsuccessful attempt to hold a workshop to review the existing EC processes in the four states with private investors and regulators (only 3 of 25 invitees replied), other options were explored. It was during this phase that EIC and ECOSMART were discovered[65]. Most importantly, we learned that ECOSMART was holding workshops on the EIC and the environmental clearance process at key locations across India, including Mumbai, Delhi and Chennai.

Workshops were well attended (more than 150 people at each) with many private sector investors, regulators and other government representatives from various levels attending. The workshops focused on the issue of environmental data and the EC process in various sectors and to a lesser extent the clearance process (ECOSMART Workshop Summary Report). Its key advantage is that it had the credibility of a quasi-government presentation, with former government officials in attendance and the most senior officials giving presentations. For example, at the Mumbai workshop, attendance of regulators included people from three states, and at least 20 investors, a much broader reach than would have been possible for our workshops. In New Delhi, there were 175 attendees and the keynote speaker was the Chief Minister of MOEF.
Since the timing of ECOSMART's workshops seemed to overlap or coincide with the one planned for this TA, and the intended audience and content were similar it was felt that another workshop would be redundant. Instead more emphasis was placed on this working paper, elaborating on the GoI's recent efforts to streamline the EC process and creating a better environmental checklist for use by PSPs.

[65] The team's social sector specialist discovered ECOSMART by sheer chance in March 2004, despite it being a part of IL&FS, the main Indian financial institution involved.

6.4 Conclusions, Recommendations and Checklist

6.4.1 Conclusions

MOEF is undertaking a large scale reengineering of its EC process. Once completed, it will be far less onerous, based on a single input and provide rapid feedback to investors of the environmental risks they might be taking.

As part of this work MOEF established an Environmental Information Centre, designed to become a repository of environmental data from all across the country and from a large variety of sources. Proponents needing EA work are able to provide parameters to the EIC through ECOSMART, the private sector firm set up to manage the EIC, and receive a relevant and focused dataset.

Both of these initiatives are large streamlining improvements which private sector investors need to access (www.ecosmartindia.com).

With the exception of MP, the project states have robust environmental management services. These include:

- well developed environmental clearance processes: in AN and KAR a 'single window' process;
- a variety of guidelines, handbooks and website advisory services readily accessible to the investor/proponent. All are available from State Pollution Control Boards, in some cases even online;
- ample expertise for examining infrastructure proposals and advising investors on environmental requirements and risks; and
- an existing communication network between the Department of Environment and Forests and the State Pollution Control Board.

State Roads and Urban Transit sector projects have clear, step-by-step procedures laid out by the Transport Departments, who refer to the SPCB and

DOE requirements as well as Ministry of Transport and Indian Road Congress guidelines.

Water and Sewer projects do not receive enough attention and jurisdictional disputes, usually between districts, state and central agencies, can lead to an erosion of interest. All new W&S projects need full CFE and EIA clearance, but are highly site specific and contingent on local conditions which central government evaluators often are not aware of, causing delays and increasing costs and risks.

Port projects can also be confusing due the restrictions imposed by the coastal zone development plans, which provide strict guidelines on what sort of development can take place within 500 metres of the shoreline or along any river or estuary. These guidelines are enforced locally, while EAs are examined by state or the central government and CFEs are issued by the state.

A number of the State Pollution Boards noted that a growing problem was private sector proponents failing to carefully review the CFE application requirements and not providing the level of detail specified in the CFE application forms, causing delays and sometimes outright rejection. Evaluators, faced with having too little information, had no choice but to delay approval until more data were presented. This is easily avoided if investors or their consultants follow instructions or take the time to consult with the PCB.

MP has a complex system of approvals, despite publicizing a streamlined 'single window' clearance process. Information is difficult to find, agencies have names unique to the State (e.g. Department of Housing and Environment), and the clearance process involves up to 6 agencies. In comparison to the other states, help is difficult to find.

6.4.2 Recommendations

The following are recommendations coming either from the states themselves or were inferred by the consultants based on the weeks of interviews and discussions with state officials:

- MOEF's streamlining work will bring considerable clarity and simplicity to the EC clearance process. Until this becomes law, investors are urged to use the scoping form and classification tables taken from the MOEF study and adapted for this work to define the environmental risks and EA needs of their proposed project.
- Investors should also make use of ECOSMART's EIC to have them assemble relevant and technically credible datasets needed for environmental screening and future EIA.
- The authority for providing environmental clearances and EIA reviews should be divested to the state level, provided that the state meets basic institutional capacity skills as exemplified by AP, Karnataka and Gujarat. Only projects extending across state borders and where national lands are involved, should have central government involvement.
- All maritime states need to work towards encouraging the central government to transfer clearance powers to the state DOE[66], instead of the Ministry of Shipping and the State Public Works Department.
- For AP, Karnataka and Gujarat it will be important to streamline the ports-development environmental clearance process and prepare a step-by-step guide to Environmental Clearance for Port Development.
- MP needs to make its entire clearance process more accessible and can do this by using AP as a template.
- The cost of environmental screening and obtaining environmental clearance sufficient for the project to begin will vary depending on who is initiating the project. If the project is unsolicited and initiated by the private sector, the process of obtaining environmental clearance will be the responsibility of the investor. If the project is being prepared and presented to the private sector for investment by the Government, then the obligation to

[66] The request for transfer to state authority was officially tabled with the central government by all maritime states (collectively) more than a decade ago. To date this has not been acted on.

ensure environmental clearance for the project will be with the Government (see Table 6.4).

- All nodal agencies should prepare a summary guide on the EC process in their state, listing key agency contacts, the names and contacts for qualified consultants, public sector environmental expertise and web sites for specific environmental data and information, such as MOEF's Environmental Information Centre.

6.4.3 Action Checklist

Since many of the steps required to obtain environmental clearance are the same in each state and any differences are at a level of detail needing expert advice and highly specific information, a generic action checklist has been prepared with specific comments wherever additional or specific details should be sought from the specific state. State-level detail can be obtained from the websites of the State Pollution Control Boards.

Investors or project proponents, and indeed nodal agencies, should be guided by Table 6.4, the checklist of actions needed for EC. At the same time Table 6.5 should be used to scope the extent of potential environmental problems, the risks involved and the type of environmental work to be completed.

6.4.4 International Best Practices

The aim of this section is to outline principles and guidelines from around the world that can provide a reference and framework for developing environmental "best practices" in public and private sector entities,as well as financial institutions.

The Seven London Principles

The British Department of Environment Food and Rural Affairs prepared a study in 2002 entitled *Financing the Future*, in which it defined the actions that UK financial services were committing to in order to foster better environmental stewardship in the financial sector. These actions became known as the Seven London Principles, of which three target environmental protection:

i. Reflect the cost of environmental and social risk in the pricing of financial and risk management products;
ii. Exercise equity ownership to promote efficient and sustainable use of risk management; and,
iii. Provide access to finance for the development of environmentally beneficial technologies.

Principles that could be adopted by the PFI Units.

The Equator Principles

In June 2003, ten of the word's leading banks adopted the Equator Principles, a framework for financial institutions to manage environmental and social issues in project financing. There are nine principles, beginning with the need for the screening of projects for environmental and social risks, using the International Finance Corporation (IFC) Safeguards criteria, thereby defining the level of environmental examination to follow.

Principles 2 through 4 involve the preparation of a detailed EA and Environmental Management Plan (EMP) using either World Bank or IFC guidelines. Principles 5–8 are exceptionally important since they make documented consultation mandatory, not just with affected agencies but the general public and NGOs. Principle 5 stresses the need to provide the public with adequate information (Summary of the EIA) and an appropriate period for response. Principle 5 also specifies that for projects screened as Category A (the screening process groups projects into 3 categories, with A having the most severe likely impacts), the entire EA documentation, consultation and implementation will be subject to an independent review by a technical expert. The sixth principle obliges the borrower, via a legal covenant, to:

- comply with the EMP during construction and operating stages; and
- provide the lending bank with regular compliance monitoring reports.

For principle 7, the lender must be ready to retain an independent expert to provide monitoring and reporting services should the borrower fail to provide this in a credible and timely fashion.

The 8th principle states that if the borrower does not follow principles 3–6, the borrower will be considered non-compliant and in default. A stalemate would mean a withdrawal of the loan.

The Equator principles are being adopted by the Banks (in August 2004 there were 28 banks, none from India) on a voluntary basis, and to date few have moved the principles from concepts into practice. While these principles would be well suited for this project and the PSP initiatives to come, they apply to projects with a total capital expenditure of at least US$50 million.

The IFC, a member of the World Bank Group, strongly endorses these principles and has already given two workshops to the signatory banks on environmental and social safeguard methods and practices.

If India's major banks were to adopt these principles, the Private Finance Initiative (PFI) Units would have to follow suit and a standard would be established.

However, IL&FS's environmental policy is better and more specific and would be an excellent policy to adopt for all financial institutions in India, possibly known as the Sustainable Banking Guidelines.

Sustainable Bankers

The 2004 report *Sustainable Banking in Africa*[67] (www.aiccafrica.org) reviewed the best practices of banks in relation to the inclusion of environmental factors in decisions regarding lending, and found that the situation was not ideal. The banks were ranked according to four levels of buy-in. These were the use of defensive strategies to offset environmental risk, basic environmental risk management, the protective and offensive approach to environmental impact management; virtually no banks were in the final category, the sustainable bankers, who used the "triple bottom line" approach of people, the planet and prosperity as a guide to investment. While the three previous conditions focus on simple environmental risk avoidance, sustainable banking uses the risk factors as triggers for development of new products, processes and services, providing environmental value-added.

Since 2000, the IFC has established four funds that encourage environmentally friendly and sustainable industries and banking. Of these, three funds are aimed squarely at the financial institutions and the PSPs. These are:

- the Corporate Citizens Facility (www.ifc.org/ccf) and the Environmental Business Finance Program (www.ifc.org/ifcext/enviro.nsf), designed to help the private sector realize environmentally sustainable development proposals; and,
- the Sustainable Financial Markets Facility (www.ifc.org/sfmf), providing tools to financial institutions to make them more environmentally and socially responsible.

All these funds and principles are based on voluntary participation and proactive dialogue with institutions offering assistance.

ISO 14,000

The International Organization for Standardization (ISO) has its own environmental certification program, ISO 14,000, which provides an environmental management best practice certification program for an industry or financial institution. The certification process means adherence to certain environmentally friendly practices, maintenance of records and commitment of management and staff to an operating code. Certain governments have given tax incentives to ISO-certified companies. Each PFI Unit could obtain ISO certification and thereby raise its lending practices to the level of, for example, the Equator Principle Banks. Businesses considering ISO certification are offered training courses by ISO (www.iso14000.org or www.iso.org).

Environmental Clearance Best Practice – The Indian Model

International Best Practice regarding environmental clearance was also examined by the TA authors through two books written by them on the subject[68] and through a review of studies presently ongoing in India, as well as experience in environmental assessment in over 28 countries. In general, the availability of environmental expertise is rare in all but the largest, multinational private entities. For the actual work, most PSPs use consultants, as is

[67] AICC. 2004. *Sustainable Banking in Africa*. African Institute of Corporate Citizenship, Johannesburg SA.

[68] *Roads and Environment Handbook*, World Bank, 1996 and *Wildlife Roads and Sensitive Areas; Environmental Guidelines for India and South Asia*. 2001. World Bank.

the case in India. Many government agencies around the world have their own environmental departments or hire consultants; with the latter widely-practiced in India.

Mitigation and monitoring is also often undertaken by consultants. A best-practice approach for building a critical mass of expertise within an agency is to have staff working side by side with consultants to gain on-the-job experience until the consultant's presence is no longer necessary. The decision on which process to follow is based entirely on the resources available to the PSP or the government agency.

The most relevant examination of best practice was the 2003 World Bank funded MOEF Reengineering Project, from which is emerging an Indian EC process as sound as any found in countries with long histories of Environmental Management such as Canada and the European Community. Nearly all South and Southeast Asian countries now use a categorization and screening approach as a precursor to defining the scope of an EC process. More and more are including consultation with local people as a cornerstone of the EC process.

Streamlining is still a difficult action for many and India is about to leap ahead of many countries. India will achieve a uniformity of process through the use of screening sheets or forms, and by quickly transferring as much decision making power as possible to the state or provincial level, permitting MOEF to concentrate on quality control and process innovation.

The reengineering study has taken the best from many countries and brought it together to create the new EC process, with its emphasis on scoping, screening and consultation with stakeholders.

In mid-2003 the ADB published its new EC guidelines, placing a heightened emphasis on consultation, something clearly reflected in India's new process. With the inclusion of computerized, internet-based EC application procedures and the existence of the Environmental Information Centre with a view to providing relevant and accessible EC databases to those who need them, India's revised EC process could be considered an example of EC best practice.

Within the context of India's history and its environmental legislation, the revised EC process is a best practice model. However, it will still have problems with EC follow up, compliance monitoring and enforcement or implementation of EC clearance conditions such as process changes, special mitigative actions, etc.

This new process, coupled with the signing on by the Indian Banks and IL&FS to the Equator Principles—thereby becoming eligible to receive IFC environmental capacity building training—could lead to a rapid strengthening of in-house environmental capacity within the PFI Units. The application of IL&FS's environmental policy to all PFI Units would be an excellent environmental sustainability building action, while keeping in line with the requirements of India's new EC process.

6.5 Training Needs

6.5.1 The Private Finance Initiative Units (PFIs)

During the inception stage of this TA, IDBI decided to drop out of the program, leaving IL&FS as the only centrally-based PFI unit.

IL&FS has had an environmental policy in place for nearly a decade and has its own environmental advisory group, thus training is not needed. It is likely that the state-level PFIs proposed in this project (if they are to be different from the nodal agencies) lack this expertise and basic environmental capacity building will be essential. IL&FS's in-house environmental department, ECOSMART, should provide such training, focusing on environmental screening, the EC process at the state level and establishment of a state-level network of expertise. It is recommended that this take the form of one day-long workshop for state-level PFI Units.

6.5.2 The Nodal Agencies

None of the four nodal agencies interviewed had any notion or interest in building EC capacity beyond what they already had; namely being able to direct PSPs to the right state-level agency and pointing out key environmental risks for a given project. All four nodal agencies seemed well equipped to provide this type of service, and therefore no training is suggested. Nodal agencies should have easy access to guidelines re the EC process prepared by the state regulatory agencies such as SPCBs, and be ready to distribute these to PSPs as needed.

To implement this each nodal agency should meet once a year with the State Pollution Control Board as well as the DOE, plus any centres of environmental training and expertise located within the state (such as ones in Gujarat and Madhya Pradesh), and prepare a list of resource specialists, useful documents and websites. They could then add these data to the EC guidelines creating a useful handbook for distribution to prospective PSPs.

6.5.3 Private Sector Participants (PSP)

Private Sector investors will most likely retain consultants to undertake all their environmental work. Requiring the PSPs to participate in an EC capacity building workshop or seminar would be counterproductive and a disincentive to invest. It would be better for each nodal agency to prepare environmental guidelines for PSPs in that state, to supplement this chapter of the final report. Beyond this initiative no additional training is called for. Some PSPs may want to consider ISO certification.

6.5.4 The Line Agencies

The term "line agencies" refers to the government agencies that undertake the government's day-to-day work, such as road building, sewage treatment, water purification and agricultural management, etc. In this project they include the departments of Transport, Energy, Civil Aviation, Shipping and Water Resources. At the state level, few of these agencies have environmental capabilities and a proponent would have to work closely with consultants to obtain environmental clearance. For line agencies, the most appropriate training would be to make them aware of the technical capacity available within the state government. A half-day workshop with SPCB and the agencies listed above, and the DOE presenting an overview of their EA capabilities and advisory services available to line agencies—would go a long way to toward filling the technical capacity gap. Each line agency should not attempt to establish its own environmental unit since cost, needed staff and indeed work load would not warrant it. While an excellent concept and one that is standard practice in developed economies, it is not practical under the existing financial conditions in the four states. With great effort (and at considerable cost) Gujarat's Transportation Department managed to establish its Environmental Unit, which now handles all EC for that agency.

6.5.5 Environmental Regulatory Agencies

The environmental regulatory agencies are the MOEF, its state level DOEs and the SPCBs. Depending on the projects and which laws become relevant, other agencies could become involved. The regulatory agencies are responsible for enforcement and monitoring, a costly and labour-intensive activity. The regulators have serious problems with compliance monitoring and enforcement, due mainly to two factors:

i. lack of budget allocation for basic monitoring or enforcement equipment; and
ii. staff shortage.

At the heart of this gap is the lack of political will to portray environmental enforcement and monitoring as a value-for-money activity. If ministers do not place significant value on environmental enforcement and monitoring, the gaps will remain.

It is the senior administrators, not the lower working levels in the regulatory agencies, that need environmental awareness training and, more specifically, training regarding the value of enforcement and monitoring. State Finance Departments also need to be made more aware. A half-day environmental awareness raising class,

with a focus on environmental enforcement and compliance monitoring, should be given in each state with ministers, deputies and key directors from the following departments present: Finance, Agriculture, Transportation, Water Resources, SPCB Land Planning and DOE.

Using relevant local case examples, the presenters should prepare a benefit-cost analysis for enforcement and monitoring. Examples should also be drawn from the SPCB and DOE records.

6.5.6 Special Training Opportunities

Both the ISO and IFC offer training to financial or lending institutions and the private sector, and endorse and promote environmentally sustainable proposals. ISO certification of PSPs is another way to build internal environmental awareness and, in time, capacity. IFC's various lending facilities stress environmental awareness and sustainability thereby making the development of proposals that reflect both environmental and social responsibility, making borrowing for environmentally sensitive proposals more attractive. A similar policy by IL&FS as well as the PFI Units should be encouraged.

1.5.7 IFC Training Program for Financial Institutions

IFC has conducted training in environmental and social responsibility for Financial Institutions in India since 1998. IL&FS was an early participant, however it is likely that the trainees have left that organization and therefore no corporate memory of that program remains.

The training program is proprietary, and as such the consultant could not obtain detail other than the brochure enclosed as Appendix C in in this report. The workshop is entitled *Sustainable Finance: Competitive Business Advantage* and focuses not just on environmental and social safeguards, but also good business practice. IFC has recently partnered with the Confederation of Indian Industry (CII) for the delivery of this training.

The consultant assumes that training is founded on the Equator Principles as well as the IFC/World Bank Environmental and Social Safeguard Policies, and therefore highly appropriate for the proposed PFI Units in the four states as well as the Nodal Agencies. The IFC contact in New Delhi[69] is Mr. R. Sandenburgh (rsandenburgh@ifc.org) or Clive H.J. Mason (cmason@ifc.org) both delivering the South Asia Enterprise Development Facility (as defined earlier in this chapter).

Table 6.3 Proposed Environmental Training Program (L=lead, P=participate)

Type of Training	Timing	PFI	Nodal	PSP	Line A.	Regul. A.
Environmental Expertise Coordination Session	½ day/yr	P	L		P	P
Prep. Of Environmental Sourcebook for PSPs and PFI Units	Prepare & Update annually on Nodal Agency Website		P		P	L
Env. Awareness Raising Seminar on: mitigation, monitoring & enforcement	½ day/yr	P	P	P	P	L
EC Process Overview Workshop	1 day once PFIs are in place	P	P	P	P	L
IFC Training Program for Financial Institutions	Lead by IFC, and Confed-eration of Indian Industry	P	P	P		

[69] IFC New Delhi office +91-11-511-1000

Table 6.4: Checklist of Actions needed for Environmental clearance of projects in the four focal sectors

No.	Action to be taken	By Whom	When	Time Needed	Comment
1	(i) Investor defines project for consideration and brings it to the attention of Nodal Agency: specifying type, size and desired location. OR, Nodal agency has a number or projects available for investors to examine. (ii) Government defines project and initiates the process of planning, screening and project development.	Investor Government	First step in the private sector participation process First step in EC	(i) several months for PSP to obtain clearance (ii) same as above	
1A	*Until the Environmental Appraisal Form is available, one option for Investors/Government is to use the Scoping Form shown in Table 6.5, and with it define the likely level of EC needed using the project category listings shown in the Annex to this chapter (Eliminating steps 1-4).*	*Investor/Government*	*First step in the private sector participation process*	*Several days*	The Framework Report is available in its entirety on the MOEF website at: www.envfor.nic.in
1B	*A second option would be for the investor/Government to contact a consultant, based on the MOEF consultant registry or the Nodal Agency list, who could undertake the initial planning, screening and data assembly, preparing the way for a smooth EC process (taking care of Steps 1-4 plus part of 5)*	*Investor/Government to start and taken over by consultant*	*First step in the private sector participation process*	*Once contacted, the consultant could quickly prepare all materials for start of EA.*	MOEF website and consultant register should be checked www.envfor.nic.in
2	Nodal agency addresses issues of land requirements, site clearances, and defines the set of environmental clearances likely to be needed. If there are known environmental risks, such as in Hyderabad and any urban transit projects near the lake which is considered an environmentally protected area, these need to be pointed out to the PSP.	State Nodal Agencies	As soon as the investor makes contact or, if a Nodal Agency project, before the Investor is approached.	At the time investor appears or within a week of contact	
3	The investor/Government or a hired consultant reviews the guidelines developed by the state (if they are available) and reviews the requirements, determining the scale of environmental work to be undertaken. This is done by examining the SPCB project categorizations and the relevant CFE and CFO requirements, as well as the MOEF's EA notification Schedule I and II (EIA format).	The Investor/Government proponent or a hired and accredited consultant	Prior to starting any environmental investigation of EA	5 days maximum, since most competent consultants will already know the requirements	State PCB web sites MOEF Delhi website
4	Investors/Government, equipped with the information from step 3 should consult with the State PCB and DOEs and reconfirm the findings and ask specific questions about: ▪ Proximity of the proposed project to designated sensitive areas, both biophysical and heritage/cultural, since presence means a costlier environmental study	The Investor/Government proponent or a hired and accredited consultant	Prior to starting any environmental investigation of EA	1 day	the SPCB project categorization lists should also be reviewed, to reconfirm the project's category and level of work required. The MOEF's EA Notification Schedule 1 should also be consulted.

No.	Action to be taken	By Whom	When	Time Needed	Comment
	▪ Forest land designations, since in some cases projects cannot proceed without great additional cost. ▪ Whether the site clearance for the land on which the facility is to be placed has been obtained. ▪ Whether a full EIA is needed.				If the answer to any of these questions is yes, the likelihood of a full EA is very high.
5	Based on the results of steps 3 and 4, the Investor/Government or the hired consultant prepares the required documentation, making sure that the level of detail is as specified by the Pollution Control Board is being produced and that the EIA is being undertaken according to the MOEF guidelines. THE KEY TO SUCCESSFUL CLEARANCE IS COMMUNICATION, NAMELY THAT THE PROPONENT KEEP THE REGULATORY AGENCIES INFORMED OF THE WORK AND PREPARATION OF THE CFE AND EIA DOCUMENTATION	The Investor/Government proponent or a hired and accredited consultant	After the decision to proceed has been taken and feasibility work has begun	Cannot be specified since it depends on the project, but generally for full EIA a minimum of 3-months should be planned.	
6	Whenever the EA work involves a full EIA, requiring MOEF approval, it should be undertaken first and submitted to MOEF, with a note indicating that the CFE application is under way.	The Investor/Government proponent or a hired and accredited consultant	As part of the feasibility study		
7	Where full EIAs are involved the CFE should not be completed until after the EIA has been evaluated and the MOEF provides a written decision, since the CFE must take into consideration any conditions MOEF makes. This can speed up the final clearance process considerably.			usually within 120 days of submission	
8	The Investor/Government Proponent must be fully aware of the sequence of clearances for those projects where both state and central government evaluation is required, e.g. for Schedule I projects. In this case the EIA should be completed first (BUT ONLY AFTER CAREFUL REVIEW OF THE CFE REQUIREMENTS TO BE SURE THAT THE EIA PROVIDES AS MUCH OF THE CFE's DATA NEEDS AS POSSIBLE) since the CFE is incomplete without the EIA and the clearance notification from MOEF. Generally a compliant CFE application for a Red category project, listed in EA Notification Schedule 1, includes: 1. A complete CFE application form 2. An EIA and MOEF clearance 3. Feasibility or preliminary Engineering Study 4. Site clearance certificates; and,			Full EIAs take a minimum of 3 months to complete and in some cases longer if seasonal data are required. Lesser examinations can be completed within a month	Depending on the category of the project, the documentation can vary from a simple letter (usually enough for a green category project), to a full CFE application as well as the EIA, its evaluation by MOEF and a feasibility study preliminary design defining the work, the location, a construction timetable, etc.

No.	Action to be taken	By Whom	When	Time Needed	Comment
	5. "No objection certificates" from other regulators such as DOE's coastal zone authorities				
9	For projects requiring only state-level approvals, CFEs are still needed, but the level of detail differs; and is usually specified in documentation prepared by the state PCB. These 'less onerous' projects still require environmental summaries, often needed by the State Departments of Environment and Forests. ***The completion of Tasks 4 and 5 should help to establish the need for environmental work.***	The Investor/Government proponent or a hired and accredited consultant	Prior to any construction mobilization	Studies are usually less than 1 month and CFE reviews should take no more than 1 month.	The time required for review and approval is highly variable and depends entirely on three factors: 1. clear, comprehensive and compliant work by the proponent; 2. maintenance of communication with the regulatory agencies during the completion of the EA and CFE work; and 3. competence of the reviewer.
10	Once the CFE has been issued the construction can proceed, with the contractor using the CFE, adhering to any conditions in addition to the EIA (in which all environmental mitigative measures are specified) and implementing these actions as construction proceeds.	Contractor/investor	During the construction period	Throughout the construction period	
11	The investor/proponent must remember that after the CFE is granted, the Consent for Operation (CFO) must also be obtained from the SPCB, before operation can begin. The CFO inspection is completed by the SPCB to determine if the construction went according to the design and if mitigative measures (defined either in the CFE or the EIA) and any conditions imposed are being implemented.	SPCB	Prior to Start of Operations	Less than 30 days after request for CFO	The CFO process can be confusing since SPCBs go about this differently. Some allow the owners to certify the compliance, while others will have their own inspectors file the report. Investors should know, however, that a Secondary CFO inspection usually takes place 1-1.5 years into the operating period, at which time samples are taken to ensure that design parameters are met, e.g. for sewage effluent standards, and mitigative actions have actually been undertaken.
12	Once the Primary CFO has been obtained the operation of the infrastructure facility can commence.	Investor	Just prior to the operation start-up	NA	
13	The final environmental step is the Secondary CFO which must be obtained, otherwise the owner could face serious fines and even closure of the operation.	Investor/Owner or consultant, or testing agency	1-1.5 years after start of operations	As defined by SPCB	The $CFO_{Secondary}$ can be facilitated since some SPCBs will allow owners to hire certified testing agencies to conduct tests and submit results

CFE = Consent For Establishment

$CFO_{Primary}$ = Consent for Operations-essentially an audit by SPCB to check that the engineering has been constructed as designed and that environmental conditions as specified in the CFE and EIA are implemented.

$CFO_{Secondary}$= this audit is usually undertaken 1-1.5 years into the start of operations to measure emission and effluent qualities and ensure that they meet engineering specifications.

Table 6.5 Impact Scoping Form, adapted from EC Framework Document (1=least, 5=most; values ≥4 are significant)

Scoping Question and details	Y Or N	(1) Which item of Site Environment could be affected & how?	(2) Consequence Severity Scale: 1-5, with + and 0	(3) Likelihood of Occurrence; Scale: 1-5	(4) Signific. (2)x(3)	(5) Is the effect likely to be significant? Why?
1. Will construction and operation of the Project Involve actions which will cause physical changes in the locality (topography, landuse, changes in water bodies, etc.)						
1. Permanent or temporary change in landuse, land cover or topography including increase in intensity of landuse						
2. Clearance of existing land, vegetation and buildings						
3. Reclamation works						
4. Dredging						
5. Major Cut and Fill operations						
6. New transport infrastructure including new or altered routes and stations, ports, etc.						
7. Closure or diversion of existing transport routes or infrastructure traffic movements, changes						
8. New or diverted transmission lines or pipelines						
9. Changes to the hydrology of watercourses or aquifers						
10. Stream crossings						
11. Use or transfers of water from ground/surface waters						
12. Transport of personnel or materials for construction						
13. Immigration of people to an area						
14. Introduction of alien species						
15. Loss of native species or genetic diversity						
2. Will construction or operation of the Project use natural resources such as land, water, timber or energy, especially any resources which are non-renewable or in short supply?						
3. Will the Project involve use, storage, transport, handling or production of substances or materials which could be harmful to human health or the environment or raise concerns about actual or perceived risks to human health?						

ENVIRONMENTAL AND SOCIAL ISSUES

Scoping Question and details	Y Or N	(1) Which item of Site Environment could be affected & how?	(2) Consequence Severity Scale: 1-5, with + and 0	(3) Likelihood of Occurrence; Scale: 1-5	(4) Signific. (2)x(3)	(5) Is the effect likely to be significant? Why?
4. Will the Project produce solid wastes during construction or operation?						
5. Will the Project release pollutants or any hazardous, toxic or noxious substances into the air?						
6. Will the Project cause unacceptable noise and vibration or excess heat energy (GoI Standards)?						
7. Will the Project lead to risks of contamination of land or water from project-pollutants reaching surface, ground and coastal waters or the sea?						
8. Will there be a risk of accidents during construction or operation affecting human health or the environment?						
9. Will the Project result in social changes, for example, in demography, traditional lifestyles, employment?						
10. Will local environment features on or around the Project be negatively affected?						
11. Will there be any visual intrusion and aesthetic degradation?						
12. Is the Project located in a previously undeveloped area where there will be changes in landuse type?						
13. Are there any densely populated or built-up areas in or near the project boundary affected by the Project?						
14. Are there any areas on or around the location which are occupied by sensitive landuses which could be affected by the Project?						
15. Are there any areas in, on or around the project boundary which contain important, high quality or scarce resources which could be affected by the Project? For example: groundwater resources, surface waters, wetlands, forests, agriculture lands, fisheries, tourism resources and minerals.						

6.6 Land Acquisition and Resettlement: Existing Policy and Legal Framework

Policies and legislation concerning land acquisition and the resettlement and rehabilitation of project-affected people are important aspects of successful PSP in infrastructure projects. Almost all infrastructure projects in India raise the issue of land acquisition due to high population densities. As part of the concession agreement for many PSP projects, the State Government agrees to acquire and transfer to the developer large areas of land and/or right of way in or over land or right of use of land. The rights of the persons who own, occupy or use acquired land must be determined for this purpose.

In most PSP infrastructure projects, the State Government uses the provisions of the Land Acquisition Act, 1894 to acquire private land for public purposes; and, transfers the land by lease or other agreement to the developer. This section reviews key legislation, namely, the Land Acquisition Act (LAA) of 1894[70] and the Environment Impact Assessment Notification of 1994; and, National Resettlement and Rehabilitation (R&R) Policy, State legal and policy frameworks and the IL&FS R&R policy framework for the PSIF II.

6.6.1 Land Acquisition Act of 1894

The Land Acquisition Act of 1894 (and as amended in 1984) is the principal legislation governing the acquisition of private land by the Central and State Governments.

Acquisition of land for public purposes

Under the Act, Governments may acquire land for public purposes, including:

- provision of village sites, or the extension, planning, development or improvement of existing village sites;
- planned development of land for pursuance of any scheme or policy of Government, and subsequent disposal of such land in whole or in part by lease, assignment or outright sale;
- provision of land for a corporation owned or controlled by the State; and,
- provision of land for residential purposes to persons who are poor or landless, affected by natural calamities or displaced by reason of implementation of any scheme undertaken by the Government.

Governments may also acquire land under the Act for private companies as in the case of PSP projects (Part VII, Sections 38-44).

The Act establishes the principle of cash compensation for lost assets, including agricultural land, house plots, crops and trees and residential structures. Compensation is paid to people who have an interest in the land, namely: land owners who have an absolute interest; tenants who have a lease or license, therefore a limited interest; and, persons with a right of easement in the land.

Procedures for notification

The District Collector (or in Karnataka, the Deputy Commissioner) carries out land acquisition and compensation activities in his district at the request of the government ministries, departments or other agencies. In brief, the procedures include:

- Public notification in the Official Gazette and two local newspapers that certain private lands will be required for a public purpose (Section 4(1)).
- Provisions for persons with interest in the land to submit written objections within 30 days and have a hearing with District Collector (Section 5). The Collector's decision on the objection is final.
- Publication of an official declaration in the Official Gazette and two local newspapers that the land is required for public purposes (Section 6); and notification to land owners and occupiers of the Government intention to acquire the land (Section 9).

[70] See also, Working Paper 1 entitled Review of Existing Policies and Legislation for PSP and Privatisation in Infrastructure, Section 4.7, Land and Land Acquisition Legislation.

Valuation of affected assets

The District Collector establishes the value of affected assets, and determines the allocation of the compensation award among interested persons (Section 11). The value of agricultural land is based on market value. In addition, due to the compulsory nature of the land acquisition, compensation includes a solatium equal to 30 percent of compensation amount, as well as interest of 12 percent per annum from the date of notification (Section 4).

Alternately, the Collector is entitled to make an award based on an agreement among all parties with an interest in the land (Section 11(2)). This is the legal basis of the consent award, a procedure often used to acquire private land for public purposes.

Government possession of land

The District Collector takes possession of the land on behalf of the Government immediately following the award (Section 16). Payment of compensation to land owners may occur immediately, or may be delayed for a variety of reasons including court referrals of the amount of award (see below). For delayed payments, an additional 9 percent per annum is paid for the first year, and 15 percent for subsequent years.

The Government has special powers in cases of urgency, whereby the District Collector can take possession of any waste or arable land required for public purposes fifteen days after notification to owners under Section 9 (Section 17). Before taking possession, the District Collection should pay interested parties 80 percent of the estimated compensation.

Referral of awards to courts

- Within six weeks of the award, interested parties who do not accept the award may require that the Collector refer the matter to the courts (Section 18). In reviewing the amount of compensation, the court must take into consideration several criteria (Section 23), namely:
- the market value of the land at the date of notification (Section 4(1));
- the value of standing crops or trees on the land;
- losses incurred due to the severance of the acquired land from other land holdings of the interested parties;
- the value of structures and other property, movable or immovable, on the land, and lost income caused by the acquisition of the land; and,
- the costs associated with the requirement to relocate a residence or business.

6.6.2 National Policy for Resettlement and Rehabilitation of Project Affected Families

The Government of India (GoI) has been working since 1992 on the formulation of a national resettlement and rehabilitation (R&R) policy for project-affected families (PAF)[71]. The policy is a set of broad guidelines and executive instructions, and represents a minimum level of support for project-affected families. States that have R&R policies that exceed the provisions of the national policy are free to adopt their own R&R packages for projects.

The national R&R policy targets projects that displace significant numbers of people, namely 500 families or more in plains areas or 250 families or more in hilly areas, DDP blocks and areas mentioned in Schedules V and VI of the Constitution of India. The proposed rehabilitation grant and other monetary benefits are applicable to all project-affected families whether belonging to the Below Poverty Line (BPL) or non-BPL categories. Elements of the policy include:

- Loss of agricultural land or cultivable wasteland is compensated with land-for-land up to a maximum of 1 ha of irrigated land or 2 ha of non-irrigated land or cultivable wasteland, subject to the availability of government land in the district. Each PAF that has lost agricultural land also receives a one-time grant of Rs. 10,000/ per ha for land development and Rs. 5,000/ for agricultural production.

[71] In February 2004, the former Government announced the imminent adoption of the R&R policy as part of its elections platform (Hindustan Times, New Delhi, 26 February 2004). The following is based on this proposal.

- Loss of houses is compensated by the allotment of a homestead site of 500 m2 in rural areas and 75 m2 in urban areas. BPL families also receive a one-time grant of Rs. 25,000/ for house construction. Basic amenities and infrastructure are provided at resettlement sites.
- Financial assistance to help PAF to relocate and re-establish livelihoods includes shifting allowances (Rs. 5,000/), and construction of cattle sheds (Rs. 3,000/) and shops (Rs. 10,000/).
- "Loss of livelihood" financial assistance packages based on the Minimum Agricultural Wage (MAW) are provided to all PAF that lose all or significant portions of their land, as well as landless agricultural labourers and non-agricultural labourers.
- PAF that are members of tribal groups receive additional benefits, including financial assistance for loss of customary grazing and fishing rights; higher benefits if they are relocated out of their district; and, continuation of reservation benefits at resettlement sites for tribal PAF and Schedule Castes (SC) who enjoy those benefits in the affected areas.
- The policy establishes procedures for a participatory Review and Monitoring Committee and a Grievance Redress Cell at the project level. The former comprising representatives of SC/ST and women living in the affected area and other elected officials will monitor and review the implementation of the R&R plan or scheme. The latter under the Chairmanship of a Commissioner for Resettlement and Rehabilitation will hear grievances of PAF.
- In the case of inter-state projects, the Central Government is the competent authority for R&R. A National Monitoring Committee will monitor and review the R&R implementation.

6.6.3 State R&R Policies and Legislation

State governments have the power to legislate concerning the acquisition of land for public purposes, and to establish state-wide policies for resettlement and rehabilitation of project-affected people. Among states included in the PSIF II loan program, existing legislation and policies have been developed in the context of specific donor-funded water resources and road projects, and applied to other situations at the discretion of the government. This section briefly reviews these initiatives.

Andhra Pradesh

In Andhra Pradesh (AP), there is no official state-wide policy for resettlement and rehabilitation (R&R) of project-affected people. However, project-specific R&R policies have been adopted for the World Bank-funded Irrigation II Project, for various JICA-funded projects and by the National Agricultural Bank for Rural Development.

The Government of Andhra Pradesh (GoAP) is currently in the process of formulating a state-wide policy that will apply to all development projects regardless of source of funding[72]. The Irrigation and CAD Department (I&CAD) is responsible for this initiative, including consultations with a range of line departments, government agencies, NGOs and other stakeholders.

The proposed AP R&R policy advocates a rights-based, participatory approach to the identification of entitlements, as well as procedures for planning and implementation of compensation and livelihood restoration strategies The key principles of the proposed policy are that project-affected people (PAP) should be fully involved in the preparation of the R&R plan, and entitlements and strategies to assist AP to restore livelihoods should reflect their priorities and preferences.

Gujarat

The World Bank-funded Gujarat State Highway Program (GSHP) is the basis of the present R&R policy framework in Gujarat. It currently applies to state highway projects, as well as projects in other sectors. The following table 6.4 summarizes the entitlements and scope of compensation and assistance.

The R&R policy framework recognizes entitlements for losses experienced by individuals, households and communities who are affected by land acquisition and/or displacement. The basic

[72] Source of information: Meeting on 10 Feb. 2004 with K. Raju, I.A.S., Secretary to Government (Projects), Irrigation & C.A.D. Department.

principles espoused in the GSHP policy framework include:

- compensation for land and other assets at full replacement value based on current market prices; and,
- recognition of entitlements for titled and non-titled project-affected people. Specifically, the absence of legal title to land does not exclude Below Poverty Line (BPL) and other vulnerable households from other forms of assistance.

The policy framework operates within the existing legal context of the Land Acquisition Act (LAA). Any discrepancy between compensation as per the LAA and the replacement value is paid to PAP as resettlement assistance.

Table 6.4: Entitlement Matrix, Gujarat State[76] Highway Improvement Program

	ENTITLEMENTS	Types of Project Affected People					
		Outside Public Right of Way			Inside Public Right of Way		
		Title Holders		Tenants[73]	Squatters and Encroachers[74]		Tenants
		Vulnerable	Non Vulnerable	Vulnerable	Non Vulnerable	Vulnerable	Non Vulnerable
LOSS OF LAND AND OTHER ASSETS		Unit of Entitlement: Project-affected Household (PAH)					
1	Consultation, counseling regarding alternatives, and assistance in identifying new sites and opportunities.	YES	YES	YES	YES	YES	YES
2	Compensation for land at replacement cost, plus allowances for fees or other charges.	YES	YES	NO	NO	NO	NO
3	Advance notice to harvest non-perennial crops, or compensation for lost standing crops.	YES	YES	YES	YES	YES	YES
4	Compensation for perennial crops and trees calculated as annual produce value times remaining producing years.	YES	YES	NO	YES_S/NO_E	YES_S/NO_E	NO
5	Replacement or compensation for structures or other non-land assets.	YES	YES	YES	YES	YES	YES
6	Right to salvage materials from existing structures.	YES	YES	YES	YES	YES	YES
7	Shifting assistance (new housing must be available before people are made to move)[75].	YES	YES	YES	YES	YES	YES
9	Option of moving to resettlement sites or cluster, incorporating needs for shelter and livelihood.	YES	YES	YES	YES	YES	YES
LOSS OF LIVELIHOOD		Unit of Entitlement: Project-Affected Person (PAP)					
10	Rehabilitation and assistance for lost or diminished livelihood.	YES	YES	YES	YES	YES	YES
11	Additional support mechanisms for vulnerable groups in re-establishing or enhancing livelihood.	YES	NO	YES_V/NO_N	NO	YES	NO
12	Employment opportunities in connection with project, to the extent possible.	YES	YES	YES	YES	YES	YES
LOSS OF COMMUNITY STRUCTURE/FACILITIES		Unit of Entitlement: Project-Affected Group (PAG)					
13	Restoration and improvement of common property resources, such as public water pumps, sanitation and drainage facilities, shrines and temples, cultural heritage, etc.						
14	Provision for women's needs, particularly related to location of sources of water and firewood. Social forestry programs may be considered.						
15	Provision for safe space and access for business purposes, local transport, and public use.						
16	Safety measures for pedestrians, particularly children, and other non-motorized transport.						
17	Landscaping of community common areas in urban environments.						
18	Provision of roadside areas.						
19	Inclusion in existing government housing schemes.	YES	NO	YES_V/NO_N	NO	YES	NO

[76] Source: Lea International Ltd., 2002

Non-titled and other vulnerable households that are not eligible for compensation under the LAA are supported in other ways. All household members over the age of 14 years are eligible for assistance due to loss of livelihood. Additional measures are offered to members of vulnerable groups, including Scheduled Tribes, Scheduled Castes, women-headed households and Below Poverty Line (BPL) households.

The procedures set out in the GSHIP policy framework include a cut-off date for eligibility for compensation and/or assistance; a grievance and dispute resolution system; provisions for monitoring the implementation of R&R activities and to assess whether PAP are capable of restoring living standards; and, underlying the entire process, a participatory approach that involves PAP in key decisions and activities.

Karnataka

The Karnataka Resettlement of Project Displaced Persons Act, 1987 establishes a legislative framework for R&R for the State. This Act evolved from the World Bank-funded Upper Krishna Project (UKP), If the State Government decides that it is in the public interest, it may issue a notification that the provisions of the Act apply to any project (Section 9).

The scope of the Act encompasses compensation and rehabilitation of project-displaced persons including landowners, tenants and agricultural labourers Agricultural land is allocated to owners and tenants on the basis of the size and type (irrigated or non-irrigated) of acquired holdings. Agricultural labourers receive a minimum landholding and large families receive extra land, depending on the availability of land.

Homestead land is allocated to eligible displaced people on the basis of family size, The location of homestead land is decided in consultation with the displaced people, and should meet certain criteria such as maximum distance from replacement agricultural land and the availability of water, access to roads and suitability of land for constructing houses. New homestead lands include the provision of public utilities, amenities and services.

Cash compensation is paid to households that opt to self-relocate or in cases where land is not available. The value of compensation is established through a process of negotiation (consent award) or as per the Land Acquisition Act.

Rehabilitation packages are provided to people whose livelihoods are affected and to other vulnerable groups. These packages include assistance to improve existing livelihoods or to shift to new income-generating activities.

Madhya Pradesh

The Madhya Pradesh Model Resettlement Policy, 2002, as its title suggests, provides a model for Government departments and agencies to review and adjust their own policies. The scope of the Policy goes beyond the Land Acquisition Act to identify provisions for project-affected people (PAP) to ensure that living standards are improved following resettlement. The Policy has been disseminated to all Government departments and agencies, although there is no mechanism to monitor whether or how the policy is being implemented.

In brief, compensation and rehabilitation packages include:

- Loss of agricultural land: Land-for-land compensation is preferred, free of stamp duties and land registration costs. Eligible PAP include landowners, agricultural labourers, landless people and people displaced from state land and forest reserves, but not encroachers.
- Loss of housing: Cash compensation equal to the estimated cost to construct a new house is paid to PAP including encroachers who lose their housing. Resettlement sites are provided with necessary social and physical infrastructure.
- Loss of livelihood: PAP are assisted in various ways to restore livelihoods including shifting allowances; loans at concessionary interest rates; allocation of shops at resettlement sites; training programs; and, preference for employment for construction and/or operation of the project.

Other provisions of the Policy include:

- Scheduled Tribes (ST), Scheduled Castes (SC) and small farmers receive special attention. ST/SC benefits also continue in the new location.
- Other vulnerable PAP such as Below Poverty Line (BPL) families and the landless receive housing under the Indira Housing Scheme.
- PAP should be resettled together in new locations in order to maintain social networks.
- Religious and archaeological sites will be protected and/or damages will be compensated.

The Law of Resettlement of Project Displaced Persons in Madhya Pradesh, 1985, established compensation and rehabilitation for "displaced" persons affected land acquisition for irrigation, power and public utility projects.

6.6.4 IL&FS Resettlement Policy Framework

The IL&FS resettlement policy framework will be applied to all PSP projects financed through the PSIF II loan facility. The policy framework is based on the IL&FS 1995 Environmental and Social Report (ESR), and accepted by the ADB during appraisal of the PSIF II loan. The IL&FS policy framework endorses the following objectives:

- address the legitimate concerns of relevant stakeholders, especially persons affected by the project;
- avoid or minimize resettlement due to land acquisition through appropriate technical and management measures, involving the affected communities;
- ensure protection of marginalized and vulnerable groups, including the economically and socially disadvantaged, the elderly, women, children, physically handicapped and indigenous people; and,
- ensure responsible resettlement and rehabilitation of affected persons through sustainable livelihood options that at least restore, if not improve, their standard of living.

Compensation and rehabilitation packages encompass seven categories of entitlement: losses of land; structures; livelihood, trade or occupation; access to common resources and facilities; and, standing crops and trees. They also include losses during transition of displaced persons or establishment; and, losses to host communities.

- Compensation for loss of agricultural land should be based, to the extent possible, on the principle of land-for-land. In the event of the unavailability of land, cash compensation should be based on replacement value. Any difference in the value of acquired land between the market value as determined by the Land Acquisition Act and an agreed replacement value will be paid as resettlement assistance.
- Compensation for loss of homestead land and housing will also be based on replacement value. A family losing housing will receive alternative housing that meets minimum national housing standards, or cash compensation if the family prefers self-relocation. Compensation for commercial structures should ensure that the family's source of income is not adversely affected.
- Rehabilitation packages should be provided to enhance social conditions in project areas and meet the objectives for social development.

The policy framework also makes provision for full consultation with and disclosure to affected people; implementation of a grievance redress mechanism; and, R&R monitoring and evaluation.

6.7 Cross-Cutting Social Issues in Infrastructure Development

Cross-cutting social issues associated with infrastructure development include the impacts on women including human trafficking; child labour; indigenous peoples; and, increased vulnerability to HIV/AIDS and other communicable diseases. While the PSIF II requirements at this stage address relocation and resettlement issues, the following issues are also critical from an implementation perspective and are rapidly becoming key concerns under other donor funded projects.

6.7.1 Gender Issues

Women in India combine responsibilities to meet the basic needs (food, water, child care) of their families with high levels of participation in paid and unpaid economic activities, particularly in rural and peri-urban areas. Infrastructure improvements such as water supply and sanitation can benefit women through significant time and energy savings. Better access to water frees women for income-generating activities, including reliable water for gardening, cash cropping and livestock raising activities. Reliable, safe sources of water and sanitation improve family health and hygiene conditions and reduce the time women spend on caring for the sick. Reduced time spent collecting water also creates opportunities for children, particularly young girls, to attend school. The participation of women in water user groups and training and employment of women for operation and maintenance of water supply and sanitation systems empowers women and provides employment opportunities in the formal sector. Improved transportation options created by UMT projects or, indirectly, by road construction and improvement projects can facilitate women's access to markets and health and education services.

However, women are vulnerable to various negative impacts associated with infrastructure projects, particularly where resettlement is involved. Economic and social dislocation tends to exacerbate existing gender disparities between women and men. Some of these include[77]:

- Where legal and social systems deny women property rights, they may not receive compensation for acquired land to which they had usufructory rights. Also, they may not share in tenure security for replacement land and housing allocated to the household.
- Rehabilitation packages that target cash assistance and training to heads of household frequently limit opportunities for women.
- Women's lower education and literacy levels also limit their choices for livelihood options unless they are offered appropriate types of assistance and training.
- Displacement increases the burden on women to meet basic household needs unless critical issues are addressed in resettlement schemes, for example, convenient access to safe water and fuel; the affordability of water supply, irrigation or transportation; and, the limited mobility of women.
- Dislocation can affect women more than men in terms of the breakdown of family, community and other social networks. As well, women and female children frequently experience reduced nutritional and health status due to limited household resources.
- The increased economic and social stress that occurs due to resettlement is borne more by women in the forms of increased domestic violence, sexual abuse and prostitution.

Women have increased opportunities for employment on infrastructure projects, particularly where labour-intensive techniques create a demand for unskilled labour. The majority of female workers, however, are engaged by construction contractors and come from outside the project area. They are housed in construction camps, making it imperative to monitor the construction camps as well in terms of safe and adequate housing facilities; provision of day crèche facilities; availability of female health worker in the health centre set up contractor; exemption of mothers with infants from night shifts; mechanisms in place to check sexual and other forms of exploitation; etc.

6.7.2 Child Labour Issues

India has the largest number of child labourers in the world. Child labour is an integral element of a cycle of poverty involving unemployment, under employment and low wages. The fact that children are a source of cheap labour and can be easily exploited, as well as frequent displacements and migration among poor households, are some of the myriad reasons for child labour. Child labourers work in unhealthy and hazardous conditions in jobs like loading, catering, waste recycling and dock work. Even in the formal sector, few industries and processes prohibit child labour.

Child labour persists despite safeguards in the Constitution such as Articles 24, 39(e) and 39(f); legislation such as the Child Labour (Prohibition and

[77] ADB, 2003. *Gender Checklist: Resettlement.*

Regulation) Act, 1986; and, Government ratification of the UN Convention of the Rights of the Child (1989). For example, the existing legislation fails to address the agrarian sector which constitutes 85 percent of child labour in India.

In infrastructure development, possible avenues for child labour include construction (though insignificant), petty jobs in construction camps and commercial establishments such as tea shops, vehicle repair shops, road side eateries, etc., that exist near or are attracted to construction camps. These children frequently work long hours for very small amounts of money. Working conditions can be particularly hazardous for children, and injurious to their health.

6.7.3 Scheduled Tribes and Schedules Castes

In 1991, Scheduled Tribes (ST) and Scheduled Castes (SC) constituted, respectively, 8 and 16.5 percent of the total population of India. In the states included in the PSIF II, the distribution varies.

	ST	SC
Andhra Pradesh	8.0	15.9
Gujarat	14.9	7.4
Karnataka	4.2	16.3
Madhya Pradesh	23.2	14.5
India	**8.1**	**16.5**

Source: Sheladia, 2001

Due to historical deprivations and their limited access to stable means of production and livelihood, Scheduled Tribes and Scheduled Castes are protected by the Constitution. Development efforts since Independence have included a variety of initiatives, such as tribal area development plans, affirmative action in employment and other social opportunities. They have produced considerable benefits by bringing ST closer to the mainstream population, particularly in the plains areas of India.

Nonetheless, ST and SC are considered to be vulnerable for a number of reasons. Scheduled Tribes live primarily in remote areas where they rely on subsistence agriculture on poor land. They are politically and administratively isolated, and have poor accessibility and little or no community services and infrastructure. Scheduled Castes are vulnerable due to social exclusion and economic exploitation.

In infrastructure and other development projects (industry, urban development, etc.), the benefits accruing to the ST and SC population are generally lower than other social groups that have better access to basic amenities, land and other means of production or livelihood. This is particularly true in the context of land acquisition and the eviction of landless squatters and encroachers from government land.

6.7.4 HIV/AIDS

In 2002, nearly 5 million people in India were infected with HIV/AIDS. Within India, this represents less than 1 percent of the total population, although there are concerns the incidence may reach 5 percent – or over 35 million people – by 2005. In the region of South and Southeast Asia, India represents 70 percent of the incidence of HIV/AIDS, and has one of the highest annual rates of growth.

The distribution, however, is very uneven across the country. The highest prevalence rates are in the southern-most states. Among people with sexually transmitted diseases (STD) testing positive for HIV, 30 percent are in Andhra Pradesh and 14 percent are in Karnataka. Gujarat and Madhya Pradesh have, respectively, moderate and low prevalence rates, with fewer than 10 percent of STD patients testing positive for HIV/AIDS.

Vulnerability to HIV/AIDS is closely linked to increased mobility, with greater risks of infection among people who travel frequently for or in search of work. As transport infrastructure develops, more people are employed in the regional and international transport of goods. Long-distance truck drivers, for example, are on the road for most of the year. Construction workers who migrate to different infrastructure projects, as well as the workers attracted by employment opportunities also spend long periods of time away from their spouses. These groups engage in frequent multi-partner sexual behaviour with commercial sex

workers and other partners. They are at heightened risk for contracting HIV and, when they return home, for spreading HIV/AIDS to their wives and children, that is, into the general population.

6.8 PSP Projects at State Level

In the context of PSP and other development projects, the States of Andhra Pradesh, Gujarat, Karnataka and Madhya Pradesh have adopted various approaches and strategies to the issues of land acquisition and R&R, including innovative strategies that respond to the requirements of the development of infrastructure in urban and peri-urban areas.

6.8.1 Responsibility for land acquisition

In PSP concession agreements, the State Government has the responsibility to acquire land required for development. However, in the PSIDF II States, the line departments (LD) and nodal agencies that sponsor and/or facilitate PSP are not directly involved in the process or procedures of land acquisition, or activities related to resettlement and rehabilitation (R&R) of project-affected people (PAP).

At the State level, land acquisition for public purposes is the mandated role of the Revenue Department. Specifically, land acquisition activities are carried out by the District Collector (Deputy Commissioner in Karnataka) in the district(s) where land is to be acquired. Land acquisition for PSP projects in the PSIF II States is carried out by the Revenue Department.

6.8.2 Legal and policy framework

In India, the Land Acquisition Act, 1894 enables Government to acquire private land for public purposes and for companies. The Act is the basis on which the State Governments in the PSIF II States acquire land for PSP projects. Within the framework of the Act, only titled owners of land and other assets situated on that land are entitled to compensation for the land they occupy or use.

A national resettlement and rehabilitation (R&R) policy has been under development since 1992, at the same time that PSIF II States have or are in the process of developing state R&R policies. In discussion with representatives of LD and nodal agencies in sectors targeted for PSP in the PSIF II States, most informants were either unaware of existing National and State policies related to R&R, or of how they applied to PSP projects.

6.8.3 Consent award

The consent award is provided for under Section 11(2) of the Land Acquisition Act, and permits the District Collector (or Commissioner in Karnataka) to reach a negotiated agreement with landowners regarding the amount of an award when the Government acquires land for public purposes. This approach can expedite the acquisition process for PSP projects: by limiting the rights of project-affected people (PAP) to refer consent awards to the courts, the consent award reduces delays and also contributes to lower land acquisition costs.

In Karnataka, a Government circular stipulates that consent award should be the norm for establishing compensation awards. In order to ensure that amounts agreed under consent award reflect true market value, any award that is 20 percent more or less than the amount as determined under the provisions of the Land Acquisition Act must be referred to the Government for approval. The objective is to ensure that all project-affected people receive fair compensation without creating a windfall profit for some.

In other PSIF II States, consent award is used, but not necessarily on a consistent basis.

6.8.4 Transfer of Development Rights

The Government of Karnataka has recently made significant changes to rules governing urban infrastructure projects, and is proposing additional changes in the Karnataka Town and Country Planning and Certain Other Laws (Amendment) Bill, 2004[78]. The purpose of these changes is to facilitate land acquisition in urban areas, and to improve the

[78] Deccan Herald, 18 February 2004. *Govt goes for transfer of rights to acquire land.*

opportunities for resettlement and rehabilitation of project-affected people.

The changes promote the concept of Transfer of Development Rights (TDR). Under this concept, a landowner who voluntarily surrenders his land for public purposes will be accorded additional development rights in terms of floor area ratio equal to 1.5 times the area of the acquired land. These development rights may be used on the remaining land holding, elsewhere in the city or sold. The landowner will also be eligible for the same floor area that was available on the original site although a portion has been surrendered for public purposes.

- Similar strategies have been successfully adopted for the Mumbai Urban Transport Project. This experience has demonstrated that in high-density urban and peri-urban areas where there is a high demand for development, the TDR approach can expedite land acquisition for urban mass transit and other large-scale PSP projects by avoiding litigation. In addition, as in Mumbai, the TDR approach has been used as an incentive for private developers to build new housing for displaced persons in return for increased development rights on remaining or other land.
- In discussions with representatives of LD and nodal agencies involved for PSP development in the PSIF II States, most informants were not familiar with the TDR concept.

6.8.5 Resettlement and rehabilitation (R&R) packages

Notwithstanding the limitations of existing National and State policies, some PSP projects in sectors targeted by the PSIF II have addressed R&R issues beyond the provisions of the Land Acquisition Act. Notable examples are the Bangalore Mysore Infrastructure Corridor (BMIC) Project[79] and the Ahmedabad Mehsana Road Project (AMRP).

The PSIF II loan facility is targeting specific sectors that, in some cases, do not entail extensive land acquisition or the need to relocate and rehabilitate people. For example, PSP projects to upgrade state highways may include the construction of bypasses and bridges, but most works can be undertaken within existing ROW. Even large projects such as the Gangavaran Port in Andhra Pradesh do not require acquisition of private land if government lands are available

The strategies adopted in these PSP projects focus on physical assets – particularly land and structures – that are lost due to land acquisition for public purposes. They do not encompass the loss of livelihoods that frequently results from loss of land holdings, or the displacement of housing or economic activities. Moreover, in most instances of PSP projects discussed in the PSIF II States, the process of land acquisition is carried out as per the Land Acquisition Act without specific resettlement and rehabilitation packages for titled or other affected people.

In Karnataka, inter-departmental committees may be created for public sector development projects. In the context of these committees, the role of the Revenue Department is to suggest and, if agreed, prepare appropriate rehabilitation packages for project-affected people. However, line departments can also undertake projects without this input from the Revenue Department.

6.8.6 Recovery of costs

The costs of land acquisition and resettlement and rehabilitation (R&R) of project-affected people for PSP projects are dealt with in the following manner:

- Andhra Pradesh: Land acquisition and R&R costs are not included in the concession agreement, but may be recovered through lease and/or service charges.
- Gujarat: Land acquisition and, where applicable, R&R costs are recovered by the Government through lease and/or service charges.
- Karnataka: Land acquisition and, in some cases, R&R costs are assumed by the Government. However, KIADB recovers some (or all) of these costs through service charges.
- Madhya Pradesh: Land acquisition and, where applicable, R&R costs are recovered by the

[79] Further information on R&R policies and provisions for the BMIC are included in the BMIC case study, Volume 5.

Government through lease and/or service charges.

6.9 Integration of Social Resettlement Issues in PSP Projects

Land acquisition and assembly will become increasingly important aspects of many PSP projects. This will occur as a result of the scale of development such as the construction of new roads and UMT infrastructure, large-scale industrial water supply systems and ports, as well as other initiatives for air transport, industrial development and other facilities. It will be particularly critical as the development of infrastructure in priority and other sectors increasingly occurs in urban and peri-urban areas where land assembly will entail many landowners at the same time that land acquisition affects greater numbers of people who do not have secure or clear title to the affected land. Successful implementation of these projects will require that Government agencies adopt pro-active approaches to the issues of land acquisition and resettlement of all project-affected people.

This section recommends steps to integrate social resettlement issues into PSP project. Due to the nature of the issues, the recommendations distinguish strategies and policies regarding titled landowners and other project-affected people. The discussion also links the integration of social resettlement issues to other recommendations for institutional frameworks and implementation of PSP projects in the present document.

6.9.1 Use of Existing Legislative Framework for Land Acquisition

The Land Acquisition Act and other existing legislation provide a suitable legislative framework for the acquisition of land from titled landowners. In particular, nodal agencies and line departments responsible for promoting PSP in the development of infrastructure should make effective use of tools such as the consent award and, where relevant, transfer of development rights (TDR).

Consent award

A significant opportunity exists in the Land Acquisition Act (Section 11(2)) for the use of the consent award to determine compensation for titled landowners for land acquired for public purposes. Used routinely in Karnataka and in some instances in other PSIF II States, the consent award process has the following benefits:

- transparent and participatory process: owners of land designated for public purposes can negotiate together with Government officials to determine the acquisition price;
- equity: the results generally reflect true market value and, as a fail safe, there are provisions for review of awards that diverge significantly from what would be achieved under the Act;
- expediency and cost effectiveness: it avoids the delays and extra costs that are often associated with awards made under other provisions of the Act.

The use of the consent award can facilitate the acquisition of land in timely fashion necessary to ensure that access to land does not become an impediment to developer interest in PSP projects. Moreover, it can contribute to land acquisition costs that are not inflated due to the costs of court proceedings or undue delays.

Therefore, it is recommended that nodal agencies and line departments involved in PSP projects adopt the consent award as the preferred method for acquiring land.

Transfer of Development Rights (TDR)

The development of infrastructure in India has demonstrated the effectiveness of new incentives to facilitate land acquisition. The transfer of development rights (TDR) is a powerful tool as demonstrated in the MUTP II project in Mumbai and in recent initiatives in Karnataka (see also, 1.3.4 above). The incentives are premised on ensuring that landowners participate in the benefits that result directly or indirectly from the PSP investments:

- if a landowner agrees voluntarily to the acquisition the landholding, s/he will receive in return higher development rights usually

expressed in terms of permissible Floor Space Index (FSI);
- this transfer of development rights (TRD) to residual or other land can be developed at the higher FSI, or sold enabling the landowner to realize a profit.

The TDR incentive derives from the provisions of town planning legislation. It has been developed for application in the context of dense urban settlements where land is scarce and land values are high, and where incentives are important to facilitate land acquisition for urban mass transit (UMT), roads or other infrastructure projects. The application of the TDR concept has also been successful, in the MUTP II project, as a means to encourage private developers to construct new housing for households displaced by the UMT project.

In general, the TDR concept does not apply for infrastructure projects in rural areas. For example, owners whose land is acquired for road projects are often encouraged to agree to the acquisition because their remaining holdings will have higher values due to improved transportation conditions. Nonetheless, the TDR and FSI concepts may be applicable and effective as incentives to facilitate acquisition of rural land, for example, when township development accompanies new highway construction.

Therefore, it is recommended that nodal agencies and line departments involved in PSP projects actively pursue the use of TDR incentives where applicable to the circumstances of land acquisition for PSP projects.

6.9.2 *R&R Policy Framework for PSP and Other Development*

The proposed National and existing State resettlement and rehabilitation (R&R) policies go beyond the provisions of the Land Acquisition Act, and strengthen the basis of assistance to non-titled and other vulnerable groups that are adversely affected by land acquisition. The scope of these policies encompasses entitlements to compensation for lost non-land assets, such as structures and crops, as well as provisions for assistance to restore livelihoods.

The proposed national policy focuses on large-scale projects, with a minimum threshold for its application of 500 or more families displaced en masse in plain areas and 250 or more families in hilly areas, DDP Blocks and areas mentioned in Schedules V and VI of the Constitution. Existing State policies have evolved from donor-funded projects and their application to other development is, in large measure, discretionary.

Nonetheless, it is recommended that nodal agencies and key line departments that promote PSP projects in the priority and other sectors endorse and adopt these policies as the basis for compensation and assistance to project-affected people who are not titled landowners. This approach will align PSP development in India with international best practice, as well to conform to the access criteria for the PSIF II loan. The principal issues and benefits include:

- predictability: public and private sector proponents need to know what is required when PSP and other projects entail the displacement of non-titled and vulnerable groups;
- consistency: people who are affected by land acquisition for PSP development should have consistent rights and entitlements;
- transparency: the criteria and procedures for resettlement and rehabilitation should be known and agreed by all parties; and
- acceptability: the scale and sensitivity of issues related to the displacement of non-titled and other vulnerable groups require that PSP proponents

The remainder of this section sets out the objectives and key provisions of an effective and equitable R&R policy for PSP projects.

R&R objective

The overall objective of an R&R policy is ensure that all project-affected people are able to maintain and, preferably, improve their pre-project living standards and income-earning capacity through compensation for the loss of physical and non-physical assets and, as required, other assistance and rehabilitation measures.

Eligibility and entitlements of project-affected people

All people who occupy land to be acquired on or before an agreed date are eligible for inclusion in an R&R program. They are entitled to compensation and/or assistance for the loss of assets and income depending on their circumstances. Clear criteria and definitions are required to identify all individuals, households, communities and other groups who are directly or indirectly affected by land acquisition for PSP projects.

Compensation for lost assets

The basic R&R principles regarding compensation for lost assets are:

- Project-affected people receive compensation for assets to which they hold legal title. In addition to titled landholders, other project-affected people are entitled to compensation for non-land assets.
- Compensation is based on the replacement value of affected assets, without deduction for land transaction fees, depreciation factors or other charges.
- Project-affected people must be fully compensated prior to relocation.

The National and some State policies focus on the allocation of replacement land for lost agricultural and homestead land. This may not be possible in all situations, and may not be appropriate for acquisition of urban land. Therefore, a policy framework for PSP and other development must also address cash compensation for lost assets.

The replacement value for land and structures can be determined by using:

- Land: a participatory negotiated process, or consent award, as per Section 11(2) of the Land Acquisition Act and/or the use of the TDR concept;
- Land and/or structures: an accepted valuation method by independent and licensed assessors, as per the Land Acquisition Act.
- If the replacement of value of affected assets exceeds the provisions of the Land Acquisition Act, the difference is paid to project-affected people in the form of Resettlement Assistance (RA).

Assistance for loss of livelihoods

A major strength of the National and State policies is the endorsement of rehabilitation assistance to project-affected people for the loss of livelihoods when land is acquired. The focus of these policies is groups that are considered vulnerable, namely, non-titled and other BPL and ST/SC families, female-headed households and households with physically or mentally handicapped members.

As a general principle of an R&R policy, vulnerable project-affected people, namely those who are at risk of impoverishment or other adverse impacts affecting their livelihood are entitled to rehabilitation assistance. Other project-affected people whose productive capacity or income levels are not adversely affected will be compensated for lost assets, but will not be entitled to rehabilitation assistance. Moreover, the definition of the type and scope of rehabilitation assistance should target project-specific needs, and promote strategies that where project-affected people share responsibility for the outcomes.

The application of the IL&FS policy framework to the Ahmedabad Mehsana Road Project targets project resources towards households and groups that are vulnerable as a result of the project's requirements for land acquisition. A project-specific approach is recommended to determine eligibility for rehabilitation packages for PSP projects.

Other policy issues

An effective R&R policy for PSP projects must also make commitments to participatory planning and implementation of R&R activities, a grievance and dispute resolution mechanism and procedures for monitoring and evaluation of R&R activities and their outcomes. The IL&FS ESR and R&R policy framework for the PSIF II as well as the provisions of the new national policy and several state policies provide guidance on these matters.

6.9.3 Overview of Land Acquisition and R&R in PSP Project Cycle

The stages for preparation and implementation of PSP projects, as set out in Chapter 4, include:

- Project identification
- Evaluation of PSP mode
- Project preparation
- Private developer selection
- Project implementation

The integration of social resettlement issues into the PSP project cycle focuses primarily on the project preparation and implementation stages, although aspects of these issues arise in all stages of the project cycle. This section summarizes the integration of land acquisition and resettlement and rehabilitation (R&R) issues into each stage. The following section will present more detailed guidelines for land acquisition and R&R activities.

Project Identification

The identification of potential PSP projects may be made by any part of the State government, including nodal agencies and line departments. In addition, as in Gujarat and recommended in Chapter 5 for other States, nodal agencies and line departments may commission a consultant study to evaluate potential PSP projects in the priority and other sectors. The consultants should be asked to work closely with line departments and other relevant public bodies to identify the infrastructure projects that are appropriate for implementation through PSP over a five to ten years. Specific criteria should be set out in the terms of reference. In Gujarat, for example, the framework for the ongoing consultant's study is the updating of Vision 2010.

The development of infrastructure through the PSP mode is an important strategy to promote and support economic development. Within this context, the scope, complexity and costs of land acquisition requirements may influence the evaluation of projects that are suitable for implementation in the PSP mode. Therefore, it is recommended that these issues be included in evaluation criteria for prioritization of PSP projects:

- The overall scope of land acquisition in terms of area and numbers of properties will be a significant determinant of the timeframe for preparation and implementation of PSP projects.
- The numbers and types of stakeholders affected by land acquisition will define the complexity of the project preparation process.
- Land acquisition costs, particularly in the cases of large-scale or urban-based PSP projects, may have major impacts of the financial feasibility of PSP projects.

Evaluation of PSP Mode

Chapter 4 recommends that the PFI Unit should evaluate all potential PSP projects requiring some form of state support, using three criteria: impact on the budget, value for money, and risk allocation. Moreover, the line department under which the project falls should be responsible for assembling the information, so that the appropriate line department takes "ownership" of the project from the start.

In the PSP mode, the States will be responsible for the land acquisition for infrastructure projects. In large-scale projects and/or projects located in urban and peri-urban areas, the extent of government financial support due to the costs of land acquisition and/or the equity contribution through land may have a significant impact on the FIRR/EIRR ratio.

Within the framework recommended in Chapter 4, the Rapid Assessment should identify "order of magnitude" estimates for land acquisition and resettlement components of the proposed PSP projects derived from the experience with similar infrastructure projects. For example, these components may represent 5 percent or less of construction costs for a project to upgrade state highways, while larger projects will require a larger financial commitment by States for the costs to acquire land and resettle and rehabilitate project-affected people.

Project Preparation

The Project Preparation stage requires a detailed Project Feasibility Analysis and, in some cases, a Detailed Project Report. This stage entails detailed technical, financial, economic, social and

environmental and other studies that provide a complete understanding of the requirements for project implementation and the roles and responsibilities of the government and private sector partners. Land acquisition and resettlement and rehabilitation of project-affected people are central issues of the project preparation stage.

In negotiating PSP projects, the State government will acquire land according to the provisions of the Land Acquisition Act, and transfer it to private sector developers through long-term lease or other arrangements. The responsibility for overall management of the land acquisition and R&R activities lies with the nodal agency or line department under which the PSP project falls, in coordination with other line departments and public bodies. The major steps include:

- Assessment of the scope of land acquisition and the key stakeholders for land acquisition and resettlement and rehabilitation of project-affected people.
- Formulation of project-specific policies for land acquisition and R&R based on the Land Acquisition Act and national and state R&R policies.
- Detailed planning for, and acquisition and assembly of the required land. The timing of the land acquisition may precede the selection of the PSP private developer, as a result of nodal agency land banking or to meet the specific needs of a PSP project. Timely land acquisition will facilitate developer interest in infrastructure projects and will avoid undue delays in the implementation of PSP projects.
- Initial planning for, and identification of objectives, criteria and responsibilities for resettlement and rehabilitation of project-affected people. Detailed planning and implementation of R&R will be the responsibility of the private developer following negotiation of a concession agreement.
- Development of a monitoring plan for land acquisition and R&R, including public and private sector responsibilities for its implementation.

Guidelines for detailed planning and implementation of land acquisition and R&R activities are presented in Section 6.9.6 below.

Private Developer Selection

As part of the process to select the private developer for a PSP project, a draft concession agreement should stipulate the roles and responsibilities of the State government and the developer for land acquisition and R&R associated with the project. The scope of the specifications should include:

- The responsibilities of the sponsoring line department or nodal agency, the Revenue Department and other public bodies for land acquisition, and the modalities of transfer of land to the developer.
- The responsibilities of the private developer for resettlement and rehabilitation of project-affected people, including preparation and implementation of a Resettlement Action Plan (RAP).
- Responsibilities of the State government and the private developer for the costs associated with land acquisition and R&R.

Schedule 6 of the Visakhapatnam Industrial Water Supply Project, for example, can serve as a model for the identification of roles and responsibilities for land acquisition and R&R in PSP concession agreements.

Project Implementation

Where required, resettlement and rehabilitation of project-affected people will be an important activity during the project implementation stage. Project implementation is the responsibility of the developer, monitored by the government. Monitoring may most efficiently be undertaken by the nodal agency responsible for project preparation, since that organisation should be fully familiar with all aspects of the project and the concession agreement. The guidelines presented in the Section 6.9.6 address key R&R activities during the project implementation stage.

6.9.4 Institutional Framework

Effective institutional arrangements for PSP participation in the development of infrastructure are dependent on three key conditions. As set out in Chapter 5, they are:

- Sustained political commitment
- Clear responsibilities during the project cycle
- Single window agency for clearances

This section examines the applicability of these conditions to the successful integration of social resettlement issues in PSP projects. It also suggests several strategies to facilitate land acquisition and R&R activities during the project preparation stage and the potential role of NGOs during project preparation and implementation stages.

Political Commitment to Social Resettlement Issues

Due to the complexity of PSP projects, the political support of senior government officials including the Chief Minister is important to address policy and other issues that arise, and facilitate timely implementation of PSP projects. Moreover, the institutional arrangements within modal agencies and line departments responsible for PSP projects must accommodate the practice of rotating senior officers to ensure continuity throughout the project cycle. These issues affect the successful integration of social resettlement issues in PSP projects.

The Land Acquisition Act constitutes the legislative basis for land acquisition required for PSP projects. It defines policies and procedures for acquisition and compensation of titled landowners. Nonetheless, the endorsement by senior government may be necessary to establish policies for PSP projects to use of the consent award and other innovative approaches such as the transfer of development rights that can expedite land acquisition for large projects and for projects that occur in urban and peri-urban areas.

Moreover, the political commitment by senior government including the Chief Minister will be essential to endorse the application of national and state policies for the resettlement and rehabilitation of people displaced or otherwise affected by land acquisition for PSP projects. The continuity of this political commitment and the institutional arrangements must also be maintained throughout the project cycle to ensure that all project-affected people, and particularly the landless and other vulnerable groups, are assisted to restore livelihoods and living standards in an equitable, transparent and accountable manner.

Clear Responsibilities During the Project Cycle

As discussed above, the project preparation and implementation stages of the project cycle are the critical stages at which social resettlement issues are addressed in the development of PSP projects. Nonetheless, land acquisition and R&R issues must also be recognized within the context of the primary objectives of other stages of the project cycle.

Throughout the project cycle, the nodal agency or line department responsible for the PSP project will be the key agency for integration of social resettlement issues. However, the nature of their role as well as the delineation of the responsibilities of other agents is critical to ensure that these issues are adequately addressed.

- During the project identification stage, the nodal agency or line department should ensure that land acquisition issues are included in the evaluation of infrastructure projects that are suitable for implementation using the PSP mode. This can be done through TOR for the planning process of the nodal agency or line department; or, through the identification of TOR and the management of consultant studies commission by the nodal agency or line department.
- During the evaluation of the PSP mode, the nodal agency or line department will be responsible to provide to the PFI the necessary information to incorporate land acquisition and R&R requirements into the assessment of the FIRR/EIRR ratio and other criteria in the Rapid Assessment process.
- The line department or other organization designated as the nodal agency for the project preparation stage of the PSP project will have, as part of its explicit mandate, the responsibility to coordinate and manage the work required to carry out detailed planning for land acquisition and R&R of project-affected people. In instances where the project preparation work is carried out by consultants, the nodal agency will be responsible for preparation of clear TOR regarding land acquisition and R&R. The nodal agency will also play a key role in consulting and coordinating with the Revenue Department and other public bodies involved in the process of land acquisition and R&R, particularly as it

relates to the implementation of land acquisition. Several proposals are made below to facilitate this coordinating role.

- An outcome of the project planning stage for land acquisition and R&R will be the identification of requirements for specifications for the bidding process for selection of the private developer. The nodal agency should be responsible to ensure that these specifications are incorporated in the request for proposals from private developers.
- Project implementation is the responsibility of the developer, monitored by the government. Monitoring is most efficiently undertaken by the nodal agency responsible for project preparation, since that organization is fully familiar with all aspects of the project and the concession agreement.

Single Window Agency for Clearances

PSP projects will involve the Revenue Department to acquire land as per the Land Acquisition Act. In addition, a variety of other line departments and public bodies may be involved in the R&R strategies to assist project-affected people. Throughout the land acquisition and R&R process, numerous approvals and clearances will be required. Therefore, as recommended in Chapter 5, the Project Coordinator at the nodal agency will provide day-to-day liaison with the developer on matters related to land acquisition and R&R; and, will coordinate with and oversee Project Coordinators from other departments involved in providing the necessary clearances within their departments in accordance with an agree timetable.

The remainder of this section presents suggestions for strengthening the institutional capacity of nodal agencies or line departments to address and integrate social resettlement issues into PSP projects.

Designation of a Land Officer as Competent Authority for Land Acquisition

Under Section 11(2) of the Land Acquisition Act, a nodal agency or line department can designate a Land Officer as a competent authority to acquire land for public purposes including the preparation of PSP projects. The APIIC in Andhra Pradesh and KIADB in Karnataka have used this provision of the Act to designate a Land Officer and to acquire land for a land bank for PSP projects in the State[80]. Other States should evaluate this approach as a means to facilitate land assembly for PSP projects in the priority and other sectors.

Land Acquisition Committee

To facilitate the process of land acquisition for PSP projects, it is suggested that the responsible nodal agency or line department establish a Land Acquisition Committee for PSP projects. The head of this committee will be the Project Coordinator or Land Officer reporting to the Project Coordinator; or, the responsibility can be delegated to the Revenue Department with reporting responsibilities to the Project Coordinator. Other members of the committee will include District Collector(s) in areas where land is to be acquired.

The mandate of the Land Acquisition Committee is project-specific, with particular responsibility for activities to support the State responsibility to acquire land for transfer to private developers for PSP projects. Specifically, its functions include:

- procurement of private and public lands required for the project, as per provisions of the Land Acquisition Act;
- timely allocation of replacement land and/or payment of cash compensation to titled owners for land, structures and other assets;
- assistance to affected landowners to relocate and re-establish in new locations prior to the handover of lands to the private developer; and,
- periodic monitoring and review of the land acquisition process, and reporting to the Project Coordinator on allocation of resources and land acquisition outputs.

Resettlement and Rehabilitation (R&R) Committee

Similarly, to facilitate the implementation of R&R activities during the project implementation stage of PSP projects, it is suggested that a Resettlement and Rehabilitation (R&R) Committee be created. The R&R Committee should be headed jointly by the Project Coordinator and the private developer; or, as agreed, by the private developer. The members of the committee will be representatives

[80] The NHAI model is also useful in this context.

of organizations involved in the R&R activities including line departments and other state-level public bodies, local government(s) in the areas where R&R will occur and NGO/CBOs.

The overall mandate of the R&R Committee is project-specific, to ensure adequate and appropriate liaison between the Project Coordinator and private developer, as well as other State, local and non-governmental organizations involved in R&R aspects of the PSP project. Specifically, its functions include:

- review and approval of project-specific R&R policies, procedures and plans, and ensuring timely implementation of R&R plans by obtaining approvals as required;
- establishment and implementation of procedures for consultations with project-affected people and grievance redress mechanisms;
- management of R&R field work, including the census and publication of list of eligible project-affected people;
- overall guidance and leadership for resettlement and rehabilitation of project-affected people, including identification and implementation of rehabilitation assistance strategies and ensuring proper use of R&R grants and/or loans; and,
- management of internal and external M&E of R&R activities, and remedial measures as necessary.

Role of NGOs in R&R Planning and Implementation

In India, there is extensive experience with using NGOs to plan and implement R&R programs. There are many different types of NGOs in India from advocacy groups to micro-credit/social development to R&R specialist NGOs for project implementation. Some of the most active NGOs have been engaged for R&R of slum dwellers, for example, in the MUTP-II in Mumbai and the Sabarmati River Development Project (SRDP) in Ahmedabad.

The involvement of NGOs under contract to the nodal agency or private developer can be an efficient and effective strategy for PSP projects. NGO experience, local knowledge and contacts in the project area are important and useful in facilitating the involvement of project-affected people and to improve the quality of R&R planning and implementation. During implementation of R&R programs, NGO can be instrumental in carrying out activities on the ground, including:

- Consultations and participatory R&R: consultations with project-affected people; information campaigns and disclosure; involvement of project-affected people and community leaders in R&R activities.
- Determination of eligible project-affected people: conducting census and inventory of losses (IOL); and, updating lists of eligible project-affected people.
- Land acquisition and relocation of project-affected people: verification of the land acquisition plan jointly with local administration; timely payment of compensation to and assisting project-affected people to relocate.
- Detailed design and implementation of rehabilitation strategies: needs assessments and design of appropriate strategies; training and technical assistance; liaison with government and CBO resources.
- Resolution of grievances/dispute concerning claims/entitlements.
- Internal and external monitoring of R&R activities and outputs.

However, based on experience in India, the efficacy of NGO involvement is contingent on several conditions, including:

- The involvement of NGOs will be effective when PSP projects are undertaken in areas where the NGOs have been active, and have developed expertise and networks for addressing the issues that will arise during R&R of project-affected people. For example, the MUTP II and SRDP have benefited from the engagement of NGOs for planning and implementation of R&R because these NGOs have a long experience of working with slum dwellers. The rapport between project-affected people and NGOs and the knowledge that makes the latter's participation effective takes time to develop.
- Equally importantly, NGOs engaged for R&R work on PSP projects must have a clear mandate, resources and reporting channels.

The lessons learned in the Upper Krishna Project in Andhra Pradesh demonstrate that NGOs cannot operate effectively in the field if these conditions are not established.

6.9.5 Capacity Building for Social Resettlement Issues in PSP Projects

Among nodal agencies and line departments responsible for promoting and developing PSP projects in the four States, the institutional capacity to integrate social resettlement issues is limited. Most land acquisition for PSP projects is carried out in compliance with the Land Acquisition Act of 1894, with responsibility delegated to the Revenue Department as per the Act. Two instances were reported where PSP project development extended beyond the provisions of the Act to address issues of non-titled affected people, and to identify and implement resettlement and rehabilitation measures to assist affected people to restore livelihoods and incomes. As discussed in the case studies (Volume 5), these are the Visakhapatnam Water Supply Project and the Banglaore-Mysore Infrastructure Corridor.

In general, PSP projects undertaken to date in the target sectors in the four States have not required significant land acquisition. Representatives of nodal agencies and line departments responsible for these projects are confident that these projects comply with the requirements of existing legislation. The potential impact of the new National Policy for Resettlement and Rehabilitation of Project-Affected People is perceived to be nil or minimal due to the scope of land acquisition. Nonetheless, most informants are not aware of existing State legislation or policies, even when these evolved from projects in the same sectors.

Therefore, nodal agencies and line departments that undertaken PSP projects should be encouraged to implement comprehensive programs of capacity building and training for social resettlement issues. In the first instance, senior management and other staff of these agencies/departments involved in PSP projects require a broad-based knowledge and understanding of the existing legislative and policy framework as well as the rationale, objectives and principles for a pro-active approach to addressing social resettlement issues. In addition, project managers require further training regarding the procedures, methods and tools to plan, implement and monitor land acquisition and resettlement and rehabilitation activities, whether the agencies/departments, the Revenue Department or the concessionaire carry them out.

Nodal agencies and line departments involved in PSP projects should have a solid understanding of the following aspects of land acquisition and R&R for infrastructure projects:

- Land Acquisition Act of 1894, including provisions and procedures for land acquisition for public purposes.
- Urban planning legislation including new provisions to promote innovative concepts such as transfer of development rights (TDR).
- National and State policies for resettlement and rehabilitation of project-affected people.
- Policies and principles of international best practice for involuntary resettlement, for example, as per the policies of the ADB and World Bank.
- Methods and tools for resettlement planning and implementation, including social surveys, public consultation, monitoring and evaluation.

A number of strategies can be employed to strengthen the capacity of nodal agencies and line departments to integrate social resettlement issues more effectively into the work to promote, prepare and implement PSP projects:

- New staff positions such as Land Officer to be filled by persons with formal training and on-ground experience with land acquisition and resettlement and rehabilitation of project-affected people.
- Incentives for existing personnel to upgrade knowledge and expertise, for example, through distance education programs at the Indira Ghandi National Open University (www.ignou.ac.in) or other institutions that offer R&R programs.
- Organization of in-house courses and seminars to raise awareness and knowledge of land acquisition and R&R, to be conducted by consultants and/or NGOs that have expertise and experience in these issues (see below).

- Study tours to gain knowledge from lessons learned by State governments, NGOs and others from the long experience of R&R for large-scale transport and water resources projects in India.

An outline of the recommended capacity building and training program is provided below.

6.9.6 *Framework for Social Resettlement Training*

The proposed framework for social resettlement training attempts to encompass the scope of information necessary to inform the PSP project development and implementation process, as well as providing an approach that is tailored to the needs of different participants in the target sectors and States. Training programs should be developed and adapted to the social resettlement issues of different sectors and the policy and institutional conditions in each State, using a modular approach to achieve the following:

- Senior management of nodal agencies and line departments that promote, facilitate or undertake PSP projects as well as project managers and other technical staff involved in these projects should receive training that encompasses a) existing legislative and policy framework and b) the issues, roles and responsibilities for social resettlement issues in PSP projects. These are encompasses in the first two modules below.
- Project managers and, where relevant, designated competent authorities in nodal agencies and line departments involved in PSP projects as well as personnel of the Revenue Department responsible for land acquisition require training to ensure a comprehensive, consistent approach to the application of the Land Acquisition Act and other activities related to the acquisition and compensation for titled land assets. This is encompassed in the third module below.
- Project managers and relevant staff of nodal agencies and line departments involved in the preparation of PSP projects prior to negotiation of concession agreements require training on the planning and implementation of resettlement and rehabilitation activities. This will enable them to carry out prepare feasibility studies and DPR and/or manage consultants engaged for these activities; facilitate all activities required to meet the State commitment to provide the concessionaire project land free of encumbrances; and, monitor the concessionaire to ensure compliance with State policies. These issues are encompassed in modules 4 and 5 below.
- Private developers, consultants and NGOs involved in PSP projects should also be included in training programs, particularly with reference to modules 1, 2, 4 and 5, to enhance the capacity to integrate social resettlement issues in PSP project.

The following description of training modules provides a preliminary assessment of the scope of the required training to strengthen the capacity of nodal agencies, line departments and other participants to integrate social resettlement issues in PSP projects. This assessment is based on documents produced by or for the Asian Development Bank, including *Handbook on Resettlement: A Guide to Good Practice (ADB, 1998)* and *Guidelines on Social Assessment and Resettlement and Rehabilitation* produced for NHAI, as well as documents of the World Bank and other donors.

Module 1: Policy Framework

This module reviews the key features of existing National and State laws and policies related to land acquisition and resettlement and rehabilitation of project-affected people as they apply to PSP projects, as well as the rationale, objectives and principles for international best practice that should be endorsed in PSP projects.

- National Legal and Policy Framework for Land Acquisition and Resettlement
  a) Land Acquisition Act, 1894
  b) National Policy of Resettlement and Rehabilitation of Project-Affected People, 2003,
- State Legal and/or Policy Framework for Resettlement and Rehabilitation,
- Objectives and Principles for Land Acquisition, Resettlement and Rehabilitation.

Module 2: Land Acquisition and Resettlement in PSP Projects (by sector and State)

This module reviews (for each sector and State) the current appraisal of potential social resettlement issues associated with PSP projects and how the existing legal/policy framework addresses these, as well as the timing, roles and responsibilities for integrating social resettlement issues into the development and implementation of PSP projects.

- Land Acquisition, Resettlement and Rehabilitation Issues
  a) Potential Resettlement Effects
  b) Application of Existing Legal/Policy Framework
  c) Outstanding Resettlement and Rehabilitation Issues
- Land Acquisition and Resettlement in PSP Project Cycle
  a) Project Identification
  b) Evaluation of PSP mode
  c) Project Preparation
  d) Private Developer Selection
  e) Project Implementation
- Roles and Responsibilities for Land Acquisition and Resettlement
  a) Nodal Agency/Line Department
  b) Revenue Department
  c) Concessionaire
  d) Other State Government Agencies
  e) Local Government Authorities
  f) NGOs
  g) Project-Specific Committees

Module 3: Land Acquisition

This module covers the steps and procedures for acquisition of titled land assets required for the PSP project, as per the Land Acquisition Act. The nodal agency or line department undertaking the PSP project will delegate responsibility for land acquisition to the Revenue Department, unless steps have been taken to establish a competent authority within the nodal agency or line department to carry out these activities. The approach to training will vary depending on whether the nodal agency or line department undertaking the PSP project is overseeing a process carried out by the Revenue Department or executing the land acquisition itself.

- Project Alternatives to Minimize Land Acquisition
- Land Acquisition Survey – Methods and Tools
- Entitlement Matrix and Compensation Policies
- Valuation of Land Assets
- Responsibilities and Schedule for Compensation Payments

This module addresses acquisition of titled land assets separately from other land acquisition and resettlement issues in order to facilitate training activities that include personnel from the Revenue Department. For project managers and staff of nodal agencies/ line departments responsible for carrying out or managing PSP project preparation activities, the scope of training should include modules 3 and 4 to ensure a comprehensive approach to planning for land acquisition and resettlement issues.

Module 4: Resettlement Planning

This module covers a wide range of essential information to assist project managers and technical staff, as well as PSP developers, consultants, NGOs and other participants involved in the planning for resettlement and rehabilitation activities. There are several sub-sections to this module as noted below. Also, as noted above, the full scope of resettlement planning issues are encompassed together in modules 3 and 4.

Setting the stage

The following two elements introduce the scope of a) resettlement planning and the requirements for preparation of resettlement plans and b) the initial social assessment that initiates the resettlement planning process.

- Overview of Resettlement Planning
  a) Full and Abbreviated Resettlement Plans
  b) Outline of Resettlement Plan
- Initial Social Assessment (ISA)
  a) Scope and Content of ISA
  b) Data Collection and Analysis Techniques
  c) Outline for Socio-Economic Profiles

Ensuring a participatory, transparent resettlement process

The following elements review processes that should be initiated early in the resettlement planning process and continued throughout resettlement planning and implementation to ensure that it is a participatory and transparent process.

- Participatory Resettlement Process
  a) Objectives, Benefits and Limitations of a Participatory Approach
  b) Participation Mechanisms: Information Sharing, Consultation, Collaboration
  c) How to Structure a Resettlement Participatory Approach: Recommended Actions
- Grievance Redress Mechanism
  a) Institutional Arrangements
  b) Procedures for Recording and Processing Grievances
  c) Mechanisms for Adjudicating Grievances and Appealing Judgments

Key Elements of Resettlement Action Plan

The following elements summarize the key activities, methods and tools for preparation of the Resettlement Action Plan.

- Resettlement and Rehabilitation Requirements. In general, the census of affected people and the inventory of affected assets will combine land assets (module 3) and other assets (this module). At the same time, a socio-economic survey will identify issues relevant to the capacity of project-affected people to restore livelihoods to pre-project levels, and serve as a baseline for resettlement monitoring. As with land assets, it is necessary to formulate policies regarding entitlements and compensation, and procedures for valuation of assets.
  a) Census and Inventory of Affected Non-Land Assets
  b) Socio-Economic Survey
  c) Policies for Entitlements, Compensation and Rehabilitation Assistance
  d) Valuation of Assets
  e) Responsibilities and Schedule for Compensation Payment
- Relocation Planning - Affected people who are required to relocate will receive assistance from the project. This section reviews the issues, strategies, methods and tools for relocation planning.
  a) Scope of Relocation Assistance
  b) Provision of New Housing
  c) Resettlement Site Selection and Planning
  d) Influx Management Plan
  e) Infrastructure and Social Services
  f) Relocation of Cultural Property and Religious Artifacts
  g) Relocation Schedule and Implementation
- Rehabilitation and Livelihood Restoration Strategies
- Compensation is a one-step event. The process of livelihood restoration is complex and contingent upon factors beyond the control of the project proponent. The scope of livelihood restoration is based on project circumstances that differ widely. This makes planning far more difficult - and makes the limits of project responsibility far more difficult to determine.
  a) Objectives and Principles for Rehabilitation Assistance
  b) Rehabilitation Strategies and Measures
  c) Assistance to Women and Vulnerable Groups
  d) Preparing a Livelihood Restoration Plan
  e) Responsibilities and Schedule for Rehabilitation Activities

Module 5: Resettlement Monitoring

This module covers resettlement monitoring, including internal monitoring carried out by the nodal agency/line department (or its agents) or the concessionaire depending on when land acquisition and resettlement activities occur; and, external monitoring carried out by an independent agency to evaluate the outcomes of the resettlement program.

- Monitoring Indicators – Internal and External Monitoring
- Internal Monitoring – Roles and Responsibilities
- External Monitoring – Roles and Responsibilities
- Monitoring Reporting

6.9.7 TOR for Training Program Development

It is recommended that a consultant be engaged to work with different nodal agencies and line departments involved in the promotion and development of PSP projects, to develop a training program tailored to the sector(s) and conditions in

each State. The following summarizes the scope of work of this consultancy:

- Work in close collaboration with the nodal agency/line department to secure the collaboration and commitment of senior management for a training program on social resettlement issues of PSP projects in the sector.
- Identify stakeholders for a training program and conduct a detailed needs assessment to assess the scope of training requirements and appropriate methods and tools.
- Prepare a proposal for a training program including the scope, methods, tools and scheduling, and review and agree with senior management. The proposal should include strategies to ensure a sustainable training program within the nodal agency/line departments (e.g., training of trainers or other methods).
- Develop detailed training materials and guidelines for different components (or modules) of the training program.
- Identify appropriate techniques, methods and tools to facilitate the training program and its integration into the work program of stakeholders. This should address timing, format and length of training activities, and provide for the sustainability of skills (practical applications, review of issues encountered in the development and implementation of PSP projects, updating skills, etc.).
- Pre-test training materials and consult with the nodal agency/line department to refine and tailor the training program to meet identified needs.
- Conduct training program for trainers.
- Identify institutional arrangements and requirements to ensure the sustainability of the training program and capacity within the nodal agency/line department.
- Prepare a report summarizing the work and outcomes of the consultancy.

6.9.8 *Recommended Guidelines for Land Acquisition and R&R in PSP Projects*

The purpose of the guidelines is to assist public and private sector partners in PSP projects to understand how land acquisition and R&R activities link to the project cycle, and to provide strategies and recommendations to facilitate the integration of R&R in PSP projects.

The guidelines derive from international best practice for R&R and draw on R&R and social assessment guidelines that have recently been prepared for NHAI. They identify sources of relevant information for different aspects of R&R planning and implementation. To begin, a number of documents prepared by the ADB are available on their website (www.adb.org). They include:

- Handbook on Resettlement: A Guide to Good Practice (ADB, 1998)
- Handbook on Poverty and Social Analysis (ADB, 2001)
- Ten Steps Towards Good Resettlement Practice at ADB
- Gender Checklist Resettlement

Similar documents on tools and methods for R&R and social analysis are available from the World Bank website (www.worldbank.org), such as:

- Social Analysis Sourcebook
- Participation Sourcebook

Further information is available at the following website that is dedicated to R&R issues: www.displacement.net.

In addition, NHAI has prepared useful guidelines for resettlement and relocation of project-affected people and conducting a social impact assessment. While these have been prepared for highway projects, they describe methods and procedures that apply equally to other types of infrastructure projects. These documents are available on the NHAI website www.nhai.org.

- Guidelines for Resettlement and Relocation on Highway Projects
- Guidelines for Social Impact Assessment of Highway Projects

The scope of the guidelines outlined below include activities carried out during the project preparation and implementation stages of the PSP project cycle are where the majority of the work to integrate social resettlement issues in PSP projects will occur.

During the planning for land acquisition and R&R during the project preparation stage, key activities include:

- Scoping of land acquisition and R&R issues for the PSP project.
- Stakeholder analysis and formulation of a consultation program.
- Preparation of socio-economic profiles
- Identification of eligible project-affected people
- Establishment of Grievance Redress Committee
- Defining entitlements to compensation and rehabilitation packages
- Defining schedules and R&R costs

During the project implementation stage, the nodal agency and private developer will collaborate on:

- Implementing land acquisition and R&R activities.

A checklist included at the end of this section (table 6.5) summarizes the key R&R activities for each of these components.

Scoping Land Acquisition and R&R Issues

Infrastructure projects such as the upgrading and improvement of state highways do not have significant requirements for land acquisition and the resettlement of project-affected people if the works occur within the existing road right-of-way. However, in the case of new road construction and many other types of infrastructure projects, land acquisition and the consequences for project-affected people are the major social impacts of PSP projects. For each PSP project, therefore, it is important to scope, or understand, the nature and extent of potential social impacts that are specific to the type of PSP infrastructure project, as well as cross-cutting issues. Scoping entails an initial assessment of:

- the types and nature of project-specific and cross-cutting social issues associated with the project; and
- the key stakeholders who will participate in the planning and implementation of strategies related to these issues.

More specifically, the purpose of scoping of resettlement impacts is to assess:

- the types and extent of losses due to land acquisition and/or the displacement of people from private and government lands; and,
- the key issues affecting the ability of individuals, households and communities to deal with these impacts, and that must be considered in defining entitlements, compensation strategies and resettlement and rehabilitation (R&R) packages.

If the resettlement impacts are significant in terms of the number of affected people or the severity of losses, the scoping exercise may also provide useful information to identify alternative project strategies to reduce these impacts, for example, site selection, project design, etc.

Stakeholder Analysis and Consultation Program

Full and timely consultation with stakeholders is a fundamental principle of a successful R&R program. A consultation plan encompasses regular, structured meetings with local officials, the project-affected people and community groups; and, information campaigns and disclosure. Participatory consultation will facilitate useful feedback from stakeholders, as well as information and data collection necessary for decision-making about R&R activities.

Stakeholders are generally categorized in terms of their "interest" in the project, and including primary and secondary stakeholders:

- Primary stakeholders are people and groups that are directly affected in positive and negative ways by the project: the affected people, other project beneficiaries, the host population and the project implementation agency; and
- Secondary stakeholders include other individuals or groups whose interest is, generally, related to the implementation of the project, such as local/national governments, NGOs and local community groups.

Consultation of stakeholders should occur throughout the process of land acquisition and R&R. To be effective, clear objectives should be defined for every consultation, and the approach and methods should be chosen to meet those

objectives and to promote participation by stakeholders. Some of the issues affecting stakeholder participation include:

- Timing: Are there seasonal or other constraints that affect the availability of stakeholders to participate in consultations? For example, planting or harvesting times are not good times to conduct consultations in farming communities.
- Social or cultural norms: Are there social or cultural norms that affect the willingness of stakeholders to speak up or participate in consultations? For example, women or other groups may not feel comfortable in mixed groups and should be consulted separately.
- Communications: Are there language or literacy barriers to stakeholders' participation? For example, consultations should be conducted in the local language and use materials that all stakeholders can understand.

Early on in the project preparation stage, initial consultations should occur with stakeholders including local officials and project-affected people to inform them of the project and to facilitate preliminary social surveys. The consultation plan for the PSP project should also identify other key consultations during subsequent stages of project development and the implementation of land acquisition and R&R activities.

A good example of ongoing, participatory consultation for R&R is found in the proposed resettlement policy for the State of Andhra Pradesh. Project-affected people as well as district and State authorities have clearly defined roles and responsibilities for decision-making at different stages of the R&R process. Specifically, project-affected people are directly involved in and define the strategies for resettlement and rehabilitation of livelihoods.

Preparation of Socio-Economic Profiles

Socio-economic profiles summarize the demographic, social, economic, labour force and other relevant conditions of people living and working in the areas directly and indirectly affected by the PSP project. They are important for several reasons. They define a context to assess how different social groups may be affected by the social and resettlement benefits or adverse impacts of the project. They also establish a baseline for social monitoring activities to evaluate the effectiveness of social mitigation measures and resettlement and rehabilitation (R&R) packages.

Socio-economic profiles are prepared using the results of surveys of a sample of households living in communities within the proposed PSP project area, focusing on those communities that are likely to be directly affected. Useful information on social and economic conditions in these communities can also be obtained from local government authorities. The household survey should use a simple, direct questionnaire, and should be administered by trained surveyors to a sample of households. The size of the sample will depend on the number of communities within the project area. It may also be necessary to sample a larger proportion of households who may be directly affected by land acquisition and R&R (20-25 percent); and a smaller proportion of other households potentially affected by social benefits/impacts.

Identification of Eligible Project-Affected People

Four linked activities establish the eligibility of project-affected people, and should occur as soon as the land acquisition requirements are known. The activities and their purposes are:

- Land acquisition survey: Documentation of all private and public lands that will be acquired by the project, including land records and ownership deeds.
- Census: Enumerate all project-affected people, namely, all individuals, households, business or other organizations whose private land holdings are acquired by the project, or who are displaced from public lands acquired by the project.
- Inventory of losses (IOL): Enumerate and, as relevant, carry out detailed measurements of all affected assets of titled landowners and other project-affected people.
- Cut-off date: Establish the official date to determine eligibility of project-affected people for entitlements to compensation and/or assistance under the R&R program.

The **census of project-affected people and IOL** must be inclusive, that is, they must include all

people and households whose assets are acquired and/or who will be relocated from lands acquired for the project. That includes, for example, tenants, sharecroppers, landless, squatters, vendors/small shop owners, employees, labourers; and, vulnerable groups such as indigenous peoples/scheduled tribes (ST), scheduled castes (SC), other backward castes (OBC), households headed by women, disabled, elderly, and the poorest who may not be covered by the existing laws. The IOL should also enumerate affected community or common property resources on land to be acquired and, as well, in host communities where project-affected people will be relocated.

The census and IOL will collect data about all individuals and household members (name, age, education, achievement, occupation, etc.); sources and amounts of household income; and, detailed information about the types and area of land, structures and other immovable property, as well as standing crops and trees. Other key data include ownership of durable goods and other indicators of the living standards of PAP; and, feedback from project-affected people on their preferences for resettlement and relocation.

The data from the land acquisition survey, census and IOL are essential information to determine the losses incurred as a result of the acquisition of and displacement from project lands, and will constitute the official basis for determining entitlements to compensation and/or assistance, as well R&R cost estimates. The census data on household characteristics and living standards will also form the baseline for monitoring of how project-affected people are able to restore living standards.

The **cut-off date** for inclusion of project-affected people in the R&R program is generally established as:

- the date of notification under Section 4(1) of the Land Acquisition Act for acquisition of titled land and assets; and/or
- the date of completion of the census and IOL for all other project-affected people who incur losses due to land acquisition and/or displacement.

When all the data are collected and collated, official lists of project-affected people should be published to permit verification and approval by the project-affected people, community leaders and elected officials. At the same time, project-affected people should be informed about procedures for appeals in the event of any wrongful exclusion or other related grievances (see below).

A chronic and serious liability of land acquisition programs is "opportunistic" encroachers, that is, people who squat on land when they know that it will be acquired for PSP and other development projects in hopes of receiving compensation and/or assistance. This problem is particularly serious in urban and peri-urban areas where there are likely to be poor migrants and other landless people who will take advantage, although it can occur in rural areas as well. The problem may be compounded by the fact that it is difficult to initiate a PSP project without alerting the opportunists. There is no fool-proof way to prevent opportunistic encroachers, but there are methods that can facilitate the identification of legitimate project-affected people, such as:

- Project ID cards: Issue ID cards to all project-affected people to certify that they were present on land to be acquired by the project. The ID cards should be issued when project-affected people have signed the census and IOL forms, indicating their agreement with the data collected.
- Photograph or videotape project-affected people and their assets: Make a photographic or videotape record of project-affected people (e.g., head of household) and their assets (land, structures, etc.), including identification such as plot number, household ID number, date, etc.
- Map of acquired land showing affected households: Make strip maps (for linear infrastructure) or plot plans (for other infrastructure) showing the location and identification of all project-affected people and their assets.

Digital photography offers opportunities to integrate photos of project-affected people into the electronic information management system for R&R programs. Videotapes can be used during the census and IOL surveys to record feedback from project-affected people on key social, economic or

environmental issues related to their livelihoods, as well as their preferences for resettlement and relocation. This can be an effective tool for future consultations with project-affected people, as well as for monitoring how they are able to restore living standards.

Establishment of Grievance Redress Committee

A grievance redress committee (GRC) should be established at the time that the official lists of eligible project-affected people are published. The GRC is a legally constituted committee approved by the project authorities for dispute resolution during the R&R program. It will, initially, deal with questions, complaints and problems associated with project-affected people who are not included in the eligibility lists and/or whose losses have not been correctly identified. In later stages of the R&R program, the GRC will attend to the claims of project-affected people regarding compensation and/or rehabilitation assistance, ownership disputes and delays in payment of compensation and/or rehabilitation assistance.

Defining Entitlements for Compensation and Rehabilitation Assistance

A project-specific resettlement policy identifies the entitlements of project-affected people. In general, these entitlements include:

- cash or in-kind compensation to titled landowners
- cash compensation for structures, crops, trees and other assets to project-affected people who are recognized owners of these assets
- rehabilitation packages for severely affected people, landless households and other vulnerable groups.

Defining Entitlements: Compensation for Land

Titled landowners are entitled to compensation for acquired land, as per the provisions of the Land Acquisition Act. This compensation will take the form of replacement land or, as often happens when land is not available, in cash. The value of the compensation is equivalent to the market price of the affected land at the time it is acquired.

As discussed previously, the consent award offers significant benefits for proponents. Consent award is a negotiated agreement between government authorities and the landowner regarding the value of the affected land. This approach avoids the lengthy legal referrals that have become standard procedure when compulsory acquisition is carried out under the Act. It also offers opportunities to establish land acquisition costs with greater reliability and at lower final cost than when awards are referred to the courts.

The recent development of UMT in Mumbai and other infrastructure development in India have demonstrated the effectiveness of the transfer of development rights (TDR) concept. The incentives offered by this concept are premised on ensuring that landowners participate in the benefits that result directly or indirectly from the PSP investments. They comprise the allocation of higher development rights on residual landholdings or other land that enable the landowner to realize a higher profit from development of the land or sale of the development rights.

The TDR concept derives from the provisions of town planning legislation. It is effective in rapidly developing urban areas where the demand and value are high for scarce land, and where the incentives are important to facilitate land acquisition for urban mass transit, roads or other infrastructure projects. In rural areas, owners whose land is acquired for road projects are often encouraged to agree to the acquisition because their remaining holdings will have higher values due to improved transportation conditions. Nonetheless, the TDR concept may also be applicable and effective as an incentive to facilitate acquisition of rural land when, for example, township development accompanies new highway construction.

Defining Entitlements: Compensation for Structures and Crops

Compensation for acquired structures includes residential and commercial structures, as well as other immovable property (wells, pump houses, animal sheds, etc.). In the case of residential structures, compensation for acquired homestead land and the structures may be dealt with together.

Owners of structures entitled to compensation include project-affected who do not hold title to the land, as well as owners of homestead land. That is,

long-term squatters who hold title to their houses or shop buildings and, in some instances, owners of structures that encroach onto acquired land are frequently entitled to compensation for the value of the structures (but not the land). Compensation for structures takes different forms including:

- cash compensation equal to the replacement value of the structure, without deduction for depreciated value or salvage of materials;
- allocation of replacement housing or shop unit in an area provided with infrastructure and services; or,
- allocation of a building site in a served area, plus a house or shop construction grant.

In urban areas, the large number of slum dwellers affected by infrastructure projects poses a special problem. Incentives based on TDR have been used, as in Mumbai, to encourage developers to build housing and provide it free of cost to displaced slum dwellers.

If replacement housing/shops are located in a host community, existing services are upgraded or expanded to meet the needs of the additional population.

Defining Entitlements: Rehabilitation Assistance

Rehabilitation assistance may be provided to all project-affected people who experience a loss of income or livelihood due to the loss of assets and/or displacement. However, the focus of rehabilitation efforts is project-affected people who are vulnerable or who are at risk of becoming vulnerable as a result of resettlement. This generally includes people who belong to groups that are considered vulnerable, such as BPL families, ST, SC, female-headed households and households with members who are physically or mentally handicapped.

A useful approach to determining vulnerability is project-specific, and uses a needs-based assessment to identify titled and non-titled project-affected people whose socio-economic status is adversely affected. This approach has been used for the Ahmedabad Mehsana Road Project. Depending on the level of vulnerability (due to loss of land and/or reduced income), project-affected people receive different levels of assistance. Non-vulnerable project-affected people generally do not receive assistance beyond the compensation to which they are entitled.

A second, key aspect to this approach uses incentives to encourage project-affected people in their efforts to restore living standards. The resettlement assistance that they receive is used, in part or entirely, to finance income generation schemes (IGS). However, if over a specified period project-affected people are able to use the IGS to increase and maintain their incomes to an agreed level, they are reimbursed in instalments for the cost of the IGS up to a pre-determined amount.

Whatever approach is adopted for rehabilitation assistance, it is important to consider multiple options to meet the range of needs of project-affected people. Some strategies will be more successful in rural areas, others in urban areas. Extensive consultation with project-affected people is essential to develop effective rehabilitation strategies.

India has a good experience with developing effective rehabilitation strategies. Some of these include:

- economic rehabilitation grant: lump-sum grant to assist in short-term recovery of income and living standards;
- lost employment income grant: lump-sum grant to agricultural labourers and employees of displaced businesses who have lost employment, although this grant may not be provided to people who practice highly mobile trades such as carpentry;
- income generation schemes to enhance income or replace lost sources of income, including a wide range of agricultural and non-agricultural strategies;
- lost shifting business income grant: lump-sum grant to assist kiosk owners in short-term recovery of income;
- assistance grants to cover the increased costs of travel to work or the permanent loss of employment due to relocation;
- training grant: a lump sum grant as contribution for vocational and skills training, with particular emphasis on the needs of women, ST, SC and other vulnerable groups;
- financial and technical assistance for development of income generation schemes;

- counseling and assistance to access existing vocational and skills training programs offered by government agencies, NGOs, etc.;
- assistance to access loans to develop new, non-land based economic activities and/or to improve agricultural productivity; and,
- preference for employment for construction, operation and/or maintenance of the infrastructure project.

Defining Schedules and R&R Costs

The completion of the planning for land acquisition and R&R requires the preparation of an implementation schedule and a plan for monitoring and evaluation. The R&R budget should identify all costs, as well as the negotiated sharing of land acquisition and R&R costs between Government and the PSP developer.

Implementing Land Acquisition and R&R Activities

By the time the concession agreement is signed and detailed project development begins, much of the work to plan R&R activities should be completed. While detailed engineering and tendering occurs, the implementation phase of the R&R program is carried out. The nodal agency through its Project Coordinator and the private developer must work together to implement land acquisition and R&R activities.

Acquisition of private landholdings will be carried out in collaboration with District Collectors. Through the use of consent award, it should be possible to expedite the land acquisition process. Key R&R activities that must be closely coordinated with land acquisition activities include:

- Cash compensation must be paid to eligible PAP at the time that the Government takes possession of their land and other assets.
- In-kind compensation such as replacement housing must also be provided to eligible PAP at the time that the Government takes possession of land.

Ideally, there should be little or no delay between the time that the Government takes possession of private land holdings and when project-affected people are relocated, as necessary, to their new surroundings. This entails payment of moving and subsistence allowances, as well as other measures to assist project-affected people to relocate.

At the same time, or even prior to land acquisition, rehabilitation assistance should be paid and/or strategies implemented. The implementation of rehabilitation strategies is a time when close consultation and support to project-affected people will facilitate the achievement of the objective to restore living standards. The role of NGOs that have experience with the livelihood issues that project-affected people confront can be instrumental to the success of these initiatives.

Other activities that are ongoing during the R&R implementation phase include:

- The Grievance Redress Committee (GRC) will be active during this time, attending to the claims of project-affected people regarding compensation and/or rehabilitation entitlements, payments, etc.
- Internal monitoring and evaluation (M&E) should be initiated to monitor the activities and outputs of the R&R program.

By the time that project construction begins, all project-affected people should be compensated and, as necessary, relocated. The activities during this period and following the end of construction include:

- The GRC may still be active during project construction, in order to finalize resolution of the claims of project-affected people.
- Following the relocation of project-affected people, an independent external M&E process will evaluate the outcomes of the R&R program, that is, the capacity of project-affected people to restore living standards.

The external monitoring and evaluation will go on intermittently for a period of up to 2 years following the relocation of project-affected people. It should be carried out by a qualified independent consultant. With reference to baseline data collected in the socio-economic survey and the census of project-affected people, the purpose will be to measure in quantitative and qualitative terms how and to what extent project-affected people have been able to restore living standards and, where there are problems, to identify remedial actions.

Table 6.5: Resettlement and Rehabilitation Checklist

Cycle	R&R Activities	Checklist	Remarks	
			Yes	No
Project Preparation	**Scoping key land acquisition, resettlement and social issues**	✓ Have the key social issues been identified and TOR prepared for detailed social analysis? ✓ Have the types and severity of resettlement impacts been identified? ✓ Have changes in project design or other measures been identified to minimize R&R?		
	Stakeholder analysis and consultation program	✓ Have primary stakeholders such as project-affected people and local governments been identified? Have their interests in the project been assessed? ✓ Have secondary stakeholders such as line departments and NGOs been identified? Have their interests in the project been assessed? ✓ Has a consultation program been prepared for the land acquisition and R&R activities?		
	Prepare socio-economic profiles of affected groups	✓ Has a sample survey been carried out of people directly or indirectly affected by the project? ✓ Have profiles been prepared to identify the demographic, socio-economic, cultural and other characteristics of different groups affected by the project, including project-affected people, vulnerable groups and people indirectly affected?		
	Establish Grievance Redress Committee	✓ Are there clear procedures to file complaints and for grievance redress? ✓ Have project-affected people been informed of these procedures?		
	Identify eligible project-affected people	✓ Has a land acquisition survey been conducted to identify all public and private landholdings that must be acquired? ✓ Has a census been conducted to identify all project-affected people? ✓ Has an inventory of losses been conducted to collect data on project-affected people, their assets and livelihood conditions? ✓ Has a cut-off date been established to define eligibility for compensation and rehabilitation packages? ✓ Has an official list of eligible project-		

Cycle	R&R Activities	Checklist	Remarks	
			Yes	No
Project Preparation	**Defining entitlements for compensation and rehabilitation packages**	✓ Do the entitlements identify compensation for titled land, structures, crops and other assets? ✓ Have vulnerable affected people been defined, and rehabilitation measures identified to assist them to restore living standards? ✓ Have project-affected people and NGOs been consulted in the development of compensation and rehabilitation strategies?		
	Defining schedules and R&R costs	✓ Have implementation schedules been prepared? ✓ Are there detailed estimated of land acquisition and R&R costs? ✓ Has a plan been prepared for internal and external monitoring and evaluation of land acquisition and R&R activities?		
Project Implementation	**Implementing land acquisition and R&R activities**	✓ Are roles and responsibilities clearly defined and institutional structures established for land acquisition and R&R? ✓ Have project-affected people and other stakeholders been consulted about the implementation of land acquisition and R&R? ✓ Have project-affected people been compensated promptly and assisted to relocate? ✓ Have vulnerable project-affected people received rehabilitation grants and/or other assistance? ✓ Has internal M&E been initiated? ✓ Is there a provision for external monitoring? ✓ Are project-affected people and NGOs involved in M&E?		

7 The Deal Breakers

In this chapter we deal with conciliation and arbitration of disputes, provision of incentives and the viability of capital markets and movement of capital. These issues are central to the issue of perception of risk, risk mitigation and allocation of risk among the stakeholders in PSP.

7.1 Introduction to Alternative Dispute Resolution

Private sector participation in infrastructure requires a well-developed mechanism for the resolution of disputes arising out of concession agreements and between the providers and users of a utility.

As part of this TA programme, we have examined arbitration and conciliation, these two forms of

alternate dispute resolution (ADR) being perhaps the most-often used, both in India and in other countries, to settle commercial disputes. In India, the law relating to arbitration and conciliation is codified in the Arbitration and Conciliation Act, 1996 which is modelled on the U.N. Commission on International Trade (UNCITRAL). The Act provides parties with the freedom to submit disputes to arbitration and to determine their own procedure, including the number of arbitrators, the procedure to be used and the applicable law for arbitration. The Act itself limits the setting aside of an international award unless it is against public policy. However, in practice courts have allowed challenges on flimsy public policy grounds.

We believe that the main problem with arbitration in India pertains to the almost routine challenge of arbitral awards by parties, not to any shortcomings in the relevant legislation. Nevertheless, the ambiguous language of certain provisions of the 1996 Act as well as the absence of provisions for expediting awards or subsequent proceedings in courts when applications are filed for setting aside awards have raised demands for an amendment of the 1996 Act. These shortcomings, amongst others, are sought to be addressed by the Arbitration and Conciliation (Amendment) Bill, 2003 (the "New Bill"), drafted in pursuance of the 176th Report of the Law Commission of India and currently pending before the Rajya Sabha. The key features of the New Bill are discussed more fully below.

Moreover individual States in India are limited in what they can do in terms of Dispute Settlement Mechanisms by the Indian Constitution. The Central Government has enacted the *Arbitration and Conciliation Act, 1996*, and States are bound by it. Amendments to the Act are being contemplated, and since the 1996 Act is modeled on U.N. draft models, the Government of India is keenly aware as to how these U.N. draft models are being implemented in other countries.

Alternative dispute resolution ("ADR") is a term for describing the processes of resolving disputes in place of litigation before a court. ADR, in India, includes arbitration, conciliation, mediation, mini-trial, expert determination, early neutral evaluation and Lok Adalat. The advantages of all forms of ADR, over judicial proceedings, reside in the fact that, in terms of settling the issues at stake between two or more parties, they are simpler, cheaper, quicker and less stressful to all concerned than an adversarial court case.

Some of the ADR processes used in India now also enjoy a statutory basis. While the Legal Services Authorities Act, 1987 ("the 1987 Act") provides for the setting up of Lok Adalats for resolution of disputes brought before it either by the parties or by way of referral by the court, the Arbitration and Conciliation Act, 1996 ("the 1996 Act")[81] consolidates the law on arbitration and gives, for the first time, a statutory basis to conciliation.

Section 89 of the Code of Civil Procedure, 1908[82], provides that where it appears to the court that there exist elements of a settlement which may be acceptable to the parties, the court shall formulate the terms of settlement and give them to the parties for their observations and after receiving the observations of the parties, the court may reformulate the terms of a possible settlement and refer the same for:

- arbitration;
- conciliation;
- judicial settlement including settlement through Lok Adalat; or
- mediation.

Where the dispute is referred to arbitration or conciliation, the provisions of the 1996 Act apply, whereas should the dispute be referred to the Lok Adalat, the provisions of the 1987 Act would apply. In the case of mediation, the court is to effect a

[81] Central Act No. 26 of 1996. The law on arbitration and conciliation in India is now codified in the 1996 Act. Prior to 1996 statutory provisions on arbitration were contained, at the central level, in three different enactments, namely the Arbitration Act, 1940, the Arbitration (Protocol and Convention) Act, 1937 and the Foreign Awards (Recognition and Enforcement) Act, 1961. The 1940 Act laid down the framework within which domestic arbitration was conducted in India, while the other two Acts dealt with foreign awards. The 1996 Act has repealed all three previous Acts. The 1996 Act has introduced many changes relating to domestic arbitration, international commercial arbitration and enforcement of foreign arbitral awards and has also codified for the first time in India the law relating to conciliation.

[82] Inserted by the Code of Civil Procedure (Amendment) Act, 1999 with effect from July 1, 2002.

compromise between the parties and follow such procedure as may be prescribed.

Section 89 of the Code of Civil Procedure is based on the recommendations contained in the 129th report of the Law Commission of India and those of the Justice Malimath Committee for requiring the court to first attempt to settle the dispute between the parties amicably. It is only when the parties fail to get their disputes settled through any of the ADR methods that the suit should proceed further.

Section 89 however suffers from some obvious defects. There is nothing in that section to indicate the stage at which the court should make the reference. Section 89 is also silent on the question as to what will be the position of the parties if they do not agree to attempt an ADR settlement. Further, the onus put on the court to "effect" a compromise while mediating, runs counter to the principles of mediation, which insist that it is for the parties to reach a compromise with the mediator merely controlling the process.

7.2 Conciliation

7.2.1 General

The law on conciliation in India is set out in Part III of the 1996 Act. Conciliation is a non-binding negotiation process in which a neutral third party ("the conciliator") assists the disputing parties in reaching a compromise with respect to the subject of their dispute. Put differently, the role of the conciliator in a conciliation proceeding is to "assist the parties in an independent and impartial manner in their attempt to reach an amicable settlement of their dispute"[83]. Unlike an arbitrator, a conciliator is not vested with the power of final decision; he can only induce the parties themselves to come to a settlement.

Under the 1996 Act, conciliation is a purely voluntary procedure, both before it begins[84] and then while it runs its course[85]. Because of its voluntary nature, conciliation, unlike arbitration, is not controlled or based on any prior agreement[86] and any settlement agreement resulting from the conciliation procedure, although given the same status and effect as an arbitral award[87], is unlikely to be contested in court, as is the case for most real arbitral awards in India[88], given that both disputing parties have agreed to it. Further, since the settlement agreement has the same status and effect as an arbitral award, the settlement agreement too is stamped as a decree of the court and can be executed immediately.

There exist essentially two types of conciliation proceedings: ad hoc conciliation and institutional conciliation. Part III of the 1996 Act acknowledges the existence of both types of conciliation proceedings throughout its provisions.

Ad hoc conciliation is simply a process in which the organisation and management of the proceeding are defined by the parties themselves without the assistance of an institution. The Conciliation Rules, adopted in 1980 by the United Nations Commission on Trade Law (UNCITRAL), are a good example of ad hoc conciliation rules[89]. Institutional conciliation is distinguished by the fact that it is organised by an institution, or specialist centre, which also generally handles the administration of arbitration procedures. One example of institutional conciliation are the Rules of Conciliation of the Indian Council of Arbitration[90].

An interesting variation of institutional conciliation is the procedure contained in the Andhra Pradesh's *Infrastructure Development Enabling Act, 2001* ("the AP 2001 Act")[91], which basically provides for compulsory institutional conciliation.

Sections 32 to 40 of the AP 2001 Act create a Conciliation Board (or more correctly allow for the

[83] Section 67(1) of the 1996 Act.
[84] Section 62(3) of the 1996 Act.
[85] Section 76(d) of the 1996 Act.

[86] Section 7 of the 1996 Act requires that there be an arbitration agreement; no similar requirement exists with respect to conciliation.
[87] Section 74 of the 1996 Act.
[88] See, *infra,* Title 8.3.2.1.4, *infra*.
[89] Online version of the UNCITRAL Conciliation Rules at: http://www.uncitral.org/english/texts/arbitration/conc-rules.htm
[90] Online version of the ICA Conciliation Rules at: http://www.ficci.com/icanet/Rules-of-Conciliation.pdf
[91] Andhra Pradesh Act No. 36 of 2001.

State Government to create, by notification, such a Board) and endow it with certain powers. The key provision of the procedure is found however at section 41:

> 41. *Application and scope*
> Any dispute, claim or difference arising out of or in connection with or in relation to any Concession Agreement or contract between the Government Agency or Local Authority on the one hand and the Developer on the other hand, shall as far as possible, be amicably settled between the parties. In the event of any dispute, claim or difference not being amicably resolved, such dispute, claim or difference shall be referred to the Conciliation Board.

This obviously is quite different from the wording of section 62 of the 1996 Act, which, as we mentioned earlier, makes conciliation a purely voluntary proceeding. Section 62 reads in part:

> 62. *Commencement of conciliation proceedings*
> (1) The party initiating conciliation shall send to the other party a written invitation to conciliate under this Part, briefly identifying the subject of the dispute.
> (2) Conciliation proceedings shall commence when the other party accepts in writing the invitation to conciliate.
> (3) If the other party rejects the invitation, there will be no conciliation proceedings.(…)

Section 48 of the AP 2001 Act ("Termination of Conciliation Proceedings") is identical to its equivalent provision (section 76) of the 1996 Act save for an important difference at paragraph (d). In the 1996 Act, a party may by written declaration given to the other party and to the conciliator terminate the conciliation proceeding. Under paragraph (d) of section 48 of the AP 2001 Act, there is no such possibility, replaced instead by a 3 months expiry clause:

> 48. *Termination of conciliation proceedings*
> The conciliation proceedings shall be terminated:- (…)
> (d) on the expiry of the period of 3 months from the date of the commencement of the conciliation proceedings. If the parties to conciliation proceedings request in writing to continue conciliation, such conciliation proceedings shall stand terminated on the expiry of a period of 90 days from the date of such joint communication in writing to the Board requesting the Board to continue conciliation.

7.2.2 Recommended approach

Except in Andhra Pradesh, conciliation is not used as an ADR process in any of the various model infrastructure contracts we have looked at in the four Project States[92]. The usual approach in these contracts is to opt for arbitration, preceded by "good faith negotiations" between the parties. We suggest that these "good faith negotiations" clauses be dropped in favour of compulsory institutional conciliation proceedings. While none of the other three Project States has anything akin to the Andhra Pradesh Conciliation Board, the Indian Council of Arbitration does provide conciliation services, including its own Rules of Conciliation[93]. It can, and does, appoint conciliators. There seems, however, to be little merit in having more than one conciliator conducting a conciliation proceeding, although section 63 of the 1996 Act does allow for more than one conciliator if the parties expressly agree to it.

A model contractual clause to give effect to a compulsory conciliation proceeding between disputing parties could read as follows[94]:

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[92] Conciliation does not seem to have caught on yet in India as an ADR process despite the 1996 Act (Andhra Pradesh being the exception). As explained in *B.S. Patil on the Law of Arbitration and Conciliation* (4th Ed., 2003), at p. 214 (of the case-law supplement): "It is unfortunate that such an excellent mode of resolution of disputes with the statutory backing, is totally lacking any response from the litigants as also the legal fraternity in India. This method has caught the imagination of the litigants in other countries and even without the statutory backing, it is getting more and more popular. The percentage of conciliation cases being settled ranges 90% and above in those countries." See also, at pp. 310-313 of the main text, for a balanced discussion of the advantages and risks of conciliation.

[93] See note 9, *supra*.

[94] Except for those contracts entered into in Andhra Pradesh which are covered by section 41 of the AP 2001

Conciliation

If a dispute arises out of or in relation to this contract, or the breach, termination or invalidity thereof, the parties agree to seek an amicable settlement of that dispute by conciliation under the Rules of Conciliation of the Indian Council of Arbitration in force at the date of the signing of this contract. Accordingly, the parties hereby accord their written consent to conciliate, and agree that such consent constitutes the acceptance of the invitation to conciliate in terms of Rule 3[95] of the said Rules.

A single conciliator shall be appointed by the Indian Council of Arbitration within 30 days from the date a party has requested the Indian Council of Arbitration to effect such an appointment. The Indian Council of Arbitration will provide administrative services in accordance with its Rules of Conciliation.

Act and where such a clause would not be necessary in view of the existing statutory provisions already in place.

[95] Rule 3 is akin to section 62 of the 1996 Act; while clauses (c) and (d) of sub-rule 15(1) are akin to paragraphs (c) and (d) of section 76 of the 1996 Act. Sub-rule 15(1) reads as follows:

Termination of conciliation proceedings

15. (1) The conciliation proceedings shall be terminated-

(a) by the signing of the settlement agreement by the parties on the date of agreement; or

(b) by a written declaration of the conciliator, after consultation with the parties, to the effect that further efforts at conciliation are no longer justified, on the date of the declaration; or

(c) by a written declaration of the parties addressed to the conciliator to the effect that the conciliation proceedings are terminated, on the date of the declaration; or

(d) by a written declaration of a party to the other party and the conciliator, if appointed, to the effect that the conciliation proceedings are terminated, on the date of the declaration.

7.3 Arbitration

7.3.1 General definition

Arbitration is an adjudication process used by the agreement of the parties to resolve disputes. In arbitration, disputes are resolved, with binding effect, by a person or persons acting in a judicial manner in private, rather than by a national court of law that would have jurisdiction but for the agreement of the parties to exclude it. The decision of the arbitral tribunal is usually called an award.[96]

It is important to emphasise at this point that the purpose of any arbitration agreement[97] is to exclude a national court of law from deciding a dispute and have that dispute settled instead by arbitration[98]. Therefore, it is crucial that an arbitration clause in any contract not be vitiated by contradictory clauses found elsewhere in the same contract. For example, Madhya Pradesh's Model Road Concession Agreement provides in Clause 39 that:

> Save where expressly stated to the contrary in this Agreement, any dispute, difference or controversy of whatever nature howsoever arising under, out of or in relation to this Agreement including non completion of the Project Highway, between the Parties…….which is not resolved amicably as provided in Clause 39.1 and Clause 39.2 shall be finally decided by reference to Arbitration.

However, more than simple confusion is introduced when one considers the opening words of Clause 39 ("Save where expressly stated to the contrary in this Agreement…") read in conjunction with Clause 43 of the same Agreement which provides that:

[96] *Halsbury's Laws of England*, 4th Ed. (Reissue), 2003, Vol. 2(3): Arbitration, at paragraph 1.

[97] Arbitration agreement is defined in the 1996 Act, at section 7(1), to mean "an agreement by the parties to submit to arbitration all or certain disputes which have arisen or which may arise between them in respect of a defined legal relationship, whether contractual or not."

[98] See section 8 of the 1996 Act.

> "the Courts in Madhya Pradesh shall have jurisdiction over all matters arising out of or relating to this Agreement",

By allowing such contradictory provisions to co-exist in the same document, grounds for challenging the arbitration procedure of Clause 39 will be easily available to either party to the MP Model Road Concession Agreement.

The 1996 Act creates 3 types of arbitration (domestic, international commercial and foreign), which can each be further subdivided into 2 separate classes (ad hoc and institutional). Before proceeding to define further the concept of arbitration in light of these statutory refinements, a few words are necessary concerning the relevant legislation in the 4 Project States as it pertains to arbitration in the PSP infrastructure sector.

7.3.2 The relevant State Acts

Neither Karnataka nor Madhya Pradesh has any legislation in place that would affect the provisions of the 1996 Act as they pertain to arbitration in the PSP infrastructure sector.

In Andhra Pradesh, while the AP 2001 Act has much to say, as we have seen, on the issue of conciliation, that Act has only one provision which touches on arbitration *per se*, namely section 50.

The gist of section 50 is that while conciliation is mandatory, arbitration is not. The parties are free to include an arbitration clause in the contracts governed by the AP 2001 Act if they so choose, but can equally decide to have recourse to a court of law in order to resolve their disputes by failing to provide for arbitration. This obviously is also the case in Karnataka and Madhya Pradesh, minus the mandatory conciliation proceedings.

In this respect, Gujarat is different. Under the *Gujarat Infrastructure Development Act, 1999* ("the GIDA, 1999")[99], arbitration is mandatory. The relevant provision is section 35 which reads as follows:

> 35. A concession agreement shall contain an arbitration clause providing that –
>
> (a) all parties to the agreement shall submit to arbitration any dispute which may arise between them out of the provisions of the agreement,
>
> (b) the place of arbitration shall be at Ahmedabad or any other place in India agreed by the parties, and
>
> (c) the disputes referred to in clause (a) shall be decided in accordance with the law for the time being in force in India.

As will be seen from what follows in this Chapter, the effect of section 35 of the GIDA, 1999 is to restrict the scope of permissible arbitration solely to domestic arbitration, albeit such domestic arbitration can be ad hoc or institutional.

7.3.3 Various kinds of arbitration under the 1996 Act

Domestic, international commercial and foreign arbitration

As we mentioned earlier, the 1996 Act creates 3 types of arbitration (domestic, international commercial and foreign). The term "domestic arbitration" denotes merely arbitration which takes place in India[100]. International commercial arbitration however is expressly defined in section 2(1)(f) of the 1996 Act to mean:

> an arbitration relating to disputes arising out of legal relationship, whether contractual or not, considered as commercial under the law in force in India[101] and where at least one of the parties is-

[99] Gujarat Act No. 11 of 1999.

[100] The 1996 Act makes a mention of "domestic arbitration" in the long title and the preamble of the Act, and of "domestic award" in section 2(7) read with section 2(2).

[101] For the learned authors of *B.S. Patil on the Law of Arbitration and Conciliation* (4th Ed., 2003), at p. 17 (of the main text) the term "commercial" in the present context is wide enough to cover transactions such as leasing, construction of works, licensing, investment, financing, exploitation agreement or concession and joint venture or other forms of industrial or business co-operation.

(i) an individual who is a national of, or habitually resident in, any country other than India; or

(ii) a body corporate which is incorporated in any country other than India; or

(iii) a company or an association or a body of individuals whose central management and control is exercised in any country other than India; or

(iv) the government of a foreign country.

The distinction between domestic arbitration and international commercial arbitration is somewhat illusory, since international commercial arbitration is merely a sub-specie of domestic arbitration[102], both of which fall under Part I of the 1996 Act. In fact, Section 2(7) expressly provides that an arbitral award under Part I shall be considered as a domestic award. The only practical advantage of being able to fall within the ambit of international commercial arbitration, as opposed to domestic arbitration in general, is the fact that in the former case the parties can apply a law other than Indian law to decide the substance of their dispute[103].

The third type of arbitration recognised under the 1996 Act is foreign arbitration, being an arbitration conducted in a place outside India. Foreign arbitration – or more correctly, the enforcement of certain foreign awards[104] – is the subject matter of Part II of the 1996 Act. Part II is difficult to understand unless one realises what its sources are. Briefly explained, it can be said that for more than a century arbitration has been of particular use for resolving disputes relating to international commercial transactions (e.g. contracts of sale between nationals of two different countries, shipping contracts where the ship-owner or charterer and the shipper are nationals of two different countries, etc.). In order to promote the effectiveness of international arbitration it has been necessary for participating countries to co-operate in order to ensure that arbitral awards can be enforced outside the jurisdiction in which they were made. This has been achieved through international conventions, the most important of which are the Geneva Convention (1927) and the New York Convention (1958). The Geneva Convention (1927) was given effect in India by the Arbitration (Protocol and Convention) Act, 1937 and the New York Convention (1958) by the Foreign Awards (Recognition and Enforcement) Act, 1961. Both of these Acts have been repealed as independent statutes, although in practice their main provisions have been consolidated into Part II of the 1996 Act. It may be noted that the provisions of Part I would also apply to Part II awards, except to the extent that Part II provides for a separate definition of an arbitral award and separate provision for enforcement of foreign awards or that all or some

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[102] For the remainder of this text, however, we will continue to refer to "international commercial arbitration" as a separate type of arbitration.

[103] See section 28(1) of the 1996 Act which provides that:

28. *Rules applicable to substance of dispute*

Where the place of arbitration is situate in India-

(1) in an arbitration other than an international commercial arbitration, the arbitral tribunal shall decide the dispute submitted to arbitration in accordance with the substantive law for the time being in force in India;

(2) in international commercial arbitration,-

(i) the arbitral tribunal shall decide the dispute in accordance with the rules of law designated by the parties as applicable to the substance of the dispute;

(ii) any designation by the parties of the law or legal system of a given country shall be construed, unless otherwise expressed, as directly referring to the substantive law of that country and not to its conflict of laws rules;

(iii) failing any designation of the law under sub-clause (ii) by the parties, the arbitral tribunal shall apply the rules of law it considers to be appropriate given all the circumstances surrounding the dispute.

[104] For clarification purposes Part II only relates to "Enforcement of certain foreign awards." These are basically awards resulting from commercial arbitration conducted in countries which have signed the Geneva Convention (1927) or the New York Convention (1958). Since over 130 countries have now signed the New York Convention (1958), and our focus is limited to commercial arbitration, the issue of how one enforces in India foreign awards that do not fall within the scope of Part II need not be addressed.

of the provisions of Part I are excluded by an express or implied agreement of the parties[105].

The main difference between domestic awards or international commercial awards and foreign awards is that a party needs to go to court to have a foreign award enforced in India[106], while domestic awards and international commercial awards are final and binding unless they are set aside by the court following an application to that effect under section 34 of the 1996 Act. This main difference is however tempered by the fact that generally in both cases it is the party against whom the award is invoked (i.e. the losing party in an arbitration proceeding) who has the burden of proof, i.e. proving to the court why the court should refuse to enforce the foreign award on the grounds set out in section 48 of the 1996 Act or why the domestic or international commercial award should be set aside on the grounds set out in section 34 of the 1996 Act.

Ad hoc versus institutional arbitration

Viewed from a different perspective, domestic, international commercial and foreign arbitration can be further sub-divided into ad hoc or institutional arbitration. The statutory recognition of this division can be seen in the very definition of the word "arbitration" found in the 1996 Act[107]. "Arbitration" is said to mean: "any arbitration, whether or not administered by a permanent arbitral institution".

Ad hoc arbitration – This is arbitration agreed to and arranged by the parties themselves without recourse to an institution. The proceedings are conducted by the arbitrator(s) as per the agreement between the parties or with the concurrence of the parties. To avoid procedural difficulties in the conduct of the arbitration proceedings, the parties have usually three options before them since the 1996 Act has little to say on how exactly an arbitration proceeding is to be conducted (e.g. will there be written or oral submissions or both? when are the various legal documents to be filed? are witnesses allowed? what are the rules of evidence applicable? etc.):

(a) spell out in detail in their agreement what those procedural rules will be (because this is a time-consuming exercise rarely worth the effort, this approach is rarely taken);

(b) leave the choice of which procedural rules to use to the arbitrator himself (easy enough when dealing with an experienced arbitrator; more problematic when the arbitrator is inexperienced or when there are many arbitrators who cannot agree); or

(c) incorporate by reference into the agreement existing rules, such as the UNCITRAL ad hoc Arbitration Rules[108].

Institutional arbitration – This kind of arbitration is conducted under the rules laid down by an established arbitral organisation and administered by that institution. We provide in what follows a few background details as to two of these institutions:

The Indian Council of Arbitration[109] - Of the many organisations providing facilities for arbitration in India, the Indian Council of Arbitration is the most important one. The Indian Council of Arbitration established in 1965 is the apex arbitral organisation at the national level. The main objective of the Council is to promote the amicable and quick settlement of industrial, commercial and trade disputes by arbitration. It maintains a panel of arbitrators, which includes expert persons from various lines of trade and professions, including a number of retired judges. The names of suitable persons of foreign nationality are also included in the panel to provide a choice of non-Indian arbitrators for those parties who so desire it.

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[105] *Bhatia International* v. *Bulk Trading SA and Anr.* AIR 2002 SC 1432, at p. 1441. This implies that interim relief can be obtained in case of foreign arbitrations and the enforcement of foreign arbitral awards and that non-convention awards may be enforced in the manner prescribed in Part I.

[106] Sections 47 to 49 of the 1996 Act.

[107] At section 2(1)(a).

[108] Adopted in 1976. Online version of the UNCITRAL ad hoc Arbitration Rules at: http://www.uncitral.org/english/texts/arbitration/arb-rules.htm

[109] Official website of the ICA at: http://www.ficci.com/icanet/

The ICA has framed its rules of arbitration based on international standards for the conduct of arbitration proceedings[110]. These Rules have been revised to conform also with the provisions of the 1996 Act. If parties wish to have recourse to arbitration under the auspices of the Indian Council of Arbitration, the following clause is the one recommended by the Council for insertion into a contract:

> Any Dispute or differences whatsoever arising between the parties out of or relating to the construction, meaning and operation or effect of this contract or the breach thereof shall be settled by arbitration in accordance with the Rules of Arbitration of the Indian Council of Arbitration and the Award made in pursuance thereof shall be binding on the parties.

International Court of Arbitration of the International Chamber of Commerce[111] - Established in 1923 as the arbitration body of the International Chamber of Commerce (ICC), the International Court of Arbitration has pioneered international commercial arbitration as it is known today. Since its creation, the ICC Court has administered well over 12,000 international arbitration cases involving parties and arbitrators from more than 170 countries and territories. The seat of the ICC Court is in Paris. The ICC Court is not however a real court. Arbitrators appointed for each particular case decide on the matters submitted to ICC arbitration. One important and unique feature of the ICC Court as an arbitration institution is that it scrutinises and approves arbitral awards submitted in draft form by the arbitrators. This acts as a quality-control mechanism with respect to ICC arbitration.

The rules of arbitration enforced by the ICC Court are the ICC's Rules of Arbitration[112]. If parties wish to have recourse to arbitration under the auspices of the ICC Court, the following clause is the one recommended by that body for insertion into a contract:

> All disputes arising out of or in connection with the present contract shall be finally settled under the Rules of Arbitration of the International Chamber of Commerce by one or more arbitrators appointed in accordance with the said Rules.

7.3.4 What is wrong with arbitration in India?

The advantages of arbitration over court proceedings

The attractiveness of arbitration for most corporate litigants, over traditional court proceedings, is due in large measure to the following three factors:

Speed – Court proceedings are generally lengthy. This is owed, firstly, to the fact that national courts are overloaded with work and secondly, because they have several layers of jurisdiction (Court of First Instance, Appellate Court and Supreme Court) they offer a dissatisfied party the possibility of seeking review of the merits of the case. Arbitration is faster than litigation. It can be very quick (weeks or months if the parties so wish). Arbitral awards are not usually subject to appeal[113] and they may be challenged before the courts only on certain limited grounds.

Economy – Because it is faster, arbitration is also less expensive than court proceedings, even though parties do not pay judges while they do bear all the fees and costs of the arbitrators, as well, in the case of institutional arbitration, the fees of the arbitration institution administering the case.

[110] Online version of the ICA Rules of Arbitration at : http://www.ficci.com/icanet/Rules-of-Arbitration.pdf

[111] Official website of the ICC at: http://www.iccwbo.org

[112] Online version of the ICC Rules at: http://www.iccwbo.org/court/english/arbitration/pdf_documents/rules/rules_arb_english.pdf

[113] The UK *Arbitration Act, 1996* (1996, c. 23) exceptionally allows, in addition to the usual challenge to the arbitration award (see *infra*), a right of appeal on a point of law (section 69), but only if the parties have agreed to such an appeal.

Confidentiality – Court proceedings involve a certain amount of notoriety and may expose the private affairs of the parties to unsought public attention. Arbitration proceedings are conducted instead in private and the awards are kept confidential.

The advantages of arbitration over court proceedings, in terms of speed, economy and confidentiality, are lost however if a dissatisfied party, once an arbitral award is issued, automatically challenges the award in court and then, if either the dissatisfied perty himself (if the challenge is unsuccessful) or the other disputing party (if the challenge is successful), appeals the decision of the first court having heard the callenge to an appellate tribunal. This is precisely what routinely happens in India. Under the 1996 Act, arbitral awards are not subject to appeal on their merits, but they may be challenged before the courts on certain limited grounds. Although these grounds are indeed limited they are sufficiently numerous and broad in scope to allow a dissatisfied party to challenge any award if so inclined. What are those grounds for challenging the award? They vary somewhat whether we are dealing with domestic or international commercial awards or with foreign awards.

Setting aside a domestic or international commercial award

Under section 34 of the 1996 Act an aggrieved party may apply to the court within 3 months of receipt of the award (this period in certain circumstances may be extended by a further 30 days), for setting aside the award. The grounds for setting aside the award are listed in section 34(2)(a) and (b). They may be summarised as follows:

1. incapacity of a party,
2. invalidity of the agreement,
3. want of proper notice,
4. award deal with dispute not referred to arbitration,
5. arbitral tribunal was defective in composition,
6. subject matter of the dispute not being capable of settlement by arbitration under the law for the time being in force in India,
7. arbitral award being in conflict with the public policy of India, which is always the case when "the making of the award was induced or affected by fraud or corruption"[114].

Under section 37(1)(a) of the 1996 Act an order by the court "setting aside or refusing to set aside an arbitral award under section 34" can be appealed.

Refusing to enforce a foreign award

Under section 48 of the 1996 Act the party against whom the foreign award is invoked can ask the court before which enforcement of the foreign award is sought to refuse to enforce said award. The grounds for setting aside the award are set out in section 48(1) and (2). These grounds are similar, but not identical, to those contained in section 34(2)(a) and (b). They may be summarised as follows:

1 incapacity of a party under foreign law,
2. invalidity of the agreement under foreign law,
3. want of proper notice,
4. award deal with dispute not referred to arbitration,
5. arbitral tribunal was defective in composition,
6. award not yet binding, or set aside or suspended, under foreign law,
7. arbitral award being contrary to the public policy of India, which is always the case when "the making of the award was induced or affected by fraud or corruption"[115].

Under section 50(1)(b) of the 1996 Act only the order of the court *refusing* to "enforce a foreign award under section 48" can be appealed. This obviously means that the party against whom the foreign award is invoked has no right of appeal once his challenge under section 48 is unsuccessful.

[114] Statutory Explanation to section 34(2)(b) of the 1996 Act.

[115] Statutory Explanation to section 48(2) of the 1996 Act.

Arbitral awards routinely challenged in India

Why are arbitral award routinely challenged in India and therefore also in the four project States?

There is nothing inherently peculiar with respect to sections 34 and 48 of the 1996 Act (or the 1996 Act itself as a whole[116]). Countries which have modelled their arbitration laws, as India has, on the UNCITRAL Model Law on International Commercial Arbitration (1985) all have similar or equivalent provisions to section 34[117] and section 48[118] of the 1996 Act. While it is true that Indian courts have interpreted the term "public policy" in section 34(2)(b)(ii) expansively[119], more so than some of their counterparts elsewhere with respect to similar or equivalent terms[120], this is all things considered a relatively minor issue.

Yet despite this, there is a consensus among people involved with arbitration in India "that arbitration has failed to fulfil its promise as a process free from full trappings of the law"[121] and that indeed arbitral awards, whether good, bad or indifferent, will automatically be challenged by the losing party.

As was explained, more than twenty years ago, by a judge of the Supreme Court of India in *M/s Guru Nanak Foundation* v. *M/s Rattan Singh & Sons*[122]:

> Interminable, time consuming, complex and expensive procedures impelled jurists to search for an alternative forum, less formal, more effective and speedy for resolution of disputes avoiding procedural claptrap and this led them to the Arbitration Act [i.e. the *Arbitration Act, 1940*]. However, the way in which proceedings under the act are conducted *and without an exception challenged in courts*, has made lawyers laugh and legal philosophers weep. Experience shows and law reports bear ample testimony that the proceedings under the Act have become highly technical accompanied by unending prolixity, at every stage providing a legal trap to the unwary. [*Emphasis added.*]

Neither the passage of time, nor the replacement of the *Arbitration Act, 1940* by the 1996 Act seem to have done much to "help curb the tendency of the parties [in India] to recklessly challenge the awards" [123]. While one can speculate regarding the reasons why all, or at the very least, the vast majority of arbitral awards are being challenged in India, neither the Consultant nor the 4 Project States can do much about it. The little that can be done from a practical point of view is by way of provisos in the arbitration clauses themselves.

The Arbitration and Conciliation (Amendment) Bill, 2003

As discussed earlier, the main problem with arbitration in India pertains to the almost routine challenge of arbitral awards by parties, not to any shortcomings in the relevant legislation. Nevertheless, the ambiguous language of certain provisions of the 1996 Act as well as the absence of provisions for expediting awards or subsequent proceedings in courts when applications are filed for

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[116] This is not to say that the 1996 Act is flawless. The 16th Law Commission of India, in its 176th Report (2001), has identified a number of areas where the 1996 Act could be improved. Online version of the 176th Report at: http://indiacode.nic.in/lawcom/Final_Arb_Report_2002.pdf

[117] E.g. (Canada – at the federal level) Section 34 of the Commercial Arbitration Code, being the schedule to the *Commercial Arbitration Act*, R.S., 1985, c. 17 (2nd Supp.); (France) Article 1484 of the *New French Code of Civil Procedure*; and (United Kingdom) Section 68 of the *Arbitration Act*, 1996 (1996, c. 23).

[118] E.g. (Canada – at the federal level) Section 36 of the Commercial Arbitration Code, being the schedule to the *Commercial Arbitration Act*; (France) Article 1502 of the *New French Code of Civil Procedure*; and (United Kingdom) Section 103 of the *Arbitration Act, 1996*.

[119] *ONGC Ltd.* v. *Saw Pipes Ltd.*, (2003) 5 [India] Supreme Court Cases 705, at pp. 727-728. Thus, the Court held that an award could be set aside if it is contrary to: (a) fundamental policy of Indian law; or (b) the interest of India; or (c) justice or morality, or (d) if it is patently illegal. This is less so, however, in relation to the term "public policy" as it appears in section 48(2)(b) – Conditions for enforcement of foreign awards- of the 1996 Act. See *ibid.*, at pp. 723-724.

[120] *Profilati Italia S.r.L.* v. *Paine Weber Inc.*, [2001] 1 Lloyd's Rep. 715 (Q.B. (Com. Ct.)), with respect to section 68(2)(g) of the U.K. *Arbitration Act, 1996*.

[121] *B.S. Patil on the Law of Arbitration and Conciliation*, *supra*, at p. 308 (of the main text).

[122] All India Reports 1981 SC 2075 at p. 2076, cited in *B.S. Patil on the Law of Arbitration and Conciliation*, *supra*, at p. 3 (of the main text).

[123] *B.S. Patil on the Law of Arbitration and Conciliation*, *supra*, at p. ix (of the preface to the main text).

setting aside awards have raised demands for an amendment of the 1996 Act. These shortcomings, amongst others, are sought to be addressed by the Arbitration and Conciliation (Amendment) Bill, 2003 (the "New Bill"), drafted in pursuance of the 176th Report of the Law Commission of India[124] and currently pending before the Rajya Sabha. Some of the key features of the New Bill are as follows:

1. Reference by the court to arbitration in case all the parties to a legal proceeding enter into an arbitration agreement to resolve their disputes during the pendency of such proceeding before it;
2. Court to decide jurisdictional issues, if any, before referring the parties to arbitration, whenever in an action before it the respondent relies on an arbitration agreement, or before making appointment of arbitrators;
3. Clarifies that provisions regarding the grant of interim measures by the court shall apply to international arbitral proceedings outside India;
4. Clarifies that where the arbitration is under Part I, the place of arbitration shall be within India, and further, that only Indian law shall be applied as between Indian nationals/companies in case of domestic arbitration;
5. Inclusion of two extra grounds for application to set aside an arbitral award;
6. Filing an application to set aside an award no longer to amount to a stay of the award; separate application required for seeking stay of the operation of the award;
7. Arbitral tribunal may pass peremptory orders for the implementation of interlocutory orders and in case they are not implemented, the court may order costs or pass other orders in default;
8. Time schedule for pleadings, evidence and arguments proposed to be fixed by arbitrators (not the parties) for expediting arbitral process, subject to High Court rules to be framed in this regard;
9. Establishment of a specific time frame for the making of arbitral awards and fixing of time for completing pending arbitration proceedings;
10. Establishment of a single member fast track arbitral tribunal, which shall pronounce the arbitral award within six months of the date of its constitution or within such extended period as specified in the relevant provisions; and
11. Setting up of an Arbitration Division within the High Courts for the speedy enforcement of arbitral awards.

7.3.5 Examples of arbitration practice in other countries

The four following countries – Japan, Australia, the United Kingdom and Brazil – have been selected to serve as a basis of comparison with India in terms of arbitration legislation and practice.

Japan

The Japanese modern arbitration system originates from 20 provisions (Articles 786-805) of the old Japanese Code of Civil Procedure[125], which were literal translations from the German Code of Civil Procedure. These provisions, left unchanged for more than a century, were re-introduced, again unchanged, in the new Japanese Code of Civil Procedure[126].

In 2003, however, Japan enacted a new and comprehensive Arbitration Law[127], which came in force on 1 March 2004. This new law is based on a 1989 Draft Text Law of Arbitration proposed by the Japanese Law Study Group. The 1989 Draft Law was for its part based on the UNCITRAL Model Law. The 2003 Arbitration Law is no longer part or an adjunct of the Japanese Code of Civil Procedure.

[124] See note 36, *supra*.

[125] Law concerning Procedure for General Pressing Notice and Arbitration Procedure, Law No. 29 of 1890, April 21, 1890.

[126] Articles 786-805. Law concerning Procedure for General Pressing Notice and Arbitration Procedure, 1996 effective January 1, 1998.

[127] Law No. 138 of 2003. For an online English version of this law see: www.jcaa.or.jp/e/arbitration-e/kisoku-e/kaiketsu-e/civil.html

While it is too early to assess the impact of the new Arbitration Law on Japanese arbitration practice, "one of the most serious problems with arbitration in Japan is its low utility rate as a mean of dispute processing, even in the business communities"[128]. According to the results of a survey published in November 1996[129] the rate of use of arbitration for domestic dispute resolution was the lowest of 6 choices (avoidance, negotiation, conciliation, arbitration, settlement-in-court and judgment) and second lowest, after conciliation, for international dispute resolution given the same 6 choices.

Ad hoc arbitration is rare in Japan as most cases are handled by institutions and even these cases are few; in the 90's the Japan Commercial Arbitration Association has never handled more than 15 new cases a year[130]. Many of these arbitration cases are moreover settled through mediation or conciliation. Given the non-confrontational nature of the Japanese people and their willingness to compromise, Japan has largely accepted the role of mediation and conciliation, both as an independent ADR procedure, or in litigation or arbitration procedures[131].

Australia

In general, international commercial arbitrations are governed by federal legislation, the International Arbitration Act 1974132. The Act incorporates the UNCITRAL Model Law. However, parties are permitted to exclude this law. Where they do so the arbitration proceeding will be governed by the commercial arbitration Act of the State or Territory where the arbitration is held.

In New South Wales, for example, the Legislature adopted the Commercial Arbitration Act 1984[133], which is not based on the UNCITRAL Model Law. Because Australia (the Commonwealth, the States and Territories) have statuary mediation in many important areas of economic and social activity and court-annexed systems of ADR, the NSW 1984 Arbitration Act allows parties to an arbitration agreement, pursuant to section 27 of the Act, to also "seek settlement of a dispute between them by mediation, conciliation or similar means", or "authorise an arbitrator or umpire to act as a mediator, conciliator or other non-arbitral intermediary between them whether before or after proceeding to arbitration, and whether or not continuing with the arbitration."

United Kingdom

Arbitration has a long history in the U.K., going at least as far back as the 17th century. Widely used as a mean to settle disputes in general, the use of arbitration in certain specialized fields such as construction, maritime, commodity, and commercial and agricultural property leases, is greater now than resort to the courts[134]. A striking feature of English domestic arbitration, in marked contrast with Japan for example, is that most arbitration proceedings in the U.K. are conducted by lay arbitrators sitting alone and are not subject to the supervision of an institution beyond the initial appointment of the arbitrator[135].

A new Arbitration Act 1996[136] came into force on January 31, 1997, thereby repealing a number of previous acts, including the Arbitration Act 1975. The U.K. Arbitration Act 1996, while following the structure and logic of the UNCITRAL Model Law and where appropriate using the actual language of the Model Law, also aims at consolidating existing U.K. legislation and codifying the more important and uncontroversial principles of English arbitration law.

Brazil

Brazil is not a country where arbitration has had much of a role to play as a dispute resolution mechanism. Prior to 1996, under the Brazilian Civil

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[128] Yasunobu Sato, *Commercial Dispute Processing and Japan*, 2000, at p. 243.
[129] *Ibid.*, at pp. 243-244.
[130] *Ibid.*, at p. 244 and 258.
[131] *Ibid.*, at p. 280.
[132] Act No. 136 of 1974. Online version: http://scale.law.gov.au/cgibin/download.pl?/scale/data/pasteact/1/712
This is new legislation. The former Conciliation and Arbitration Act 1904 (Cth), repealed in 1988, was solely limited to disputes related to industrial relations.
[133] **No 160 of 1984. (Repealing thereby NSW's** the *Arbitration Act 1902* and the *Arbitration (Foreign Awards and Agreements) Act 1973.) Online version:*

[134] Henry J. Brown and Arthur L Marriott, *ADR Principles and Practice*, 1999, at p. 49.
[135] *Ibid.*, at p. 50.
[136] Online version at: www.legislation.hmso.gov.uk/acts/acts1996/1996023.htm

Code and Code of Civil Procedure, (1) the parties needed to enter into a separate agreement to go to arbitration after the dispute arose, even if they had an arbitration clause in their original contract, and (2) the party interested in enforcing the arbitral award had to request its recognition from a court first, and only thereafter could he enforce the award. (Lack of interest - until recently - by the Brazilian authorities in promoting arbitration as a viable form of ADR can be deduced from the fact that Brazil only ratified The New York Convention on Recognition and Enforcement of Foreign Arbitral Awards 1958 in 2002.)

A new Arbitration Law[137] was adopted in Brazil on September 24, 1996. Although the law took effect on 23 November 1996, it was quickly challenged on constitutional grounds and remained in limbo until 2000 when the Brazilian Federal Supreme Court (STF) confirmed that it was constitutional and could be applied in its entirety.

The new Act is based on the UNCITRAL Model Law, but contains a number of variations from it, the most notable being the inclusion of provisions which maintain the distinction that existed under the Code of Civil Procedure between an arbitral clause in a contract and what is known in Brazil as an "arbitral compromise" or submission. While making clear that the existence of an arbitral clause excludes the jurisdiction of the courts to decide a dispute falling within the scope of the arbitral clause, the Brazilian legislator decided to maintain in the new Act the requirement of a formal submission before an arbitration proceeding could be validly instituted. Should such submission not be voluntarily drawn up and executed by both parties, the party still wishing to proceed to arbitration will have to institute court proceedings first to force the defaulting party to sign the submission.

7.4 Conclusion

Indian legislation regarding commercial arbitration is very similar to that which exist in most countries – that is, legislation based on the UNCITRAL Model Law. The 1996 Act *per se* is fine. Whatever perceived flaws still exist with regard to it will be dealt with once *The Arbitration and Conciliation (Amendment) Bill, 2003*, discussed earlier, is enacted by the Indian Parliament.

Moreover, even if the 1996 Act had been truly dismal, individual States in India, including the four Project States, are limited by the Indian Constitution as to what they can do in terms of setting norms or effecting improvements with respect to ADR mechanisms, such as arbitration and conciliation. These matters are largely within the jurisdiction of the Central Government.

The main impediment which arbitration faces in India pertains to the routine challenge of arbitral awards by the losing party before the very same courts which arbitration is designed to avoid. This is mostly a cultural issue for which there are no easy or self-evident solutions. How to does one stop disgruntled litigants from further litigation? The problem is compounded, and perhaps abetted, by the chaotic, and extremely slow, judicial process prevailing in India. This unfortunate state of affairs is a matter of public record[138] and one in which the ADB is currently actively involved in by way of a different TA Programme than the current one[139].

Given these constraints, and in order not to create additional problems through sloppy contractual drafting, the Consultant can only recommend that the four Project States adopt, based on all that which has been said earlier, as the standard text to be inserted in those contracts (concession agreements or other types of contracts) aimed at promoting PSP in infrastructure the model ADR clause (set out in two versions, with two variants each) which appears in Annex 12 of Volume 3 – "Draft Policies and Legislation for the Project States".

137 Law 9.307/96. Online version at: http://www.presidencia.gov.br/ccivil_03/Leis/L9307.htm

138 "Govt turns to ADB to study what ails Indian judiciary", The Times of India, Monday, 8 December 2003. Online version of article at: http://timesofindia.indiatimes.com/articleshow/345190.cms

139 Administration of Justice (Pilot Study). See: www.adb.org/Documents/Profiles/PPTA/37064022.ASP

7.5 Incentives for Private Infrastructure Investment: General Considerations

7.5.1 The Case for Incentives

Incentives can be broadly defined as actions, arrangements, or commitments on the part of governments that serves to minimize risk or enhance returns to an investor. Several countries have used incentives to attract private investment characterizing such investment as a source of economic development and modernization, income growth and employment.

A high rate of investment has long been viewed as a possible key to economic growth. Consequently, countries have liberalized their investment regimes and pursued policies to attract investment. They have addressed the issue of how best to pursue government policies to maximize the benefits of private investment in the economy, particularly in infrastructure sectors. The overall benefits of investment in infrastructure for developing country economies are well documented. Given the appropriate government policies and a basic level of development, a preponderance of studies shows that private investment in infrastructure triggers technology spillovers, assists human capital formation, contributes to international trade integration, helps create a more competitive business environment, and enhances enterprise development. All of these contribute to higher economic growth, which is the most potent tool for alleviating poverty in developing countries.

Traditionally, liberalization policies have focused on establishing the regulatory and other basic conditions for market access and fair treatment of investors, while investment promotion policies are concerned with facilitating the attraction of investment projects and maximizing their benefits to the local economy. Increasingly, these two areas of public action are becoming inter-connected. Hence, while on one hand better policies and governance practices are among the best long-lasting incentives for investors, according to numerous investor surveys, there may be situations where policy measures specifically designed to attract investors, in specific sectors of the economy are both desirable and effective.

In theory, the case for incentives arises when a free market economy or an economy without active interventions from the government results in a less than optimum supply of infrastructure services. Incentives may be economically justified in some cases, where market imperfections impede investors from earning a normal return on their investments. These could arise due to a number of factors. Characterized as these sectors are by increasing returns to scale, they tend to be natural monopolies and hence even in the absence of entry/exit regulations, capital flow in such sectors is limited.

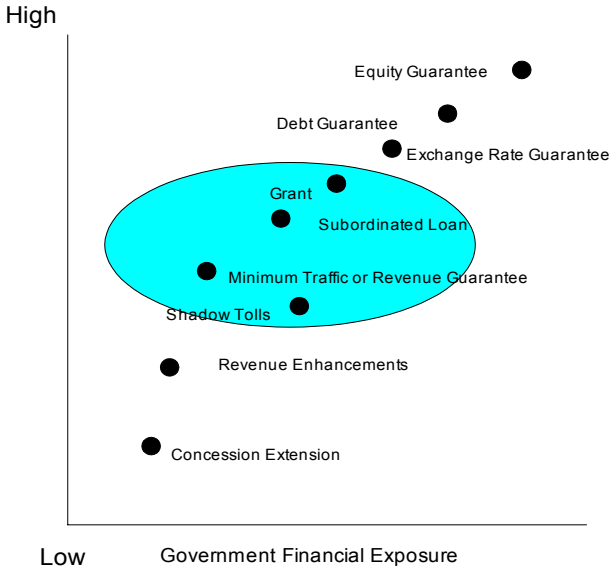
In addition, investments in these sectors carry higher risk premiums, as these investments are usually lumpy and irreversible and have long pay-back periods. Thirdly, several infrastructure services are characterised by their non-completive nature as quasi-government services and may require active government interventions to bring market forces to bear on those services. There exist additional, indirect benefits - technology spill-over and other positive externalities - which are not captured by private returns and may result in levels of investment that are sub-optimal. In the specific context of developing countries, the government is usually constrained in its access to external finance, so attracting private investment becomes a strategy for financing economic growth.

7.5.2 International Experience

Many countries offer special incentives to promote investment. These incentives include, for example, tax holidays for new projects, tax credits for new investments, exemptions from import duties on inputs, and exemptions or deferment of local taxes. Advocates of such incentives argue that they promote investment and jobs, while opponents contend that they are not effective, have high revenue costs, distort investment, facilitate corruption, and make the tax system complicated and less transparent.

While financial incentives may distort financial clarity, they are also sometimes essential to closing the deal. The investor is interested in minimising

risk and therefore those incentives that bring his risk to a manageable level are attractive. By comparison the Government is interested in minimising exposure to financial cost. The intersection of these interests for any project is the point where the deal can be struck. A schematic of the relationship between risk and exposure is as shown diagrammatically below.



Reference: Private Financing of Toll Roads, Fisher and Babbar, RMC Discussion Paper Series 117

Fisher and Babbar explain the experience of various countries in each of these levels.[140]

Equity guarantees. "*Of the various mechanisms available to government, risk exposure is highest for equity, debt, and exchange rate guarantees. Under an equity guarantee the concessionaire is granted an option to be bought out by the government with a guaranteed minimum return on equity. Although there is no public cost under this arrangement as long as the project generates the minimum return on equity, the government essentially assumes all of the project risk, and private sector performance incentives are severely reduced. None of the projects studied included equity guarantees, although an equity guarantee has been used in other projects, such as the San Juan Lagoon Bridge project in Puerto Rico. To date, the Puerto Rican government has not been required to make payments to support the project's return on equity.*

[140] Fisher and Babbar, Private Financing of Toll Roads, RMC Discussion Paper No. 117.

Debt guarantees. *Under a debt guarantee the government provides a full guarantee or a cash-flow deficiency guarantee for repayment of loans. As with an equity guarantee, a debt guarantee entails no public cost as long as the project generates sufficient cash flow to service debt. However, it creates extremely high government exposure and reduces private sector incentives. In China the government provided a cash-flow deficiency guarantee for the $800 million in senior project debt.*

Exchange rate guarantees. *Under an exchange rate guarantee the government compensates the concessionaire for increases in the local cost of debt service due to exchange rate movements. Because currency fluctuations can constitute a significant project risk when foreign capital is involved, government guarantees can have a substantial impact on a project's ability to raise financing. Although not on the same scale as debt or equity guarantees, exchange rate guarantees can still expose the government to substantial risk. They also tend to create an artificial incentive to raise foreign capital since the exchange rate risk premium on foreign capital is eliminated by the government guarantee. Exchange rate guarantees were used extensively in Spain's toll road program, resulting in large annual exchange rate payments by the government that peaked at about $500 million in 1985 (Gomez-Ibanez and Meyer 1992).*

Grants and subordinated loans. *Equity, debt, and exchange rate guarantees all create contingent exposure of varying degrees, depending on the expected operational performance of the toll road project. Alternatively, governments can furnish grants or subordinated loans at project startup as cash or in-kind contributions. These can provide a critical boost to project economics. In the projects studied, Chile provided a $5 million cash grant—nearly one quarter of total project capital—with no provision for repayment. By providing a subordinated loan, a government can fill important gaps in the financial structure between senior loans*

and equity and can be repaid if the project is successful. Subordinated loans are repaid after debt service on senior loans but before returns to equity.

Malaysia, for example, provided a $634 million subordinated loan, or about a fifth of the total project capital of $3,192 million. It also made soft loan facilities available to support minimum traffic levels and currency fluctuations.

Shadow tolls. *An alternative structure to a one-time, up-front government payment is a 'shadow toll,' whereby the government contributes a specific annual payment per vehicle recorded on the road. The advantages of shadow tolls are that they are paid over time and therefore may be less of a burden to the government than an up-front grant. Furthermore, they enhance the concessionaire's incentive to attract users to the facility.*

The drawback of shadow tolls is that they may not use government funds efficiently to protect investors from revenue risk. Government contributions under a shadow toll arrangement are higher when traffic is high and lower when traffic is low. Thus government support may inadequately protect investors when traffic falls below expectations. On the other hand government support may be unnecessarily high when traffic exceeds expectations. In addition, the payment of contributions over time creates a credit risk for the concessionaire that is avoided with up-front grants. The inefficiencies of shadow tolls can be reduced in a number of ways, including a declining schedule of shadow toll payments as traffic levels increase or a maximum traffic ceiling above which shadow toll payments are not paid. Shadow tolls were not used in any of the projects studied. They are, however, being used in the United Kingdom's Design Build Finance Operate program. The U.K. Department of Transport concessioned the first in a series of these concessions in late 1995.

Minimum traffic or revenue guarantees. *A minimum traffic or revenue guarantee, in which the government cornpensates the concessionaire in cash if traffic or revenue falls below a specified minimum level, is a relatively common form of government support. Typically, the minimum traffic or revenue threshold is set below (for example, 10-30 percent) the expected level in order to reduce government exposure while providing sufficient coverage to support the debt component of the capital structure. Under such a structure the government can support private financing for a road that it would otherwise have to fund on its own, while limiting its financial exposure to the possibility that revenue may fall below the guaranteed minimum. In addition, traffic and revenue guarantees retain the sponsor's financial incentive in the project, provided the minimum revenue stream does not allow for an attractive revenue on equity. Chile's South Access to Concepcion project includes a minimum revenue guarantee, while Colombia's Buga-Tulua Highway project uses a minimum traffic guarantee.*

Especially if they are sharing significant "downside" risk with the private sector—for example, when extending minimum traffic and revenue guarantees—governments should also consider sharing 'upside' potential with concessionaires. This approach can be used by establishing a revenue-sharing threshold at a specified level above anticipated revenues. The concessionaire retains 100 percent of revenues up to the threshold level, and the government receives a percentage of any revenues above the threshold. The Colombia project includes a maximum traffic guarantee above which all revenues are transferred to the government sponsor.

Concession extensions and revenue enhancements. *Two final types of financial support involve very limited public sector risk, but are also limited in their ability to support financing. First, a government can extend the concession term if revenue falls below a minimum amount, as was the case with the Mexico City-Toluca Toll Road. Term extensions do not impose any cash cost on the government, but they also do not provide any short-term protection to investors from traffic and revenue shortfalls."*

7.5.3 Importance of Good Governance

With liberal policy frameworks in the economy becoming commonplace and losing some of their traditional power to attract private investment, governments are paying more attention to broader measures and policy tools including investment

promotion and facilitation. As investors have a variety of sectors and investment opportunities to choose from, making investors aware of the opportunities which exist in a given sector in addition to improving that sector's image and providing it with a sound regulatory/enabling environment, can often increase substantially the attractiveness of a sector for investment. While investment promotion strategy may influence investors' preference for a certain country or location, there are many other factors for investors, which often have different, more complex, motives than the government. The main determinants of private investment in general include size of markets, infrastructure, macroeconomic stability, inputs, labour and product markets, incentives, integration schemes, methods of private participation, attitudes, and overall business environment.

Incentives should be reviewed regularly and adapted or phased out when they have achieved their purpose. At the same time, their cost-effectiveness needs to be carefully monitored. Some may attract primarily short-term, profit-orientated, or low cost-motivated investment. Specific investment incentives may miss their targets due to the difficulty in identifying when and where expected spill-overs, which would justify government intervention, will actually occur. The opportunity cost of alternative uses of public funds (e.g. education and infrastructure) has also to be taken into account. They can pose some policy problems -- particularly when targeted at or tailored to individual enterprises. By creating a non-level corporate playing field, through their cost to the public purse, such incentives may not increase the benefits of private investment. Where the incentives offered to investors include regulatory derogations they furthermore heighten concerns about sustainable development.

Role of Tax Incentives

A tax incentive can be defined as any tax provision granted to a qualified investment project that represents a favourable deviation from the provisions applicable to investment projects in general. Thus, the key feature of a tax incentive is that it applies only to certain projects. For example, a provision that sets the corporate income tax (CIT) rate for private investors at half the rate that applies to other investments would constitute a tax incentive, but a provision that simply sets a low CIT rate for all firms would not constitute a tax incentive. Thus, tax incentives will generally increase investment only if the more tax-sensitive projects receive the more favourable tax treatment.

While such investment-enhancing differential taxation is possible in theory, in practice it can be very difficult for political processes to select correctly such projects. Indeed, experience shows that in some cases it is the most profitable projects, which would have been pursued even in the absence of incentives that are most likely to receive incentives, rather than the more tax-sensitive ones. Thus, while it is possible that tax incentives will increase overall investment, this is not obviously the case. Indeed, they may well reduce investment if they necessitate higher tax burdens on others projects', discouraging the latter's implementation. Similarly, tax incentives may result in a significant loss of revenue if they are concentrated on investment projects that would have occurred even in the absence of the incentives. Empirical evidence points out that tax incentives can be costly and are rarely the most important determinant of investment. Moreover, while low rates of taxation may promote investment, no evidence is found for the notion that complicated regimes of discriminatory tax incentives are more effective in promoting investment than simple tax regimes with low, uniform rates of taxation. Tax incentives can be broadly separated into several major categories. The benefits and disadvantages of these are described in Table 7.1 below.

Table 7.1: Tax Incentives – Benefits and Drawbacks

Lower income tax Tax holidays	▪ Higher benefit to high return PSP ▪ Simple to administer ▪ More attractive for short run PSP
Investment allowance & tax credits	▪ Better targeted ▪ More attractive for short run PSP ▪ Higher administrative costs
Depreciation allowance	▪ Better targeted ▪ Doesn't discriminate against long term PSP ▪ Higher administrative costs
Exemption from sales tax/ customs	▪ Difficult to administer ▪ Impact not certain on infrastructure PSP

It can be argued that tax incentives suffer from the drawbacks of less transparency, create multiple distortions, and are susceptible to abuse and tax avoidance strategies. Therefore, while granting tax incentives care should be taken to minimize such effects. Also, as is evident from Table 7.1, there is a trade-off between ease of administration (as in tax holidays or lower tax rates) and better targeting (as in case of depreciation allowance), and the design of tax incentives should make the appropriate call on it.

Cost of Complexity And Uncertainty

OECD's Foreign Direct Investment for Development study suggest that companies may be willing to invest into countries with legal systems and regulatory frameworks that would not otherwise be considered as "investor friendly" provided they are able to obtain a reasonable degree of clarity about the specific environment in which they will be operating. Conversely, there appears to be certain threshold levels for transparency beneath which the business conditions become so opaque that virtually no investor is willing to enter, regardless of the extent of the inducement. Among the elements of the regulatory/enabling environment that can be influenced by policies, transparency is arguably the single most important one. A non-transparent business environment raises information costs, diverts corporate energies toward rent-seeking activities, and may give rise to outright crime such as corruption.

Transparency in government decision-making and public policy implementation is important because it facilitates governmental accountability, participation, and predictability of outcomes. To achieve transparency, there is a need for clear and enforceable rules and procedures, which are preferable to those that provide discretionary powers to government officials or those that are susceptible to different interpretations. Accountability is needed to make sure that rules are actually complied. Similarly, transparency and information openness cannot be assured without legal frameworks that balance the right to disclosure against the right of confidentiality, and without institutions that accept accountability.

In particular, the design of the tax structure and the way in which it changes over time can critically affect the level of risk and transaction costs associated with investment. Complex tax legislation, usually associated with the number of tax rates, tax bases and the number of special provision it includes, directly imposes transaction costs on a firm, reducing the return on any given investment. Complexity is costly because firms must seek both to understand the tax law as it applies to their activities and to fulfill the requirements necessary for them to remain in compliance. The greater the number of provisions in the tax code, the more time must be devoted to discerning which provisions are applicable to a particular activity. Although the initial reading and comprehension of the law imposes only a one-time cost to the firm for any particular activity, shifting policy priorities lead to frequent changes in tax laws, and the firm must continually reassess the law to determine how its various activities are affected.

Directly measuring the cost of assessing tax law is difficult, but there is ample evidence of the high cost incurred in order to remain in compliance with the tax system. Calculating tax liabilities, completing requisite forms, maintaining records and providing documentation all contribute to what is termed the compliance burden. Estimates of these costs indicate they can be quite high. For example, compliance costs for combined U.S. federal and state corporate income tax are estimated at over three percent of revenues collected. Evidence from other countries puts estimates in the range of 2 – 24 percent of total collections. Similar systematic estimates are not available for transition economies, but anecdotal evidence suggests that compliance burden can be substantial. For example, the reporting requirements of the Russian tax system are so demanding that even small firms are obligated to employ a full-time accountant in order to remain in compliance. In addition, tax complexity may hinder investors indirectly via fiscal illusion, or a misperception on the part of the taxpayer of the true amount of taxes paid. The informational cost associated with increased complexity in the tax system will discourage taxpayers from informing themselves.

Another aspect of tax structures that may influence investment decisions is uncertainty. Uncertainty affects business decisions because firms and individuals prefer less risk for any given expected

return. Given a firm's business activities in a given period, uncertainty about its tax liability may arise for a number of reasons. First, frequent changes in tax law can generate uncertainty about the return on an investment in future periods. Ample examples of government capriciousness in the tax treatment of firms are available to support doubts of government credibility in maintaining any given tax policy. Second, the current written laws and procedures themselves can be a source of uncertainty. Third, complexity itself may generate uncertainty because it can hinder discernment of the meaning of the law. In fact, tax law can be so complex and its evolution so disjointed, that, provisions can be enacted that conflict with existing legislation. However, a shorter tax code does not necessarily imply a better business environment. If more extensive and detailed tax law provides more precision, it may actually encourage business activity by reducing uncertainty and transactions costs associated with determining tax liability.

7.6 Incentives for private investment in water supply and sanitation

Growing population in India over the decades has put a constraint on the availability of resources in both urban and rural areas. In a changing liberalized scenario and increasing pressure on resources, there is a need for controlling the environment infrastructure consisting of basic services like water supply and sanitation. Augmentation of water supply and sanitation, and improvements in service quality call for significant investments. As in other core infrastructure sectors, the state cannot finance all such developmental activities on its own. Thus, private investment would be required to augment the efforts of the state in this essential sector.

7.6.1 Water sector in India

Access to water and sanitation services is not universal in India. Approximately 90 percent of rural habitations have been fully covered with drinking water facilities while 20 percent of rural habitations have been covered by sanitation facilities (Annual Report, Ministry of Rural Development 2002-03). Similarly, in case of urban habitations, more than 90 percent of the urban population has been covered with water supply and around 55 percent by sewerage and sanitation facilities.

Other problems associated with water supply are the presence of impurities and the supply being largely un–metered. Groundwater is being increasingly overexploited in some of the Indian states. Surface water, on the other hand, is being used either inadequately or inefficiently. In most urban areas, water supply is intermittent. In such metropolitan cities as Ahmedabad, Bangalore, Hyderabad, and Pune, water is supplied only for a few hours a day, For instance, in Ahmedabad the water supply is limited to 1–1.5 hours a day and in Pune, 2–4 hours (AMA 1998). The distribution losses of treated water range between 25% and 40% (World Bank 1999)[141].

Sewage from cities increased from an estimated 5 billion litres a day in 1947 to 30 billion litres a day in 1997. Of this, only 10% are treated. Only 70% of the population in Class–I cities[142] have access to basic sanitation services. Wastewater treatment, even in Class–I cities, is only 30% (CPCB 2000). The remaining untreated sewage from the urban areas finds its way into water bodies, making the water unfit to drink or even to use for bathing, and at the same time, affecting their ecological health. The lack of adequate sanitation facilities has also led to severe health and environment impact due to presence of unhygienic conditions. The annual economic losses due to the adverse effects of poor quality drinking water on human health are estimated to be Rs 122 billion (Pachauri R K and Sridharan P V (eds). 1998).

Investments required

The India Infrastructure Report (1996)[143] on investment requirements for Infrastructure had estimated an annual requirement of funds of Rs 280 billion for providing water supply and sanitation

[141] Benchmarking water and sanitation utilities: a start-up kit, Washington, D.C.: The World Bank. 6 pp

[142] Those with a population of 100 000 or more

[143] India Infrastructure Report 1996: Policy imperatives for growth and welfare. New Delhi: National Council for Applied and Economic Research, Vol. 2, 172 pp

infrastructure for the urban population only for the period (1996–2000). As compared with this, the total allocation for the schemes pertaining to Urban Water Supply and Sanitation during the whole 9th Five Year Plan period (1997–2002) was Rs 186 billion (NIUA,1999)[144].

Inefficient collection of revenue by local bodies (40%–45%) coupled with inadequate and highly subsidized user charges for provision of services and high administration costs (18%–22%) is a major problem (HSMI 1999). This has diminished the financial resources of the urban local bodies over the years, thus increasing their dependence on State governments and other external agencies for loans and grants. There is therefore a need to direct the limited resources more effectively. In addition, it is necessary to identify other sources of funding for these sectors such as the private sector.

However, these reforms cannot take place unless a proper legal and regulatory framework for such investment is created and developed which ensures a full cost recovery. This calls for innovative reforms in the incentive structure for private participation in the sector. The current environment mitigates against such full recovery for social reasons.

7.6.2 Water sector policies: National and state level

There have been several policy interventions by the Union Government in water supply and sanitation. These policies highlight the need to improve the delivery of these basic services and acknowledge the possibility of private investment in improving these services. Several other Union Government policy statements also have a bearing on the water sector. The 1991 Economic Policy and subsequent policy statements on economic liberalization, market based approaches to economic management have discussed issues like privatization of urban water, and decentralization. The two Union Government initiatives that explicitly acknowledge the need for private participation in the delivery of water supply and sanitation services are discussed below. The initiatives by State Governments are discussed subsequently.

National Water Policy, 2002

The National Water policy (1979) assigned the highest priority to drinking water, advocates promotion of integrated use of surface and ground water and recognizes water as an economic good. This has also been reiterated in the National Water Policy of 2002. The National Water Policy, 2002, calls for a holistic and integrated approach to water management, identifies drinking water as the first priority, discusses various environmental issues, and proposes participation of the beneficiaries and the private sector in water management. Some of the key features of this policy are the following:

- Drinking water should be priority in planning and operation of systems;
- Maintenance of existing water resources schemes would be paid special attention under these institutional arrangements;
- Participatory approach should be adopted and water user associations and local bodies should be involved in operation, and maintenance to lead to eventual transfer of management to the local bodies/user groups;
- Private Sector Participation should be encouraged in planning, development and management to introduce corporate management and improve service efficiency;
- A standardised national information system with a network of data banks and data bases, integrating and strengthening the existing Central and State level agencies should be established;
- Exploitation of ground water resources should be so regulated as not to exceed the recharging possibilities as also to ensure social equity.

Urban Reform Incentive Fund (URIF)

The 2002/03 Budget called for setting up an URIF with an initial outlay of Rs. 500 crore to provide reform-linked assistance to states. The Government of India approved the proposal on 28th June 2003. In the first phase, the URIF will provide incentives to state governments to carry out reforms in the following areas:

[144] Draft Report: Status of water supply, sanitation and solid waste management in urban India
Delhi: National Institute of Urban Affairs

- Repeal of the Urban Land Ceiling and Regulation Act at the state-level by resolution;
- Rationalization of stamp duty in phases to bring it down to no more than 5% by the end of the Tenth Plan period
- Reform of rent control laws to remove rent control so as to stimulate private investment in rental housing;
- Introduction of computerized processes of registration;
- Reform of property tax so that it may become a major source of revenue of urban local bodies, and introduction of arrangements for its effective implementation so that collection efficiency reaches at least 85% by the end of Tenth Plan period;
- Levy of reasonable user charges by urban local bodies, with the objective that the full cost of operation and maintenance is collected by end of the Tenth Plan period;
- Introduction of double entry system of accounting in urban local bodies;
- The funds under URIF will be released as additional central assistance to the states. Allocations are based on the share of each state's urban population compared to total urban population. Importantly, Public-Private Partnership is being encouraged though this mechanism. The states will enter into Memorandum of Agreement (MOA) with the Ministry of Urban Development & Poverty Alleviation (MOUDPA) for carrying out the above reforms. States that do not wish to undertake all the seven reforms can sign a MOA covering less than the complete reform package. Each reform area has been assigned a special weightage. On signing the MOA, 50% of the outlay will be released and the balance 50% will be given to the state governments after achieving the prescribed milestones.

Reform Area	Proposed Weightage (% of State's Share of URIF)
Repeal of the Urban Land Ceiling and Regulation Act	10
Rationalisation of stamp duty	20
Reform of rent control laws	20
Introduction of computerized processes of registration	10
Reform of property tax	10
Levy of reasonable user charges	20
Introduction of double entry system of accounting in urban local bodies	10

Corporate Income Tax Incentives

Water was amongst the first infrastructure sectors to be considered for tax incentives for private investment. Under Section 80 IA, investors in the sector are offered a 100% rebate on income tax for 10 consecutive years, out of the first 20 years of the project.

On the basis of policy notes and other documents available for such initiatives, the general directions that the incentive structure for private investment would take in the state have been assessed. The following table 7.2 summarizes the incentives available for private investors for investments. The items in bold indicate the incentives specified in the policy statements. These have been inferred from the concession agreements in the various states[145]. In addition, salient features of some international best practices in the sector are also presented.

7.6.3 Directions for change

In a segmented fashion, the PSP option can take on different forms. These can be described as a continuum between the extremes of completely public sector responsibility, through joint responsibility, to private responsibility. PSP in areas such as billing and collection, meter installation, etc. (as in Mexico City), in contracting out operations of existing treatment works (as in Puerto Rico), and in creating new assets through BOOT (Build–Own–Operate–Transfer) options (as in Thailand) (The World Bank 1998), are some international examples of PSP in water supply and sanitation.

There have been very little in terms of private sector participation initiatives in the water sector in India. Even the initiatives that have taken place have been confined to discrete functions and to forms of PSP such as management and service contracts. However, the Tirupur project in Tamil

[145] The draft Visakhapatnam Industrial Water Supply Concession in the case of AP and the Gujarat Water Infrastructure EPC and maintenance contracts for Gujarat

Nadu has been developed on a BOOT model. In Karnataka also, the BOOT option is being explored for various activities in the water sector. AP is considering the concession mode for the VISCO project. While it is generally considered that it is premature to consider PSP of the form of concession contracts or even lease contracts, some policy initiatives would certainly facilitate PSP in the sector and a gradual transition to longer contracts. These are listed below:

- **Financial health**: The inherent poor viability of the sector arises in great measure from inefficient collection of revenue by local bodies (40%–45%) coupled with inadequate and highly subsidized user charges for provision of services and high administration costs (18%–22%) (HSMI 1999). Clearly laying down incentives for service providers in the sector, particularly private sector service providers, would ensure that objectives to improving efficiency in service delivery and improving viability would be met. The incentives that could be considered here could be designed in a manner that ensures that while the private operators are assured of a minimum rate of return, they are also encouraged to improve efficiency. This apart, enforcement of rational tariffs and cost recovery would be prerequisites for expanding private financial flows.
- **Institutional and process issues**: The urban service providers need to be equipped with a broad spectrum of skills and expertise to undertake a wide variety of tasks ranging from the management of urban areas to involvement in the technical operation of water supply networks and solid waste disposal systems including the monitoring and regulation of private sector, attracting capital from the markets and enforcing environment regulations. The local bodies do not have the requisite skills and hence are unable appreciate the need for a facilitating framework for private investment in the sector. Equally, the presence of a large number of institutions makes the management of the sector and hence projects in the sector very complex. In addition, some of the institutions are local, others state level and some are central level organisations. Due to lack of co–ordination between these organisations, a situation has arisen, where the responsibilities and powers of various authorities in delivering a single service are ambiguous and unclear. For example, while the management of water resources is the responsibility of the state water supply department and the irrigation department, the construction of water works is the responsibility of another state level agency, such as water supply boards, and finally, the operation and maintenance of these water works is the responsibility of urban local bodies.
- **Credible information to mitigate risks**: The urban local bodies and the policy makers are not aware of the present status of the quality of life in urban areas due to lack of adequate and updated information database. As a result, private developers are unable to carry out robust financial analysis to assess the viability of projects. It is therefore essential for urban local bodies to maintain a good database at ward level, zonal level so as to aid decision-making.

Given the above, a gradual approach is suggested for these services. A first step may be restructuring the water and sanitation department on a profit centre basis followed by corporatisation of the utility or separate joint venture companies to manage the water and sanitation system. These water supply companies could then operate with assistance from a strategic partner.

For the existing distribution network in large urban local bodies, the rehabilitate–operate–transfer mode of privatisation could be explored. Here, the existing distribution system would need to be repaired and restored to its desired condition by the private operator. Wherever the distribution network has not been laid, as in the urban areas adjoining the Municipal Corporations, private participation could take the build–operate–transfer form, wherein the private operator would also lay down the distribution network. For local bodies that are not very large, sustaining commercial operations through the use of private entities can still occur if management and service contracts are given to the private sector in discrete activities like operation of pumping stations and water treatment plants, billing, etc. This option should be considered by all local bodies wherever it is not possible to introduce private sector participation in any of the other suggested modes.

Table 7.2: Comparison of Incentives in Two States and International Experience

	Andhra Pradesh	Gujarat	International Experience
Guarantees	Guaranteed supply of minimum amount of water, except in cases of water shortage. In the latter case, financial compensation is due to the concessionaire.		
	GoAP to provide land for the project with part cost being converted to equity, the rest being leased		
Tariff setting	Tariffs to be determined based on the formula in the concession agreement and reviewed by a 'Charges Review Committee' comprising representatives of GoAP and the concessionaire chaired by a retired judge.		Tariff revision formula is built into the concession agreement in Macau, China
Exit terms	GoAP not to appropriate facilities other than in a national emergency		
Exclusivity and duration	GoAP undertakes not to supply water to potential customers of concessionaire		
	32 year concession period	2 year O&M following EPC contract	25 year concession for bulk water supply in Macau, China
Stability	Concessionaire to bear the risk		
Process issues	GoAP to prevent illegal offtake of water when brought to its notice		
	Provision for monitoring of the contract by and 'Independent Engineer' and 'Independent Auditor'. Tariffs to be determined based on the formula in the concession agreement and reviewed by a 'Charges Review Committee' comprising representatives of GoAP and the concessionaire chaired by a retired judge		Both Manila and Macau have regulatory supervision built into the contracts
	GoAP would assist in provision of water, power and utilities. GoAP would support concessionaire in case of petition challenging the project	GWIL would assist in provision of water, power and utilities.	
	GoAP to provide land for the project with part cost being converted to equity, the rest being leased. All R&R activities will be undertaken to GoAP at its own cost		
	Government to assist in all clearances. To give all clearances it its authorized to give.	Government to assist in all clearances.	
	GoAP not to allow construction and development along ROW for the canal to ensure safety of the structures erected.		

7.7 Incentives for private investment in the ports sector in India

India has nearly 5560 km long coastline with 12 major ports and 181 minor ports out of which 139 are operable and only about 30 handle cargo traffic. 95 per cent of India's foreign trade by volume and about 70 per cent by value involve sea transportation. The first 25 years after independence saw a modest growth in traffic, from 20 million tonnes in 1950 to 67 million tonnes in 1975, the main commodities being crude oil and iron ore. However, following liberalization in the early 1990s, there has been a significant increase in India's maritime trade. Containerization of general cargo, which came late in India in comparison with other Asian economies, has also shown a steady increase and is currently over 10 per cent of all traffic in major ports.

7.7.1 Ports sector in India

Ports are placed in the Concurrent list of the Constitution and are administered under the Indian Ports Act, 1908. It lays down rules for safety of shipping and conservation of ports. It regulates matters pertaining to the administration of port dues, pilotage fees and other charges.

Ports in India are classified into major and minor ports. This classification is based on the jurisdiction of Central and State Government as defined under the Indian Ports Act, 1908. Ports owned and managed by the Central Government are classified as Major Ports, while Minor Ports are owned and managed by the State Governments. It must be noted that this arrangement is not based on the size of the port but rather only on legislative arrangements.

Major ports

In India, the major ports are placed under the Union list of the Indian Constitution, and are administered under the Indian Ports Act, 1908, and the Major Port Trust Act, 1963, by the Government of India. Under the Major Port Trust Act, each major port is governed by a Board of Trustees appointed by the Government of India. Their composition gives dominance to public enterprises and government departments. The powers of the trustees are limited and they are bound by directions on policy matters and orders from the Government of India. The major functions of Port Trusts include planning, management, and operations of ports, including conservancy functions.

Minor Ports

At the State level, the department in charge of ports or the State Maritime Board created through a State legislation, as in case of Gujarat, is responsible for formulation of water front development policies and plans, regulating and overseeing the management of state ports, attracting private investment in the development of state ports, enforcing environmental protection standards, etc. Maritime boards have so far been constituted only in Gujarat, Maharashtra, and Tamil Nadu.

The functions of the State Maritime Boards or the state governments are broadly the same as the major ports trusts, with an additional power of tariff setting. The conservancy functions are also vested in the same authority. In terms of private sector participation, their function is to facilitate and attract private investment to promote efficiency and investment. These would include awarding concession contracts, providing fiscal incentives, right to exclusivity and assuring land acquisition. These have been dealt with later in the specific cases of Gujarat and Andhra Pradesh.

7.7.2 Port policies: National and state level

It is now recognized that ports are no longer mere modal interfaces between surface transport and sea transport. They are now logistics and distribution platforms in the supply chain network. International trade has now become transport intensive and time sensitive and Indian ports clearly are not yet ready for this changing environment. There is, therefore, an urgent need to restructure the port sector in order to improve efficiencies and reduce costs.

Given these considerations, the Government of India has taken several policy and legislative initiatives that have resulted in improvements in port performance as discussed above.

1996 Guidelines for Private sector Participation

The Government of India, which administers the major ports, has now realized that port restructuring is essential if Indian exporters are to be given an opportunity to enjoy the efficiencies and low costs in transportation as are available to their competitors elsewhere. The Government also recognizes that the additional port capacity to meet the projected traffic by 2006 cannot be achieved unless there is massive private investment in the augmentation of port capacity.

Port restructuring was therefore deemed necessary to avail of private investment. The adoption of landlord port concept was a step in this direction and to facilitate the process of gradual privatization of port service provision, the Government in October 1996 issued guidelines for the private sectors. Leasing out of existing assets of the port, construction and creation of additional assets, leasing of equipment for port handling and leasing of floating crafts from the private sector, pilotage, and captive facilities for port-based industries, are the areas where private investment and participation was provided for. In 1997, the initiative was given a further boost when guidelines were issued to enable the major ports to set up joint ventures with foreign ports, minor ports, and private companies. The Major Port Trust Act was amended to give effect to the guidelines issued in 1996 and 1997.

General tender conditions formulated were that private participation would be based on open competitive bidding, with technical and price bids. After the issue of tender document, the port may arrange one or more pre-bid conferences for clarifications, if necessary. The tender document will not give any kind of guarantee for financial returns to the entrepreneur and that port property, if any, being transferred to the entrepreneur, will be kept insured at the cost of the private entrepreneur. The private entrepreneur would not be permitted to transfer asset by way of sublease, sale, sub-contract, or any other method without the previous approval of the port. Environment clearance and other statutory clearance for privatization project would be obtained by the Port Trust or entrepreneur depending on the project and requirement. The Tariff Regulatory Authority may fix a ceiling tariff. If the Tariff Regulatory Authority is satisfied, suitable periodic increases in tariff may be permitted on justified grounds. In all, the drive was to facilitate the environment for a smooth transition to corporatization of the ports.

While these guidelines are for projects in Major ports, the role that the Union Government plays in guiding the development of the sector in the states implies that several State Government initiatives are modeled on these guidelines.

Corporatization

As stated earlier, the major ports are governed by the Major Port Trusts Act, 1963, and the minor ports by the Indian Ports Act 1908. Both these acts were modeled after the then British practice in managing ports and carry a lot of baggage from the acts of the 19th century governing the ports in the three presidencies of Madras, Calcutta, and Bombay. The Board of Trustees who are appointed by the Government of India to administer the port represent government departments involved with port operations, labour and service providers such as stevedores, shipping agents etc. Their interest lies more in protecting their turfs and not in promoting the commercial well being of the ports. The financial and other powers of the trustees are also limited. In fact, they could incur expenditure only up to Rs 5 billion in respect of new works and replacements. The different operations in the port were also not set up as separate profit centers. The accounting practice followed was revenue accounting and not commercial accounting.

Recognizing that port operations cannot be made efficient or cost effective unless ports were encouraged to operate on commercial lines, the Government of India, as part of the 1996 policy guidelines, substantially increased the financial and other powers of the Port Trusts. The Government of India also took a decision that all new ports will be set up as companies under the Indian Companies Act and the existing Port Trusts will be gradually corporatized and set up as companies. Accordingly, the 12th new major port, at Ennore near Madras, has been set up as a company under the

Companies Act, with the conservancy functions being exercised by the Madras Port Trust. Action has also been initiated to corporatize the Jawaharlal Nehru Port Trust (JNPT) and the Haldia port, which are among the newer of the major ports.

Tariff Authority for Major Ports (TAMP)

As private sector was allowed entry into the major ports to provide services often in competition with the Port Trust themselves, there was a demand from the private sector for an independent regulator to set port tariffs in order to ensure that there was fair competition between themselves and the Port Trust. There was also a feeling that where services are provided only by one agency involvement of the private sector could result in public monopolies being converted into private monopolies. Accordingly, the 1996 guidelines provided for the establishment of the Tariff Authority for Major Ports to fix and revise port tariffs. TAMP was set up in March 1997 through an amendment of the Major Port Trust Act 1963. All powers for fixing tariffs in major port lies with TAMP, but it has no jurisdiction over minor ports or private ports.

The following table 7.3 summarizes the incentives available for private investors for investments in minor ports. The items in bold indicate the incentives specified in the policy statements for PSP in port in the states. Other items have been inferred from the concession agreements in the various states[146]. In addition, salient features of some international best practices in the sector are also presented.

International experience reveals that the process of port privatization has rarely involved pure privatization, since land and infrastructure are rarely sold. Instead, the process involves PSP in operations and investment in equipment and facilities. The process is not a monolithic effort because of the diversity and complexity of ports and the services they provide. It can be divided into divestiture of existing services and assets and investment in new facilities and services. These can be implemented individually or in combination. Hence, for each port component, there are many possible public-private partnerships.

[146] Gangavarm Port Concession in the case of AP and the Model Concession Agreement for Gujarat

Table 7.3: Incentives Available in Minor Ports

	Gujarat	Andhra Pradesh	Government of India	International Experience
Guarantees	**Gujarat Maritime Board would undertake the construction of wharf/jetty/quay in JV ports and its maintenance.** **Gujarat Maritime Board will initiate a techno-economic feasibility study on JV ports. For completely private ports, it would do a 'preliminary techno-economic feasibility' report.** **Port based industrial estates would be established in 4 to 5 new Port areas by Gujarat Industrial Development Corporation.**	In the case of the Gangavaram Port, the State Government provided land as equity support	**No guarantees on return to be provided** **Major Ports can form JVs with minor ports or private investors.**	90% container traffic guarantee in Shanghai Port container terminal privatization Kelang, Malaysia, engaged private operators through equity sale in Joint Ventures in container terminals
Tariff Setting	**Freedom to fix tariff. Wharfage charges to be fixed by GMB**	**Freedom to fix tariff**	**Tariff ceilings fixed by TAMP.**	Tariff revision formula stated in deregulation policy for Victoria Ports
Stability	Allows for the GoG to establish new regulatory regimes	Concessionaire to bear the risk		
Process issues	**Based on open competitive bidding.**	**Competitive bidding process based on Technical and Financial competence:** **Minimum Guaranteed Revenue Share (50 % weightage)** **Percentage of Revenue Share offered per annum** **(30 % weightage)** **Maximum investment proposed (20% weightage)** Provision for monitoring of the contract by and 'Independent Engineer' and 'Independent Auditor'	**Based on open competitive bidding. Detailed process laid out by GoI** TAMP sets out consultative process for tariff setting.	Independent regulator in Victoria, by Government in Shanghai

	GoG would assist in provision of water, power and utilities. An extension of the concession up to 2 years if transport infrastructure such as roads, etc is not made available for the port.	Provide transport, water, and power linkages up to the port site		
	GoG to assist in acquiring additional land for the project.	**In respect of acquired land, cost of land acquisition to be adjusted against share of revenue payable to the Government**		
	Government to assist in all clearances	Government to assist in all clearances		
		Freedom to set own employee policies	**Port Trusts to address employee issues before concessions in existing ports. For Greenfield project, investors free to employ new labour.**	
		AP government to help obtain clearance from pollution control board		
Exclusivity and duration	**Captive jetties would be allowed only in exceptional circumstances; industries would be encouraged to use existing ports**	**In case of new port development activity within 30 km, assured exclusivity in terms of right of first offer and refusal**		No new developer to have better terms and conditions in Buenos Aires
	30 year concession period	**30 year concession period which can be extended by 2 more spells of 10 years each and first offer and refusal and at the end of the concession**		
Local taxes		Exemption on stamp duty, sales tax, etc		
Rights for collateral development	**Investors will be given ousting priority for a period of 5 years for some projects[147]. For projects with higher investment, Gujarat Maritime Board will consider to enhance this period.** Concessionaire may use land reclaimed on the waterfront during the lease period.	Concessionaire may use land reclaimed on the waterfront		

[147] Incomplete works of wharf/jetty/quay, installation of modern mechanical handling equipments, construction of new wharves/jetties in selected sites

7.7.3 Directions for change

The policy initiatives delineated so far have had a tremendous positive impact on the performance of the Indian port sector, particularly Major ports. In terms of the traditional indicators of port performance, pre-berthing delay and vessel turn around time reduced, labour force has decreased. This has resulted in increased capacity being able to meet increasing traffic volumes. Some of the major private sector projects boosting growth and development in major Indian ports in the last five years have been container terminals at JNPT like the Nava-Sheva International Container Terminal and Liquid Cargo Berth for BPCL/IOC; container Terminal at Tuticorin by PSA/SICAL; oil Jetty by IFFCO and IOC at Kandla; container Terminal by P&O, Australia at Chennai; captive Fertilizer Berth at Paradip by Oswal Fertilizers and construction of a new port at Ennore along with equipment by TNEB at Coal Berth.

This experience needs to be replicated in minor ports as well. Several states have taken initiatives to improve port capacity and performance and already considerable private investment Rs.4714 crores has been achieved. However, the strategy to achieve the policy objective has not been thought through and progress so far has been halting and ad hoc. There is no concerted move to speed up the privatization of all port services. Adequate attention has not also been paid to strengthen the support infrastructure such as land and rail connections and to streamline administrative and customs procedures. The way forward is for the states to develop an integrated approach for the commercialization and privatization of port services.

In terms of incentives for increasing the viability of port projects, issues such as the maritime conditions, scale of investment and the kind of cargo to be handled need to be considered. The port project has to be assured at a reasonable rate of return after accounting for capital recovery and interest repayment. Hence, it is essential that each port project is evaluated based on an investment analysis consisting of a capital cost, revenue receipts, revenue expenditure and capital recovery. Thus, sites have to be identified taking into consideration the availability of draft, general marine conditions, minimum burden on the existing infrastructure, proximity to the hinterland cargo and promotion of regional development concept, and incentives detailed uniquely for each site. Looking to the location and generation of cargo, each port would have to be earmarked for specific commodities to facilitate the movement of cargo through the existing infrastructure and to ensure the financial viability of each project.

Internationally in the port sector, the transfer of cargo-handling activities to the private sector has been successful in replacing inefficient government bureaucracy with commercially-oriented management as in Shanghai. Improvements in productivity and maintenance have increased the quality of service. However, where there was no competition, these arrangements were less likely to sustain these improvements. As in India, private investment in port infrastructure has generally been limited to new and existing cargo terminals. Trans-shipment terminals were the most successful, since they were less dependent on local markets and land transport. Greenfield ports were slower to develop because they were further from their markets and the transport access was less developed. Basic infrastructure offered few opportunities for full cost recovery.

Nevertheless, the comparative assessment of the incentives used across the states under consideration does reveal the following:

- **Exclusivity and monopoly provisions** are considered important by private investors. This also appears to be rational as it allows some guarantee of market size to private port developers while at the same time allowing them to exploit efficiency gains by not being encumbered by explicit revenue or market guarantee clauses. These clauses could be either restrictions or rights on port development in the neighbourhood as in the case of AP, or discouraging development of captive jetties, as in the case of Gujarat.
- The other issue of import to greenfield ports is **transport connectivity** with the hinterland. Since this connectivity is usually by means other than maritime transport, state agencies such as the Department of Roads of the State Government or Indian Railways have an important role to play. This is where the State

Government can facilitate private investment by ensuring that issues such as transport connectivity for new ports are resolved before the project is put out for bidding.

- The most significant port development **cost items are such as land, breakwater**, etc. Participation of the State Government in the project, whether by way of grant or equity, could be though making available land for the port and the associated breakwater, etc.
- **Privatization process** issues are critical to all PSP in infrastructure. In the ports sector, the concern emanates from ambiguity and complexity in the tax regime, environmental and other clearances required for port development, services of other utilities such as power and water. In this regard, the PSP process could be canalized through a dedicated PSP unit that could also provide single window clearances for PSP projects. This agency could also provide clarity to the PSP procedures, laws, and regulations to private developers.

7.8 Incentives for private investment in urban mass transit

India's rapid economic development is accompanied with the problems of traffic congestion owing to the rapid growth in motor vehicle fleets. The most effective strategy to address congestion and other concerns associated with increasing traffic are increasing the share of public transport in meeting mobility needs, often with dedicated rights of way for mass transit. However, given the significant investments required in public transport infrastructure, particularly rail based mass transit systems, the need for private participation has been articulated in several fora. This paper reviews the current initiatives in urban rail based mass transit systems in India, and assesses the possibility of PSP in the sector.

7.8.1 Urban mass transit sector in India

The mega cities in India Delhi, Mumbai, Chennai, and Kolkata have an urban/suburban rail network. These services account for about 60% of the total number of passengers carried by the railways (Ministry of Railways 2000).

Kolkata was the first city in India to commission an urban rail based transit system in 1995. It extends from Dum-Dum near Netaji Subhas Chandra Bose Airport to Tollygunj along the busy north south axis of Kolkata over a length of 16.45 km with seventeen stations en route.

Until recently, these services all over India formed a part of the respective zonal system. However, there have been some restructuring exercises in the recent past to unbundled these operations into separate units. A separate corporation has been formed recently to take care of Mumbai's transportation needs. Mumbai suburban rail is one of the biggest systems in the world carrying nearly 2 billion passengers and operating 47 billion passenger-kilometers annually. The suburban rail fares are, however, some of the lowest in the world the yield per passenger-kilometer fluctuating between 0.1–0.12 rupees.

Delhi is the second city in India to commission a metro system. For implementation and subsequent operation of Delhi MRTS, a company under the name Delhi Metro Rail Corporation was registered under the Companies Act, 1956. DMRC has equal equity participation from GOI and the Delhi Government. DMRC, not falling within the category of a Public Sector Undertaking, is vested with greater autonomy and powers to execute this gigantic project involving many technical complexities, under difficult urban environment and within a very limited time frame. The capital cost of the approved components of the project, referred to as the Phase I, is Rs. 6, 000 crores at base year (April 1996) price level. However taking into account the element of escalation during construction period of 7 ½ years, the completion cost has been estimated as Rs.10, 571 crores. Following is the funding pattern of the project:

Govt. of India	14%
Govt. of National Capital Territory of Delhi	14%
Property Development	3%
Japan Bank for International Cooperation (JBIC) Loan	64%
Interest Free Subordinate debt towards land cost	5%

The Union and the State Governments have collaborated by way of equal equity participation for the project, with a debt-equity ratio of 2.33. The debt itself is not commercial debt but concessional financing by JBIC, that is a 20 year loan at a prime rate of from 4-7% per annum with a 10 year moratorium on repayment of principal under the Special Program of Economic Partnership. This project therefore has received complete capital subsidy from the government. Only 3% of the project cost is expected to be recovered from collateral development.

In addition, the project gets taxes and duties from Government of India for all items of equipments including machinery and rolling stock procured for use in the Delhi MRTS Project. This adds up to a subsidy of import duties of Rs 945 cores and excise duty of Rs 458 cores. Similar exemption of Sales Tax of Rs. 140 cores and Works Contract Tax of Rs. 250 crores are expected from the Government of Delhi by DMRC, the project executing agency. According to DMRC, 'the above exemptions will enable the first Phase of the Metro Project consisting of three lines covering 68.3 km to be completed within the estimated finished cost of Rs. 10571/- crores at the 2005 price level.'

Similar projects are planned for Hyderabad and Bangalore in the States of Karnataka and Andhra Pradesh respectively. Gujarat Infrastructure Development Board (GIDB) has also taken up the Rs 3000-crore integrated public transit system (IPTS) study for Ahmedabad. There is no such plan that is envisaged in this scale for any city in Madhya Pradesh.

7.8.2 Policies related to UMT

There are no PSP policies for urban mass transit in India. In fact, there is no Urban mass transport Policy in India, either at the Union Government level, or even at the State Government level. However, there is a draft Urban Transport Policy under consideration by the Ministry of Urban Development, Government of India that does touch upon the issue of PSP in transport services in general and mass transit in particular148. While the Draft Policy recognizes the need for private investment in transport infrastructure, it also acknowledges that greater Union Government support would be necessary for the development of rail based mass transit systems. In particular, it reinforces the role of the Government of India in project development in this sector.

That apart, the Government of India has effected changes in the FDI Policy that allow 100% FDI in mass rapid transit systems on the automatic route in all metropolitan cities, including associated commercial development of real estate. In addition, rail transit systems are defined as infrastructure for tax purposed under the Income Tax Act, 1961. Under Section 80 IA, investors in the sector are offered a 100% rebate on income tax for 10 consecutive years, out of the first 20 years of the project.

The following table 7.4 outlines the handling of urban mass transit projects by the State/Central Government and the support extended by them to invite interest to private developer. In addition, salient features of some international best practices in the sector are also presented.

7.8.3 Directions for change

The existing situation public transport institutions are grossly inadequate for dealing with the rapidly increasing congestion is not peculiar to India. It exists in most major cities around the world. Several of them have undertaken drastic reforms and restructured the manner in which public transport is provided (both bus and rail systems) with a view to meeting the demand and expected quality of service. An examination of the reforms carried out around the world reveals two basic trends in the restructuring of public transport. The first is towards unbundling the monolithic and integrated services into more manageable and compact constituent units. This has generally preceded a greater involvement of the private sector in providing services in a competitive environment as has been described in the case of

148 http://urbanindia.nic.in/mud-final-site/w_new/index.htm

the Sao Mateus-Jabaquara Trolleyway Bus Concession in Brazil.

With respect to mass transit systems in India, the private investors are wary of investing in this as most of the investments are made by the Government. Railway projects are owned by the Central Government and any project initiated by the former has to be financed by the Government. In India to deal with the problem over MRTS, the Urban Development Ministry has set up a company called Urban Mass Transit Corporation Limited with a paid-up capital of Rs 12 crore. This company is supposed to initially carry out feasibility studies for the transport projects in various cities and help raise funds. The Ministry is having this policy to attract equity participation from the State Governments, financial institutions, the Railways and IL&FS.

Absence of any assured revenue stream is the main reason behind the disenchantment of private investors towards most of the MRTS projects. For

Table 7.4: Urban Mass Transit Projects by State Governments and International Experience

	Gujarat	Karnataka	International Experience[149]
Guarantees	Feasibility study to be partly funded by GIIC and the cost of study to be borne by the company selected for implementation of the project. Centre to give 40% support for preparing DPR.	No guarantee for minimum rate of return on investment or subsidies to make up revenue shortfalls Local Indian banks will probably provide loan but without exposure beyond 12-13 years. In the initial version, the agreement (of 1997) between GoK, BMRTL and UB Group Commission (UBGC) lays down concessions which GoK was willing to extend such as cash contribution up to 25% of the project cost in the form of equity and subordinate debt, free land, no fare regulation until 16% profit on net worth is achieved etc. Now, the overall debt equity package is 52% and 48% respectively. The debt will be guaranteed by the GoK. Both GoK and GoI will put 20% each in the project cost and 4% each of the projects cost as the subordinated interest free loan.	Infrastructure maintenance by Government operator 20 year concession period Independent tariff fixation formula Stability guaranteed by Brazil Concession Law
		JBIC will probably offer a funding package similar to that offered for the Delhi Metro.	
		One-third of infrastructure cess collected from excise, stamp and motor vehicle taxes is earmarked for Bangalore Metropolitan Rail Transit Limited.	
Process issues		Lies with the Government.	
		State support for acquiring land and other clearances required.	
	Global tendering to shortlist bidders for consortium.	This project is established by GoK in partnership with private sector under a BOOT framework.	Transparent bidding process

[149] Based on the Sao Mateus-Jabaquara Trolleyway Bus Concession

instance, Kolkata metro network's annual revenue earnings are not enough to cover even 50 per cent of the cost, thereby forcing the State Government to subsidize the cost.

Experience in other jurisdictions around the world have shown that in virtually all cases, UMT requires significant government input in any operation. Even in cases such as the Hong Kong Metro, long held up as an example of private sector investment, viability of the system relies heavily on the rent obtained from the developments that were created above the various stations.

In South America, privatised systems have government ownership of the track and infrastructure and private operation of the system and rolling stock. This is also the model which is being applied in Bangkok.

Hence, activities where PSP can be envisaged in India would necessarily involved public sector investment and ownership of key components – essentially joint venture operations with the private sector. Attached to such projects would be ancillary activities such as property development along the metro routes, parking management, etc. These activities do not have investment requirements as significant as the rail project themselves and are more amenable to financial viability analysis.

7.9 Incentives for private investment in roads

7.9.1 Introduction

India has the second largest road network in the world with about 2% of it by length contributed by the national highways. There has been a rapid increase in the demand of road infrastructure; with freight and passenger traffic increasing 15 to 20 times more than the growth in the length of road network in the past few years. As far as the institutional framework for this sector is concerned, the Ministry of Road Transport and Highways (MRTH) is responsible for all the policy matters related to national highways. The MRTH is entrusted with the task of formulating and administering, in consultation with other Central Ministries/Departments, State Governments/UT Administrations, organisations and individuals, policies for Road Transport, National Highways and Transport Research with a view to increasing the mobility and efficiency of the road transport system in the country. The issues relating to National Highways in the country are dealt with by Roads Wing of the Ministry while those pertaining to transport are dealt with by the Transport Wing. The National Highways Authority of India (NHAI) is the implementing agency for select national highway stretches entrusted to them by MRTH and the National Highway Development Project (NHDP).

7.9.2 Road sector policies: National and state level

National Level

In the past few years, the total plan outlay for the road development has enhanced and the government has announced a road policy and a set of guidelines for the development of highways, including a series of measures to attract private investments in the sector. The key incentives include:

- The government has permitted 100 per cent foreign equity in construction and maintenance of roads, highways, vehicular bridges and toll roads
- Private sector participation in the highways sector is under the Build Operate and Transfer (BOT) concept
- Private parties allowed to develop service and rest areas along the roads entrusted to them.
- Investors in identified highway projects permitted to recover investment by way of collection of tolls for specified sections and periods.
- NHAI/GOI to provide capital grant up to 40% of project cost to enhance viability on a case to case basis
- Duty free import of specified modern high capacity equipment for highway construction Concession period allowed up to 30 years
- Arbitration and Conciliation Act 1996 based on UNICITRAL (United Nations Commission on International Trade Law) provisions.

- Entrepreneur allowed to collect and retain tolls in BOT projects
- Government to carry out all preparatory work including feasibility study; land acquisition, resettlement and rehabilitation and utility removal.
- Right of way (ROW) to be made available to concessionaires free from all encumbrances.
- Streamlining the process of the award of tenders so that the whole process is finalised within 40 days from closing date of tenders.
- Projects for widening of existing National Highways exempted from environmental and forest clearances
- Amendment of National Highway Act for expeditious land acquisition, procedural change for environmental clearance, enhanced delegation of power to Ministry for expeditious clearance of the projects.
- As per Section 80-IA of the Income tax Act 1961, a deduction of an amount equal to 100% of profits and gains derived for ten consecutive assessment years. This deduction may at the option of the assessee be claimed for any ten consecutive assessment years out of the twenty years beginning from the year in which the undertaking or the enterprise develops and begins to operate the facility. This shall be applicable to enterprises that fulfill the following conditions:

  - it has entered into an agreement with the Central Government or a State Government or a local authority or any other statutory body for (i) developing or (ii) operating and maintaining or (iii) developing, operating and maintaining a new infrastructure facility.
  - it has started or starts operating and maintaining the infrastructure facility on or after the 1st day of April, 1995:

    Provided that where an infrastructure facility is transferred on or after the 1st day of April, 1999 by an enterprise which developed such infrastructure facility (hereafter referred to in this section as the transferor enterprise) to another enterprise (hereafter in this section referred to as the transferee enterprise) for the purpose of operating and maintaining the infrastructure facility on its behalf in accordance with the agreement with the Central Government, State Government, local authority or statutory body, the provisions of this section shall apply to the transferee enterprise as if it were the enterprise to which this clause applies and the deduction from profits and gains would be available to such transferee enterprise for the unexpired period during which the transferor enterprise would have been entitled to the deduction, if the transfer had not taken place.

Depending upon the financial viability of the projects, government may recoup its investments on the above items from the project. Land required for construction and operation of the facilities will be provided by the government free from encumbrances and private parties are allowed to develop services and rest areas along the roads developed by them.

Development work on the National Highways is done through budgetary support. Steps have also been taken to improve the position of availability of funds. Cess on petrol and diesel has been levied to make funds available for Highway infrastructure development. Funds are also obtained from external funding agencies like World Bank, ADB, OECF etc. for projects in Highway sector.

The following table 7.5 summarizes the incentives available for private investors for investments in the road sector in the four states and in selected cases in China and France. The items in bold indicate the incentives specified in the concession agreements in a particular state[150]. The other items have been taken from the from the state policy statements.

The concession agreement in China (Guangzhou-Shenzhen Superhighway Project) was signed in February 1988 and construction started in August

[150] Madhya Pradesh – Draft Concession Agreement For Development - Construction, Strengthening & Widening ofSeoni-Balaghat (SH-26) & BaJaghat - Rajegaon (SH-ll) on BOT Basis. Madhya Pradesh Rajya Setu Nirman Nigam Ltd (MPRSNN)

Karnataka - Second Narmada Bridge Privatisation Project - Concession agreement among GOI, GOG, L&T and Narmada Infra Cons. Entps. Ltd.

1988. The project achieved financial closure in January 1991 and became operation in 1994. This is one of the most well known examples of private sector participation in the roads sector and has therefore been considered in the current context. France has experimented with both toll and non-toll financing as well as with publicly and privately-owned toll roads in building its motorway system. The toll motorway concession system initiated in France in 1955 is now over 7,000 km long, and constitutes over three quarters of the 9,000-km-long toll motorway network, the remaining quarter being toll-free. The motorway network is divided between 6 state-owned companies (3 pairs), one private company and 2 state-owned companies, which operate international tunnels. The system was developed on the basis of a pooling system (within each company and between public sector companies also).

7.9.3 *Directions for change*

Some of the directions for change to encourage PSP in the roads sector are:

- Well-defined procedures especially for tariff setting and periodical revisions should be established so that the viability of the project is not adversely affected;
- Single-Window approach for all BOT projects should be provided;
- Annuity scheme for the development of roads should be used where the private participant will have the right to recover the cost and manage and maintain them through the levy of user charges. This is an expansion of the existing Annuity Based BOT approach by allowing the incorporation of toll collection in the annuity package;
- Tax incentives should be given not only for operation and maintenance but also during the construction period;
- Where appropriate creation of state road maintenance fund as has been done in Karnataka;
- State support in obtaining environmental clearances, relocation of utility services, removal of trees etc is essential to provide incentives for private sector participation

Table 7.5: Incentives Available to Road Sector by State and International Experience

	Gujarat	Madhya Pradesh	Andhra Pradesh	Karnataka	International experience China	International experience France
Tariff setting	Tariff Committee having representation of Government as well as the investor to be appointed by the State Government to ensure a mechanism for adjusting toll rates fairly and equitably so that the viability of the project is not adversely affected.	Tolling permitted Indian Tolls (Madhya Pradesh) Act, 1932 amended to permit the levy of toll on new construction as well as improvement of road and bridge projects.	Toll revision allowed and lined to WPI. -Revision allowed twice in a year when inflation in the same year jumps by four points. -Full compensation allowed during a specified period and the extent of compensation may be progressively reduced thereafter.	Tolling permitted -Private investor allowed to collect and retain user charges during the concession period to recover the investment with a reasonable rate of return. -Regulating authority may be considered to be constituted as and when found necessary by Government. -The private investor shall have the freedom to fix and revise tariffs within the ambit of existing statutes for charging users of facilities as provided in the project.	-Tolling permitted -Toll rates are based on vehicle classifications and distance traveled[151].	-Tolling permitted. Project costs recovered through toll revenue and ancillary services. -Toll tariffs are set in reference to 5-year contracts between Government and concessionaires
Guarantees special funds	All finance for the project to be arranged by the entrepreneur. No Government	**A State Road Maintenance Fund to be created**	State Road Fund to be set up for use for preparation of DPRs, land Acquisition etc.	**-All finance for the project to be arranged by the entrepreneur.** **-No Government**	-US$800 million debt and US$1,922 million equity. Government cash flow deficiency guarantee for the	-Strong Government support in kind, financial grants and cross subsidisation[152].

151 A portion of the tolls is collected in Hong Kong dollars. Toll rates and toll adjustments fall under the auspices of the Guangdong Provincial Price Bureau, in consultation with the Guangdong Provincial Finance Bureau. The Price Bureau generally considers factors such as inflation, affordability, usage, local price levels, return on investment, and parity tolls in the region when establishing tolls or considering a toll increase.

152 The construction, maintenance and operation of the national road network is financed through the national budget (25% of total resources), regional budget grants to the national network (20%), and toll motorway concession companies' resources (50%).

Table 7.5: Incentives Available to Road Sector by State and International Experience

	Gujarat	Madhya Pradesh	Andhra Pradesh	Karnataka	International experience China	International experience France
	guarantee made available.	**Payment of Subsidy/grant to concessionaire through bonds raised by GOMP** **-In case of a change in law, provision made to keep the concessionaire in the same financial position, as when there would not have been such change.**	Government may provide upto 30% of the project cost as a subsidy on a case-to-case basis. Road PSP projects to be identified by the State Government based on adequate economic internal rate of return (EIRR)	**guarantee made available** **-The Company may, however arrange for equity from other interested Investors both Indian and foreign**	loan and government equity for US$200 million. -No subsidies	-Mixed finance: Loans (State guaranteed at the start; public grant at the outset (about 30%) then pooling; equity for private companies (about 10%)
Tax incentives	As per section 80-I A of Income Tax Act 1961[153] -Exemption from royalty on construction materials	As per section 80-I A of Income Tax Act 1961[3]	As per section 80-I A of Income Tax Act 1961[3]	As per section 80-I A of Income Tax Act 1961[3]		
Collateral development	-Government may give permission to develop adjoining land to improve financial viability if levy of toll alone is not enough for	**Government may lease additional land for commercial development** -PO permitted to display	Private Parties permitted to develop wayside facilities -PO permitted to display advertisements/	The Government would assist the private investors in environmental clearances, relocation of		No land development allowed to concessionaire

[153] Deduction of an amount equal to 100% of profits and gains derived for 10 consecutive assessment years. This deduction may at the option of the assessee be claimed for any ten consecutive assessment years out of the 20 years beginning from the year in which the undertaking or the enterprise develops and begins to operate the facility. This shall be applicable to enterprises that fulfill the following conditions:
-it has entered into an agreement with the Central Government or a State Government or a local authority or any other statutory body for (i) developing or (ii) operating and maintaining or (iii) developing, operating and maintaining a new infrastructure facility.
-it has started or starts operating and maintaining the infrastructure facility on or after the 1st day of April, 1995

Table 7.5: Incentives Available to Road Sector by State and International Experience

	Gujarat	Madhya Pradesh	Andhra Pradesh	Karnataka	International experience China	International experience France
	ensuring -Government may consider giving advertisement rights to the entrepreneur	advertisements/ hoardings	hoardings	utility services, removal of trees		
Law and Policy regime	Amendments to existing legislations to enable private parties to levy toll and regulate traffic on the facility constructed by them.	Amendments to existing legislations to enable private parties to levy toll and regulate traffic on the facility constructed by them	-Government to guarantee the private party against risk of change of Government Policies. -Amendments to existing legislations to enable private parties to levy toll and regulate traffic on the facility constructed by them.	-Govt may introduce independent regulation		The concession system is not governed by statute law but is based on case law, general legislation (in particular competition law for awarding the concession contract and the work and service contracts) and concession contracts. Because of the length of the concession contract, various issues (such as toll tariffs) are included in 5-year contracts which fall within the concession contract framework. -Rules are mainly enforced by a division of the Government Road Authority which implements strict controls both at the time of commissioning and throughout the operation period.

Table 7.5: Incentives Available to Road Sector by State and International Experience

	Gujarat	Madhya Pradesh	Andhra Pradesh	Karnataka	International experience China	International experience France
						-The regulation process is further reinforced by a built-in mechanism consisting in the combination of a long concession period and the immediate transfer of ownership to the Government upon completion of the construction phase.
Exclusivity and duration	Period of toll to depend on traffic, rate of toll and amount invested by the entrepreneur, cost of toll collection, cost of maintenance, return on investment etc. The period could be increased or decreased due to variation of any of these factors		Upto 30 years. May be extended suitably, to cover any default of the Government in fulfilling its obligations.	Upto 30 years depending on the financial viability of a project.		Concessionaires sell shares in the road system and are allowed to hire whomever they wish to do repairs.
Process issues: Bidding and state support	-Selection on the basis of open competitive bids. Government to acquire land for the project. The cost of land acquisition to be borne by the entrepreneur except in exceptional cases.	-Selection on the basis of open competitive bids. -Govt to carry out clearance of ROW -The Government will assist in environmental clearances, relocation of utility services, removal of trees.	-Selection on the basis of open competitive bids. Govt to undertake the following: -Detailed Feasibility Study -Land for Right-of-way and en-route facilities. -Clearance of the Right-	-Selection on the basis of open competitive bids. -The Government may consider executing a MoU with any qualified company, which offers to undertake the project. In addition, when the investor comes on his own and when project is		

Table 7.5: Incentives Available to Road Sector by State and International Experience

Gujarat	Madhya Pradesh	Andhra Pradesh	Karnataka	International experience China	International experience France
	-Granting permission for plantation of trees and deriving revenue	of-way land. -Relocation of utility services, cutting of trees, -Resettlement and Rehabilitation of the affected establishments. -Environmental clearances Single-Window approach for all BOT projects.	not viable, MOU could be considered. The Government to assist in acquiring land, and resettlement and rehabilitation of affected people. The Government will assist in environmental clearances, relocation of utility services, removal of trees		

7.10 Incentives for private investment in Special Economic Zones

7.10.1 Introduction

A policy was introduced in the Exim Policy effective from April 1, 2000 for setting up of Special Economic Zones in India with a view to provide an internationally competitive and hassle free environment for exports. As per the policy, units may be set up in SEZ for manufacture of goods and rendering of services; all the import/export operations of the SEZ units is to be on self-certification basis. The units in the Zone have to be net foreign exchange earners but they shall not be subjected to any pre-determined value addition or minimum export performance requirements. Sales in the Domestic Tariff Area by SEZ units shall be subject to payment of full Custom Duty and import policy in force. Further Offshore banking units may be set up in the SEZs. The policy provides for setting up of SEZ's in the public, private, joint sector or by State Governments. It was also envisaged that some of the existing Export Processing Zones would be converted into Special Economic Zones. Accordingly, the Government has converted Export Processing zones located at Kandla and Surat (Gujarat), Cochin (Kerala), Santa Cruz (Mumbai-Maharashtra), Falta (West Bengal), Madras (Tamil Nadu), Visakhapatnam (Andhra Prad esh) and Noida (Uttar Pradesh) into Special Economic Zones. In addition, approval has been given for setting up of 21 Special Economic Zones in various parts of the country in the private/Joint sectors or by the state. The salient features of the policy are given below.

Eligibility:

- Special Economic Zone (SEZ) is a specifically delineated duty free enclave and shall be deemed to be foreign territory for the purposes of trade operations and duties and tariffs.

- Goods going into the SEZ area from DTA shall be treated as deemed exports and goods coming from the SEZ area into DTA shall be treated as if the goods are being imported.

- SEZ units may be set up for manufacture of goods and rendering of services, production, processing, assembling, trading, repair, remaking, reconditioning, re-engineering including making of gold/ silver/ platinum jewellery and articles thereof or in connection therewith. Units for generation/distribution of power may also be setup in SEZs.

Export and Import of Goods:

- SEZ units may export goods and services including agro-products, partly processed jewellery, sub-assemblies and component. It may also export by-products, rejects, waste scrap arising out of the production process.
- SEZ units, other than trading/service unit, may also export to Russian Federation in Indian Rupees against repayment of State Credit/Escrow Rupee Account of the buyer, subject to RBI clearance, if any.
- SEZ unit may import without payment of duty all types of goods, including capital goods, as defined in the Policy, whether new or second hand, required by it for its activities or in connection therewith, provided they are not prohibited items of imports in the ITC (HS)[ITC (International trade Codes -Harmonized System classification). Goods shall include raw material for making capital goods for use within the unit. The units shall also be permitted to import goods required for the approved activity, including capital goods, free of cost or on loan from clients.
- SEZ units may procure goods required by it without payment of duty, from bonded warehouses in the DTA set up under the Policy and from International Exhibitions held in India.
- SEZ may import, without payment of duty, all types of goods for creating a central facility for use by software development units in SEZ. The Central facility for software development can also be accessed by units in the DTA for export of software.
- Gem & Jewellery and Jewellery units may also source gold/ silver/ platinum through the nominated agencies.

- SEZ units may also import/procure goods from DTA without payment of duty for setting up of units in the Zone.

Leasing Of Capital Goods:

SEZ unit may, on the basis of a firm contract between the parties, source the capital goods from a domestic/foreign leasing company. In such a case the SEZ unit and the domestic/ foreign leasing company shall jointly file the documents to enable import/procurement of the capital goods without payment of duty.

Net Foreign exchange Earning (NFE):

SEZ unit shall be a positive net foreign exchange earner. Net Foreign exchange Earning (NFE) shall be calculated cumulatively for a period of five years from the commencement of commercial production according to the formula specified in the policy.

There were 659 units in operation in the 8 functional SEZs in March 2003 and investment by the units in these zones is of the order of Rs. 100566.20 million. The Draft Central SEZ Bill (Special Economic Zones Bill, 2003) that provides for the establishment, development, operation, maintenance, management and administration of the Special Economic Zones and for matters connected therewith is yet to be enacted.

7.11 Special Economic Zone policies: State level initiatives

7.11.1 Gujarat

The establishment of first SEZ in the country has been approved in Gujarat under the SEZ Policy of GOI. In addition, the existing Free Trade Zones namely Kandla Free Trade Zone and Surat Export Processing Zone have been converted into Special Economic Zones and these are in operation in the State. Besides, there are new proposals to establish SEZs in the State. The Central Government has offered various incentives and facilities both to developer of SEZ as well as the industrial units coming up in SEZ. All kind of units namely manufacturing, trading or service activities are permitted in SEZ. All approvals are to be given by the Development Commissioner for establishment of the unit in SEZ. The State Governments are required under the scheme to offer specified facilities and concessions for promotion of units in SEZs.

The state government decided that the State Policy on SEZs will apply to all SEZs in Gujarat, namely Kandla SEZ, Surat SEZ and proposed SEZ at Positra, Mundra and Dahej and at any other locations where SEZ may come up in Gujarat, subject to the framework for SEZ determined by Government of India from time to time.

Government of Gujarat's Policy on SEZ

Management of zones

The management of the Special Economic Zone will be under the designated Development Commissioner. The Development Commissioner will grant all the permissions as Single Point Clearance from his office. These will include registration of the unit, allocation of land, permission for construction of building and approval of building plan, power connection, environmental clearance, water requirement etc. SEZs in the State will be declared as Industrial Township (Notified Area).

Power

The SEZ authority will ensure continuous and quality power supply to SEZ units. SEZ developer will be permitted for arrangement of power through establishment of power project as independent power producer (IPP) as well as transmission and distribution of power. SEZ developer will approve power connections and carry out billing of units in the SEZ.

The SEZ authority may also ensure standby arrangement through establishing grid connectivity so as to draw power from Gujarat Electricity Board subject to their entering into a separate agreement with GEB on mutually acceptable terms. SEZ units shall be exempted from electricity duty for ten years period, from the date of production or rendering of services. SEZ units will be granted automatic approval to set up captive power plant.

Environment

Applications for Site clearance, NOC, consent order and other clearances required from Gujarat

Pollution Control Board for units and activities within SEZ under different Acts except for the industry/activities which require clearance from Ministry of Environment and Forests (MOEF), Government of India will be accepted by Development Commissioner of the SEZ. An officer of GPCB may be deputed to work as Nodal Officer under supervision and administrative control of Development Commissioner of the SEZ to grant approvals and requisite powers will be delegated to Development Commissioner, SEZ.

GPCB has declared 80 industries, which are exempted from requirement of obtaining NOC. These are however, restricted to small-scale industrial units only. The list of industries exempted from obtaining NOC will be extended to medium and large industries also. A separate exercise will be carried out to expand the list and to further streamline the system for speedy single point environmental clearance without diluting in any way compliance with environmental protection parameters.

Water

The SEZ developer will be granted approval for development of water supply and distribution system to ensure the provision of adequate water supply for SEZ units.

Labour Regulations

The powers of the Labour Commissioner, Government of Gujarat shall be delegated to the Development Commissioner in respect of the area within the SEZs. An Officer will be designated and placed under the supervision and control of Development Commissioner, SEZ. He will function as Registration Officer, Conciliation Officer as well as Inspector under various Labour Laws to provide Single Window Service. As a part of liberalization process for filing returns, a Consolidated Annual Report (CAR) has been designed, consolidating various periodical returns (quarterly, half yearly etc) under following Acts: (1) Workmen compensation Act 1923, (2) Payment of wages Act 1936, (3) Factories Act 1948, (4) Minimum wages Act 1948, (5) Maternity benefit Act 1961, (6) Payment of bonus Act 1965 and (7) Contract Labour (Regulation and Abolition) Act 1970.

The units in SEZ will be required to file annually Consolidated Annual Report (CAR) to Development Commissioner, SEZ. The units in SEZ will not be required to file periodically separate returns. All industrial units and other establishments in SEZ will be declared as "public utility service" under the provisions of Industrial Dispute Act. For Inspections relating to workers' health and safety, units will be permitted for obtaining inspection reports from accredited agencies as may be notified by the State Government.

Sales Tax And Other Levies:

a. Complete exemption on payment of Stamp Duty and Registration Fees on transfer of land meant for industrial use in the SEZ Area.

b. Complete exemption on payment of stamp duty and registration fee for loan agreements, credit deeds, mortgages etc. pertaining to SEZ units or which will be executed within the SEZ area.

c. Transactions within the SEZ shall be exempted from all State taxes including Sales Tax, VAT, Motor spirit tax, luxury tax and entertainment tax, purchase tax and other state taxes.

d. Inputs (goods and services) made to SEZ units from Domestic Tariff Area (DTA) will be exempt from Sales tax and other State taxes.

e. Any sales from SEZ to DTA will be treated as import and import duty will be applicable as per GOI policy. Sales tax will be applicable to SEZ goods as applicable to other imported goods. Same Rules and Procedure will be applicable to SEZ goods as applicable to normal imports.

f) Due to tax system constraints, if it is not possible to grant direct exemption to any transactions, such payment of State taxes will be reimbursed to the SEZ units. .

g) The SEZ developer and SEZ units will be eligible to avail exemptions under (a) to (f) above during implementation period as well.

Law And Order

The State Government shall take required suitable steps within the SEZs for the maintenance of law and order. The policy also constituted a committee to resolve various issues pertaining to the promotion, development and functioning of SEZs in the State.

7.11.2 Madhya Pradesh

Madhya Pradesh Government has in its State policy recognised that it will undertake socio-economic and industrial development of the State through SEZs. The Madhya Pradesh State Industrial Development Corporation has been declared as nodal agency for development of Special Economic Zone proposed near Indore and will be declared as the nodal agency for SEZs to be established in the State in future. The policy specifies that the SEZ project will be implemented with private sector participation. The State will contribute equity in the form of land and the nodal developer for the project will bring in his equity contribution and will be instrumental in forming alliances with international and Indian investors including financial institutions, foreign institutional investors, mutual funds, etc. The nodal developer will also be responsible for infrastructure development and management of the zone. The provisions of the state SEZ policy with respect to incentives for PSP are given below:

Policy framework for SEZs in Madhya Pradesh

- The State Government shall make available land required for the zone. Private land shall be acquired under Land Acquisition Act for the purpose.
- The State Government shall request the Government of India to declare Indore Airport as International Airport to provide direct Air links to facilitate export of goods from SEZ.
- To provide single agency clearance, powers to grant permissions, NOCs, etc. of the concerned departments, corporations, boards etc. shall be delegated to the designated Development Commissioner of the SEZ or to an empowered officer working under the administrative supervision and control of the DC.

Development Commissioner:

- The Development Commissioner will be deemed as competent authority for the Industrial Development Area for the notified SEZ.
- The Development Commissioner will provide sanctions under various statutes and regulations of the Government of India and the State Government.
- The Development Commissioner will advise the Government on issues requiring amendments or clarifications to facilitate sanctions to units in SEZ.
- Facilitate marketing of the zone along with private promoter.
- Necessary infrastructure like building, office space and equipments, etc. for the Development Commissioner will be provided by the SEZ developer.

Single Agency and Self-Certification System:

- SEZ Units will be eligible to obtain various clearances/permission pertaining to different departments under single agency clearance system prevalent in the state for industries.
- Appropriate powers under single agency clearance system for granting clearance/approvals to SEZ units pertaining to Energy, Commercial Taxes, Home Department (Foreigners' registration), Food & Drug Administration, M.P.
- Pollution Control Board, Industries Department, Industrial Health and Safety, Employment Exchange (Apprenticeship Act, etc.), Fire Brigade etc. will be delegated to the Development Commissioner.
- Facility of self-certification available to industries in the state will also be available to SEZ Units.

Environment:

- NOCs, consents and other clearances required from the Madhya Pradesh Pollution Control Board for units and activities within the SEZs would be granted by the empowered officer of the Board working under the administrative supervision and control of the Development Commissioner of the SEZ.
- In the event of delegation of powers to the designated Development Commissioner in SEZ for granting environmental clearance for the activities/projects covered under Environmental Impact Assessment Notification, 1994 of the Government of India (Ministry of Environment & Forest) the clearances may be sought accordingly.
- A Committee headed by the Development Commissioner will be constituted for each SEZ comprising concerned officers of Ministry of Environment & Forest, Government of India, State Pollution Control Board and

Environmental Experts. The Committee shall be delegated powers of the State Government to grant environmental clearance for projects/activities in SEZ.

- The State Government would notify a list of non-polluting industries in SEZ where no consent (or NOC) would be required irrespective of their size, whereas in other cases consent would be given by the designated officer of MPPCB posted in the zone through a simplified procedure.
- The State Government will consider having a green belt around the SEZ in order to avoid unplanned development.

- Power:
- The SEZ authority will ensure continuous and good quality power to all consumers in SEZ.
- The SEZ shall be exempted from electricity duty; cess and any other tax or levy on sale of electricity for self generated and purchased power.
- Within the SEZ, the distribution company shall have freedom to fix tariff for consumers.
- Staff of Madhya Pradesh State Electricity Board shall be posted in SEZ for approval of power connections and billing with full powers. However, such arrangement will not be applicable, when private service provider will make entire arrangement for power generation, transmission and distribution.
- No prior approval will be required to set up captive power plants by the SEZ units, subject to fulfillment of specified terms and conditions.
- There will be full freedom regarding generation, transmission and distribution of power within the SEZ along with grid connectivity to draw power from the State grid, as the case may be. Such grid connectivity would be permitted on the basis of "pay and use" without any standby charges. Similarly, surplus electricity generated by SEZ's captive power plant can be purchased by the M.P.State Electricity Board on mutually agreed terms.
- Wheeling and third party sales within the SEZ would be allowed either through free grid access or directly to private parties without any restrictions.
- The SEZ would be free to procure power from NTPC or any other generating company to meet its power requirement.

Sales Tax and other levies:

All SEZ units and SEZ developer would be exempted from payment of Commercial Tax, Turnover Tax, VAT, Octroi, Mandi Tax, Purchase Tax, Electricity Cess, Stamp Duty or any other kind of cess or levy of the State Government for any transaction between them within the zone as well as on sales made to Domestic Tariff Area (DTA). Units in DTA would also be exempted from these taxes and levies on sales made by them to a SEZ unit and SEZ developer. SEZ Developer and units would also be exempted from taxes levied by local bodies, as they would be self-contained units and would be responsible for the maintenance of services within the Zone.

Labour:

- The State Government would delegate powers of Labour Commissioner to the DC Commissioner and also place an officer of the Labour Department under the DC. State Government would also delegate to DC powers of State Government under various Labour Laws for the SEZ.
- State Government would notify a single reporting format for all SEZ units, which would cover all Labour Laws.
- Appropriate officials of the Zone would be designated as Inspectors, Conciliation officers and Registration officers under various Labour Laws to provide single window service.
- For inspections relating to worker's health and safety and other Labour Laws, the State Government would use best international practices by permitting units to get such inspections done through such accredited agencies (outside Labour Department) as may be notified by the Government.

Water:

The State Government shall make arrangement for supply of water for drinking, industrial and other use as required for SEZ. The rates of utility services availed from private services provider would be subject to approval of the Development Commissioner.

Management of Zone:

SEZ to be declared as Industrial Township: The State Government will declare SEZ as Industrial

Township under Madhya Pradesh Nagar Palik Nigam Adhiniyam 1956 and Madhya Pradesh Nagar Palika Adhiniyam 1961 so that it could function as Special Area Self Governing Body.

Appointment of Development Commissioner for SEZ: Designated Development Commissioner of SEZ will be delegated powers to discharge various departmental functions under Single Window System.

Arrangement of Law & Order in SEZ: The State Government shall make appropriate and exclusive arrangements within the SEZ for the maintenance of law and order and control of crime.

Constitution of Monitoring Committee: The State Government shall constitute a committee of Secretaries and other concerned officials, including representatives of the SEZ authorities/promoters, under the chairmanship of Chief Secretary to resolve various policy issues pertaining to the promotion, development and functioning of SEZ in the State.

Amendment in Act/ Rules, as required, in the context of SEZ: Development Commissioner may send proposals as per requirements of SEZ for amendment in Act/Rules, as applicable in Madhya Pradesh.

Inspection of SEZ Units: For all physical inspections, a schedule would be worked out in consultation with the Development Commissioner and only then inspections would be carried out. However, in case of any specific information of any violation, the inspecting agency would visit after taking prior approval of the Development Commissioner for the proposed inspection.

Large, Medium and Small Scale Industries: Powers to grant provisional/permanent registrations to SSI units and sanction incentives/assistance to the SSI, Medium & Large units in SEZ will be delegated to the Development Commissioner or other designated authority.

Financing the development of the SEZ:

- The SEZ project will be implemented with private sector participation. The State will contribute equity in the form of land.
- Nodal developer for the project, who will be selected through open bidding process, shall bring in his equity contribution and will be instrumental in forming alliances with international and Indian investors including financial institutions, foreign institutional investors, mutual funds, etc.
- Nodal developer will also be responsible for infrastructure development and management of the zone.

7.11.3 Andhra Pradesh

The Government of Andhra Pradesh (GoAP) has decided to set up the SEZ to leverage the state's inherent advantages. This coastal SEZ is envisaged to be internationally competitive offering definitive advantages to locating industries. The state government's vision revolves around two principal themes:

- **Infrastructure led development** - wherein world-class infrastructure would be created first to provide a tangible and visible evidence of advantage to industries.
- **Private sector participation** - wherein private capital and expertise would be leveraged to develop & manage the zone infrastructure.

The GoAP has designated Andhra Pradesh Industrial Infrastructure Corporation (APIIC) as the nodal agency to facilitate private sector participation in the SEZ. The GoAP has also initiated an integrated infrastructure development plan for the region around AP.SEZ (Vishakhapatnam industrial belt) with the objective of significantly boosting the attractiveness of Vishakhapatnam as an industrial location. The state government has prepared a comprehensive policy framework for SEZ s in the state. The important provisions of this policy giving details of the incentives provided for PSP are reproduced below:

Policy framework for Special Economic Zones (SEZs) in Andhra Pradesh

Single Window Clearance:

The Special Economic Zone will provide for a single Window Clearance for approvals and clearances for investors. This will be targeted for timely clearances using electronic formats on Electronic Data Interchange (EDI) platform.

a. Each Special Economic Zone will designate a Development Commissioner (DC). DC would be the Designated Authority representing State and

Central Government and their agencies for all investments by SEZ Units for the Specific SEZ.
b. Single window for all agencies of GoAP including Power, water, Commercial Tax Department (sales tax, entertainment tax), Food & Drug Administration, Andhra Pradesh Pollution Control Board (APPCB), Industries & Commerce Department, Commissioner of Industries/District Industries Commissioner, Chief Inspector of Factories, State Labour Officer, Employment Exchange Officer (Apprenticeship Act etc.) District Fire Officer, AP Transco, Police Department (Foreigners' registration cell) available at SEZ etc. and other terms and agencies included from time to time by GoAP, Officials of above state departments and agencies will be nominated to DC's office to assist the DC on a need basis, at the discretion of the DC.

Simplified Business Working Environment:

All procedures will have pre-laid guidelines and time lines for disposing off cases as well as approval with certification fees.
a. Self-certification will be enabled for all industries using empanelled private sector inspection agencies.
b. To the extent possible, regulation and governance on the SEZ shall rest with the DC. Physical inspection would be undertaken in accordance with schedule in consultation with DC.
c. Exemption for small scale industries and IT industries from registration.
d. SEZ Company will provide necessary infrastructure (building, office space and equipment) for DC and pay equitable amounts as salary and prerequisites to the DC's office staff through suitable escrow account.

Development Authority:

a) The Development Commissioner is deemed to be appropriate authority for the Industrial Development Area for the notified SEZ area.
b) Role of Development Commissioner
Regulation: To provide clearances under various statues and regulations of Government of India and State Government.
Facilitation: To facilitate clearances not granted within the SEZ and advise Government on issues requiring Framework amendments of clarifications.
Promotion: To undertake marketing of the zones along with private promoter.

Revenue Department:

- 50% exemption will be allowed on Stamp Duty, Registration Fee on transfer of lands meant for Industrial use in the Special Economic Zone area.
- Complete exemption of stamp duty and registration fee for loan agreements, credit deeds, mortgages and hypothecation deeds executed by the SEZ Units for assets in the SEZ in favour of banks or financial institutions will also be allowed.
- With due regard to the National Uniform floor rate policy and exemptions given to SEZs throughout the Country, the State Government proposes to extend the following exemptions to AP-SEZ, Achutapuram.
- 'Other state taxes including sales tax, VAT, luxury tax and entertainment tax and state duties on transactions within SEZ. Sale tax and other State Taxes on inputs (goods and services) made to SEZ units from Off Zone suppliers within the State.
- A Consensus would also be attempted at National level for exemption being given to SEZs throughout the country.

Energy Department:

- The State exempts Power in SEZ from Electricity Duty and Tax.
- Captive Power will be allowed in SEZ. Government will take a view as to whether SEZ units will be given exemption from wheeling charges and grid protection charges levied on Captive Power.
- The APSEZ will take necessary steps to make arrangements in respect of transmission, distribution and collection of bills"

Water Supply:

The SEZ Company will ensure the provision of adequate water supply within the SEZ.

Labour Department:

- The State Govt. delegates power of Labour Commissioner to the DC.
- State Govt. will also place an officer of Labour Department under the DC.
- The State Govt. approves simplified submissions of reports by SEZ Units and

created a Consolidated Annual Report System. Self-Certification is also approved.

- Appropriate officials with DC will be designated as Inspectors, Conciliation Officers and Registration Officers under the labor laws to provide Single Window service.
- For inspection relating to workers' health and safety, the State Government permits units to undertake inspection by accredited agencies notified by DC.

Environment Department and Andhra Pradesh Pollution Control Board:

Development Commissioner will be notified as the appropriate authority to represent the APPCD, with regard to clearances for all SEZ Units. In respect of inspections pertaining to pollution control, these would be taken up by the Pollution Control Staff deputed to the Development Commissioner of SEZ.

SEZ does not require Environment Impact Assessment (EIA) approval.

Industrial Approvals:

(a) Non-Polluting Units: Approval will be based on SEZ EIA Master Plan. DC will provide Consent for Establishment and Operations.

(b) Polluting Units: SEZ Level Empowered Committee (with experts nominated by MoEF, APPCBO will assist DC in speedy approvals to polluting units. Such Units will approach Ministry of Environment and Forests, GoI and receive consent on EIA within 45 days.

Operating Framework for Industries:

a. Periodic Self Certification for all industries in the SEZ assisted by private certification agencies. Random sampling monitoring by DC of Units for environmental management.

b. Afforestation: SEZ Level Empowered Committee may grant approvals for developments on specific pockets based on compensatory afforestation in line with guidelines established by SEZ Town Planning Authority.

c. No Development Zone: Government will consider establishing a no industrial development zone around the SEZ periphery, to extent possible as a green belt in order to avoid unplanned development.

Municipal Administration Department and Panchayat Raj Department:

- The State Government will declare the SEZ as a local authority, which shall replace the existing Panchayats. Such local authority will be vested with all powers and shall carry out all functions in the existing provisions. The State Government may further declare this local authority as a Municipality.
- SEZ land will be notified in line with the SEZ Master plan approved by DC. The SEZ Master Plan will be undertaken in accordance with international best practice in town planning and Environment and Social Management Planning norms. Town planning Authority (with nominees from State and SEZ Company) will be established for regulating land usage in SEZ.

Home Department:

The State govt. will process creation of State Police, Fire Services and Home Guard Structures for SEZ(s) for the maintenance of Law & Order.

Law Department:

Special territorial jurisdiction will be accorded to Special Courts as necessary in the SEZ, in consonance with High Court approvals. Prescribed court fee and suitable service fees may be notified for such courts.

Education Framework:

The State Govt. will facilitate development and augmentation of education and training facilities through suitable formats including private sector formats. The education policy for SEZ aims to proactively create highly skilled and managerial human resource bases in line with the needs and dynamics of international markets.

All other Policies of the State would remain in force for the SEZ, unless they are amended by the appropriate authority.

7.11.4 Karnataka

The Government of Karnataka has proposed to set up a SEZ at Hassan, which is midway between Bangalore and Mangalore on National Highway 48. The Government is also proposing to establish an exclusive SEZ for electronic hardware near the

proposed International Airport at Devanahalli. Government is also proposing to convert existing Export Promotion Industrial Park at White Field, Bangalore and the proposed Export Promotion Industrial Park at Mangalore (which is under implementation) into SEZ. Government may also consider establishing of SEZs in other parts of the state. The important provisions of the State's policy on SEZ on the incentives provided for PSP are reproduced below:

Government of Karnataka's Policy on SEZ

Development Commissioner:

All matters pertaining to SEZs in the state will be looked after by an exclusive Development Commissioner for each SEZs and will function from the SEZ site.

Environment Clearance:

MOC's consents and other clearances required from the Karnataka State Pollution Control Board for units and activities within the SEZs would be granted by the empowered officer of the Board working under the administrative supervision and control of the designated Development Commissioner for the SEZs. Environmental clearance for the projects, from State & Central Governments will have to be obtained as per relevant statutes as prescribed in GO No. FEE 14 FNV 2000 dated 13th December 2001. In the event Government of India delegates the powers to the designated Development Commissioner or other authority within the SEZ, the clearances may be sought accordingly.

Water Supply:

The SEZ authority shall ensure the provision of adequate water supply within the SEZ.

Power:

The SEZ authority will ensure continuous and good quality power supply to the SEZ. Public Sector Enterprises or Joint Ventures promoted by them can establish independent Power Plants (IPPs), which will be permitted to establish dedicated provision of power to the SEZ, including generation, transmission and distribution, besides fixing tariffs for the Zone. The SEZ authority will ensure standby arrangements. The IPPs will also be permitted to establish grid connectivity so as to draw power from the grid as standby arrangement, subject to their entering into a separate agreement with KPTCL on mutually acceptable terms. Industrial Units and other establishments in those SEZs for which no IPP has been established will be permitted to generate their own power for captive use. Industrial units in the SEZ will be free to source power from Central Power Generating Stations, from and out of unallocated surplus, for which purpose KPTCL will provide wheeling facility from the grid subject to payment of the prescribed wheeling charges as per the normal policy of KPTCL. As per Energy Deptt. Notification, industries setting up Captive Power Generation (CPG) sets have been exempted from payment of electricity duty. This would apply to new industries in SEZs. IPPs in the SEZ and CEG sets set up by individual industrial units within the SEZs will be charged a concessional ST of 4% on fuel used for CPC.

ST, Duties, local taxes & levies:

Developers of SEZs and industrial units and other establishments within the SEZs will be exempted from all State and local taxes and levies, including ST, purchase Tax, Entry Tax, ToT, Cess, etc. in respect of all transactions made between units/establishments within the SEZs and in respect of the supply of goods and services from the Domestic Tariff Area to units/establishments within the SEZ. All the industrial unit and their expansion located in the SEZs, irrespective of their location within the State shall be fully exempted from payment of Stamp Duty & Registration Fees. Further, industrial unit within the SEZ will be eligible for all other incentives and concessions as per general policies of the Government.

Labour Regulations:

The powers of the Labour Commissioner, Govt. of Karnataka, shall be delegated to the designated Development Commissioner or other authority in respect of the area within the SEZs. Modalities will be devised for the grant of various permission required from the Chief Inspector of Factories & Boilers within the SEZs themselves through the stationing of exclusive personnel for the purpose or through other means so that clearances relating to various labour laws can be provided at a single point in the SEZs. Except in emergent circumstances the prior permission of the Development Commissioner or other designated authority of the SEZs would be required for the

conduct of inspections by these agencies of industrial units and other establishment within the SEZs. All industrial units and other establishments in the SEZs will be declared as 'Public Utility Service' under the provisions of the Industrial Disputes Act. In pursuance of the deregulation measures already put in place and subject to Legislature approval and Government of India's assent, amendments are proposed to the Industrial Disputes Act. The proposed amendments would include, inter alia, limiting the applicability of Chapter VB to industries employing 300 or more workmen, etc. Similarly, the Contract Labour (Regulations & Abolition) Act is proposed to be amended to include certain peripheral service activities.

SSI & IT Registration:
The power to grant provisional & permanent SSI (small scale industry) registration and Letter of Intent and registration of Information Technology (IT) Units, will be delegated to the Development Commissioner or other designated authority in respect of units in the SEZs.

SEZs as Industrial Townships: The State Govt. will take appropriate steps to declare the SEZs an Industrial Townships to enable the SEZs to function as self-governing, autonomous municipal bodies.

Law & Order:
The State Government shall make appropriate and exclusive arrangements within the SEZs for the maintenance of law and order.

Escort Services:
Directorate of Industries & Commerce, Karnataka State Industrial Investment & Development Corporation, Karnataka Udyog Mitra, Resident Commissioner, Karnataka Bhavan, New Delhi, shall provide effective escort services to entrepreneurs/promoters who are desirous of making investments in SEZ.

Committee for review & development of SEZ:
The State Government shall constitute a Committee of Secretaries and other concerned officials, including representatives of the SEZ authorities/promoters, under the Chairmanship of the Chief Secretary to resolve various issues pertaining to the promotion, development and functioning of SEZs in the State.

International Experience:

China
One of the most known Special Zones success story is that of China's Special Economic Zones. China designed its Special Zones to encourage globally competitive industry and attract foreign investment. The national government designated a particular region as a Special Economic Zone, and implemented favorable policies for foreign companies operating within the specified zone. These policies included reduction of corporate income taxes and elimination of import tariffs. There are five SEZs in China. Of these, four- Shenzhen, Xiamen, Shantou and Zhuhai - were founded 20 years back and the fifth, Hainan, was set up in 1988.Primarily geared to exporting processed goods, the special economic zones are foreign-oriented areas which integrate science and industry with trade, and benefit from preferential policies and special managerial systems. It is after the success of SEZs, that Economic and Technological Development Zones, boundary economic cooperation areas, bonded zones, export-processing zones were also established in China. These along with the SEZs are referred to as Special Economic Areas (SPA).

The following table 7.6 summarizes the important incentives available for private investors for investments in the SEZs. The items in bold indicate the incentives from the concession agreements in the various states[154]. Other items have been taken from the policy statements.

7.11.5 Key factors for success based on our review of the various SEZs in India

1. Sound infrastructure base, including an uninterrupted power supply, abundant water supply, adequate warehousing and forwarding services and in-zone customs clearance, postal services, banking facilities, communication facilities.

[154] The Indore Special Economic Zone (Special Provisions) Act, 2003. Passed By Madhya Pradesh Vidhan Sabha On 28th March, 2003

2. Apart from the available infrastructure, the package of fiscal and non-fiscal incentives that are provided to the units is very important.
3. While the fiscal incentives include waiver of licensing, duty-free imports, excise-free procurements and tax holiday, the non-fiscal incentives include repatriation of capital, free remittance of profits etc.
4. Applications for new units cleared within a stipulated timeframe through a single-window clearance mechanism.
5. Developing SEZs at strategic locations - excellent locational advantages, availability of raw materials, intermediate goods and cheaper skilled manpower in and around the SEZ is a must.

7.11.6 Checklist for Governments who are contemplating setting up an SEZ

The following checklist highlights how governments can more effectively create the environment to support development of SEZs.

1. There should be world class infrastructure, simple laws, simplified procedures & clear, predictable rules, local autonomy & minimum bureaucracy, generous tax holidays for manufacturing units, unlimited duty free imports of raw, intermediate and final goods as well as capital goods;
2. Efficient administration;
3. Incentives used should maximize transparency: benefits should be automatic and not subject to decisions by government officials;
4. Direct copying of SEZ models in other countries may not be beneficial to India as some of these SEZs are much larger in magnitude, and in addition to export processing they promote activities such as commerce, tourism, housing, agriculture and industrial production;
5. Establishment of SEZs should be accompanied by liberalization in the rest of the economy.

7.11.7 Directions for change

Some of the incentives that can contribute to increasing PSP in development of SEZs are:

- Developer to have collateral development rights - freedom to develop township adjacent to the SEZ with residential areas, markets, play grounds, clubs and recreation centres;
- Amend labour laws and provide suitable exemptions to developers;
- Extended corporate tax holidays and concessional tax rates post holiday period;
- Complete delegation of powers under various central and state government functions at the zone level so that it becomes an autonomous administrative unit for all commercial activities;
- Authority to delegate the power of collection of the charges for the use of services
- State support in ensuring connectivity of the SEZ by setting up/revival of existing air links/road links/railway links so that the SEZs have world class infrastructure necessary to attract investors;
- It may be beneficial to let the developer directly negotiate for the land prices and reach a mutually beneficial agreement with the residents to avoid delays that may happen if the state government has to allocate/negotiate for land.

Table 7.6: Incentives Available for SEZs in States and International Experience

	Gujarat	Madhya Pradesh	Andhra Pradesh	Karnataka	International experience CHINA (SPA)
Stability: Law and tax regimes	The management of the SEZ to be under the Development Commissioner.	**State Government to appoint an authority for the zone.**	To the extent possible, regulation and governance of the SEZ to be with the DC.	The management of the SEZ to under the DC.	Administrative Committee of SEAs exercises the administrative approval power in respect of foreign investment that is otherwise exercised by provincial governments -The SEZ authorities in China can approve foreign investment proposals up to $30 million
Tax incentives	Income-tax exemption for a block of 10 years in 15 years under **section 80-IA** of the Income-Tax Act. -Complete exemption on payment of Stamp Duty and Registration Fees on transfer of land meant for industrial use in the SEZ Area. -Transactions within the SEZ shall be exempted from all State taxes including Sales Tax, VAT, Motor spirit tax, luxury tax and entertainment tax, purchase tax and other state taxes. -Inputs (goods and services) made to SEZ units from Domestic Tariff Area (DTA) will be	Income-tax exemption for a block of 10 years in 15 years under **section 80-IA** of the Income-Tax Act. -Complete exemption on Stamp Duty & registration fees Transactions exempted from all State taxes	Income-tax exemption for a block of 10 years in 15 years under **section 80-IA** of the Income-Tax Act. -Complete exemption of stamp duty and registration fee -Exemption from duties on all imports for project development -Exemption from excise/VAT on domestic sourcing of capital goods for project development -50% exemption on stamp duty, registration fee on transfer of lands meant for industrial use in the SEZ	Income-tax exemption for a block of 10 years in 15 years under **section 80-IA** of the Income-Tax Act. -Complete exemption on Stamp Duty & registration fees Transactions exempted from all State taxes Any sales from SEZ to DTA will be treated as import -Goods and services forming part of internal transactions with the SEZ exempt from any state taxes, duties or cess.	-The corporate income tax rate set at 15% for production enterprises, which is much lower than the ordinary rate of 30% applied to elsewhere in China. -Exemption from corporate income tax for 2 years commencing from the year of starting to profit and enjoy a three-year-period of 50% tax rebate thereafter. -Products produced and sold within bonded zones and export-processing zones are free from VAT.

Table 7.6: Incentives Available for SEZs in States and International Experience

	Gujarat	Madhya Pradesh	Andhra Pradesh	Karnataka	International experience CHINA (SPA)
	exempt from Sales tax and other State taxes.				
Process issues: State support	-The DC to be the single agency to grant all approvals, clearances, licences and permissions -Exemption from electricity duty for ten years period. -Permitted to arrange for power through establishment of IPP as well as transmission and distribution of power. -Automatic approval granted to set up captive power plant.	-**The DC to be the single agency to grant all approvals, clearances, licences and permissions** **-Exemption from levy of electricity duty and cess.** **-Units entitled to generate electricity either individually or in association with other units in the zone for captive use and consumption of such Unit or Units or sell and supply electricity to other units in the Zone.** -**The tariff terms and conditions of the generation, transmission, distribution, sale, supply and use of electrical energy subject to regulations made by the DC** State Government to make available land required for the zone. **-The Developer may acquire land independently from private parties by purchase,**	Single window clearance for approvals and clearances for investors. -Exemption from levy of state electricity duty and tax -Captive power will be allowed in the SEZ	The State Government may specify common application for grant of any approval, clearance, licence, permission or registration. -Industries setting up Captive Power Generation sets exempted from payment of electricity duty. IPPs and Captive generation sets to be charged a concessional ST of 4% on fuel used for CPC. Public Sector Enterprises or Joint Ventures promoted by SEZ authority can establish IPPs -Industrial units in the SEZ will be free to source power from Central Power Generating Stations, from and out of unallocated surplus, for which purpose KPTCL will provide wheeling facility from the grid subject to payment of the prescribed wheeling charges as per the normal policy of KPTCL. -The State Government may acquire land for the purpose of development of the Zone and the developer shall meet the expenses	"One Step" procedure for foreign investment is adapted. Various government agencies related to approval and registration of foreign investment are arranged to work in the same hall with a view to facilitate approval and registration procedure. - Many SEAs offer lower expenses for land use right and other public facilities. Some even offer tax refund to cover part of investment cost. -Many SEAs promise to provide investors with " 9 Access with 1 Level off ", namely convenient access to transportation, drainage, reclaimed water, water, gas, electricity, heating, internet, cable TV, and leveled off land. -Preferential treatment in land use and raw material supply is offered to technologically advanced enterprises and outsider-invested export-

Table 7.6: Incentives Available for SEZs in States and International Experience

	Gujarat	Madhya Pradesh	Andhra Pradesh	Karnataka	International experience CHINA (SPA)
		lease or otherwise.		of such acquisition. After such acquisition the State Government shall transfer the land to the Developer.	oriented businesses.
	The powers of the Labour Commissioner to be delegated to the Development Commissioner	**State Government to request the GoI to declare Indore Airport as International Airport.**	The powers of the Labour Commissioner to be delegated to the Development Commissioner	The powers of the Labour Commissioner to be delegated to the Development Commissioner	- Enterprises can determine by themselves both the organizational structure and the manning quotas.
	-Amendments to be made to the Contract Labour (Regulations & Abolition) Act.		-Suitable exemptions to make possible 365 days working for 24 hours in a day	-Amendments to be made to the Contract Labour (Regulations & Abolition) Act.	- Enterprises can independently recruit technical and managerial personnel and workers either in SEZ or other provinces.
				Developer to be permitted to develop, operate and maintain a minor port and to set and collect tariffs from the vessels entering in the minor port and on the goods landed and shipped at the port.	Enterprises allowed to independently determine their hiring and laying off of employees.
					-Predicated on the enforcement of state and provincial provisions concerning labor and wages, the enterprises to independently determine their employees' wage level, pay form, allowance, rewards and penalties.
Collateral development		**The Developer may engage a co-developer, off-Zone supplier, operator, or any other person for the purposes of providing infrastructure or amenity.**	-Developer to have freedom to develop township adjacent to the SEZ with residential areas, markets, play grounds, clubs and recreation centres without any restrictions on foreign ownership		
		- **Power to levy charges for the**			

Table 7.6: Incentives Available for SEZs in States and International Experience

Gujarat	Madhya Pradesh	Andhra Pradesh	Karnataka	International experience CHINA (SPA)
	use of infrastructure or amenity **-Can delegate the power of collection of the charges for the use of services**			

7.12 Incentives for private investment in the airports sector in India

7.12.1 Airports sector in India

India has 122 airports, controlled by the Airports Authority of India (AAI), of which 11 are international airports. AAI provides air traffic services over the entire Indian airspace and adjoining oceanic areas. The total passenger traffic handled by Indian airports in 2001-02 was over 40 million, while the cargo traffic handled was around 854,000 tonnes.

The Ministry of Civil Aviation (MoCA) is primarily responsible for the formulation of national policies and programs for development and regulation of civil aviation and for devising and implementing schemes for orderly growth and expansion of civil air transport. Its functions also extend to overseeing the provision of airport facilities, air traffic services and carriage of passengers and goods by air. It has under its administrative purview various organisations including Director General of Civil Aviation (DGCA) and Airports Authority of India (AAI).

Traditionally, airport sector has been managed by the public sector in India. However, post-liberalisation of Government policies in early 90s, the monopoly of public sector air carriers ended with the reopening of Air Corporation Act, 1953 in March 1994.The sector was opened up to investments by the private sector in order to meet substantial investment needs. This has further led to devising of such policies by the GoI that attracts private sector investments and encourages its' participation in the planning for civil aviation sector in the country.

Most airports, except the one in Cochin, are owned by the Government and managed by the Airport Authority of India (AAI), though there are few other airports that are managed by the defence services as well. Cochin is the first joint venture between Kerala State Government and private enterprises. There has been considerable progress in two more state-of-the-art international airports at Bangalore and Hyderabad involving private sector participation. A similar project has been approved for Goa as well. Recently, the Government has sanctioned huge funds for modernizing the major international airports including airports at Delhi and Mumbai, with the support from the private sector.

Despite the expansions and improvements in the aviation infrastructure over the years (in terms of the airport facilities and air navigation services) there has been some time lag between supply and demand for the infrastructure facilities in the sector that has been experienced recently. Lack of financial resources has been a major reason, which has retarded expansion of aviation infrastructure. A need to have better airport management in order to address the emerging issues of airport restructuring, safety and security has also been greatly felt. Though Government has shown a lot of interest in improving private sector participation, there has not been any drastic change experienced because of several reasons. Some of the reasons that has hampered the private investments include inadequate legal and policy framework, cumbersome procedures for participating in sector's development, delays in obtaining clearances, inadequate administrative support, threat of public interest/other litigations, inadequate redressal mechanism amongst others.

7.12.2 Policies related to the airport sector

Most significant steps undertaken by the Government in the civil aviation sector include deregulation of the domestic airline markets, inviting private participation in the development of airport infrastructure and modernisation of the air traffic system. A policy on airport infrastructure was announced by the Government in 1997 that encouraged the private investment in domestic air transport services sector. This comprehensive policy was formulated to bridge the gaps in resources and also to bring about greater efficiency in the management of airports. As per this, in case of high-cost projects involving international hubs, the Government may seek international or bilateral cooperation; the actual implementation of the projects will be entrusted to consortia interested in turnkey execution on the joint venture basis. Foreign equity participation in such ventures got a

permission of up to 74 per cent with automatic approvals and up to 100 per cent with special permissions. It envisaged the development of international hubs and regional hubs to provide a "Hub & Spoke" arrangement connecting all the airports. Under this policy, restructuring of some of the airports of AAI are also to take place through long term leasing route.

In 2000, the Government drafted a new Civil Aviation policy that aimed at:

- Improving the development and regulation of the civil aviation including the operation of air transport services to meet the needs of the people for safe, secure, regular, efficient and economic air transport
- Establishment of the Civil Aviation Authority
- The Government allowed up to 40 per cent foreign equity in domestic air carriers. However, no direct or indirect equity participation by foreign airlines is allowed
- Non-resident Indians and corporate bodies allowed to hold up to 100 per cent equity in domestic air transport services
-

Over the last few years, there have been significant changes in India's bilateral air services policy. Recognising the need to enhance the availability of capacity for international traffic, the Government has re-negotiated the existing bilateral agreements or has entered into fresh new bilateral agreements with a number of countries. In addition, the Government has allowed new points of call for foreign airlines and agreed to the utilisation of the Indian landing entitlement in other countries by foreign carriers on mutually beneficial terms. For cargo operations, India has an open-skies policy. All foreign airlines are allowed to operate cargo services without any restrictions. For chartered flights, the Government has been gradually liberalizing the conditions for allowing such flights at a larger number of airports. The patterns which are allowed to the operating companies include build-own-transfer (BOT), build-own-lease transfer (BOLT), build-own operate (BOO), lease-develop-operate, joint ventures and management contracts. In each individual case, it gives the flexibility to negotiate the exact pattern. It envisages that the AAI, which at present owns most airports and manage all of them, will slowly withdraw from this role and act as a facilitator and regulator of private investment.

The policy lays specific emphasis on the participation by private sector. PSP is to be a major thrust area in the civil aviation sector for promoting investment, improving quality and efficiency and increasing competition.

- Competitive regulatory framework with minimal controls will be created to encourage entry and operation of private airlines/ airports;
- Private sector investment in the construction/ upgradations/ operation of new as well as existing airports including cargo related infrastructure will be encouraged;
- Private sector participation will be encouraged in existing maintenance infrastructure of Indian Airlines and Air India like Jet Engine Overhaul Complex (JEOC) and new maintenance facilities including engine overhaul and repairs with up to 100 % foreign equity;
- Rationalization of various charges and price of ATF will be undertaken to render operation of smaller aircraft viable so as to encourage major investment in feeder and regional air services by the private sector;
- Training Institutes for pilots, flight engineers, maintenance personnel, air-traffic controller, and security will be encouraged in private sector;
- Private sector investment in non-aeronautical activities like shopping complex, golf course, entertainment park, aero-sports etc. near airports will be encouraged to increase revenue, improve viability of airports and to promote tourism;
- Government plans to gradually reduce its equity in PSUs in the sector.

The Government also aims at ensuring adequate world-class airport infrastructure capacity in accordance with demand, ensuring maximum utilization of available capacities and efficiently managing the airport infrastructure by increasing involvement of private sector. Greenfield airports will be permitted by the Government where:

- The existing airport is unable to meet the projected requirement of traffic or

- A new focal point of traffic emerges with sufficient viability and
- The new location is normally not within an aerial distance of 150 kilometres of an existing airport

Discussions related to this draft policy on various proposals on air connectivity, private and public sector airlines, issue of foreign direct investment (FDI) in the aviation sector are still ongoing and announcements are expected on the Civil Aviation Policy soon. In this regard, the recommendations made by Naresh Chandra Committee Report are also kept into consideration. Naresh Chandra Committee report announced in December 2003 has come up with the suggestion that foreign airlines be permitted up to 49 per cent stake in scheduled Indian carriers. It recommended allowing private airlines to fly abroad and made a pitch for the divestment of Air-India (AI) and Indian Airlines (IA), which has been delayed over the issue of fleet acquisition. Taking cognizance of the fact that the delay in the fleet acquisition of public-sector airlines has led to huge losses, the Committee has suggested that the issue of fleet acquisition and privatisation be delinked. These suggestions are the first part of a report which is already submitted to the Civil Aviation Ministry, while the second part of the report is expected to be completed in 2004.

This report also proposes to improve efficiency of AI and IA and limit government interference by way of privatisation, by which management control would be transferred to the strategic private investors. In order to lower the cost of flying, the Committee has recommended that import duty on aviation gasoline be abolished and excise duty on aviation turbine fuel lowered. Other charges such as inland air travel tax and passenger service fee may be replaced with a single, sector-specific cess, expectedly 5% of airfare, which can also reduce fares considerably - by almost 15%.

7.12.3 Privatisation of airport sector in India

The Cabinet has recently taken a decision to privatise Delhi and Mumbai airports and approved the proposal to set up joint ventures for these airports where AAI will have 26% equity and the private partners will own the rest (74%). The Government has chosen a concession contract route to encourage private participation. The progress on privatisation of airports is given below:

- Privatisation of the operation and management of four international airports at Delhi, Mumbai, Chennai and Kolkata - as these airports handle significant amounts of both passenger and cargo traffic. Projections also show that traffic is likely to increase steeply at these airports.
- FDI upto 100% is permitted in airports, with FDI above 74% requiring prior approval of the GoI.
- Private sector is allowed to operate scheduled airlines in the domestic sector.
- Private sector participation is also allowed in the airport modernisation, ground services and aircraft manufacture.

Apart from these incentives, recently a greenfield airport has been promoted at Kochi/Cochin by the Government of Kerala in the private sector. The Cochin International Airport (CIA) is a project where Government of Kerala, Non Resident Indians, financial institutions and airport service providers have joined hands in the equity structure. It is the first airport in the country outside the ambit of GoI and was opened to traffic in 1999. In this project, some loans were raised from banks and interest-free deposits were mobilized from the service providers and concessionaires in the project. The Union Government has also accorded in-principle approval to two new proposed Greenfield airports near Hyderabad and Bangalore with majority of private sector participation. The Union Cabinet in 2003 has approved the amendments to the Airports Authority of India Act, 1994. Given the difficulties and delays associated with Greenfield projects, the amendments emphasised that the Government may focus its efforts on harnessing efficiency gains through better management of existing capacity. It also stressed the criticality of investment decisions regarding Greenfield airports to be based purely on commercial considerations. Accordingly, Central and State Governments have refrained from extending concessions, in general and subsidies, in particular, to the Greenfield airports in India.

7.12.4 International Comparison

The following table 7.7 summarizes the incentives provided by the Central/State Government for attracting investments in the airport sector in the four states and international experience of Colombia. The items in bold are taken from specific contracts[155].

A considerable number of concession contracts have been executed in Colombia in recent years especially in the sectors of road and wastewater treatment. In the aeronautics sector, the second runway at El Dorado International Airport was finished in 1998, pursuant to a concession contract that has a 17-year term. The country is expecting an increase in the participation of private companies the next few years. The Aerocivil has recently been recognised as Category One by the Federal Aviation Association and this constitutes a major incentive for aeronautical development within Colombia. The airport concession contracts are not only subject to the general state contracting regime provided in the law, but rules that have to be followed in the execution of any concession contract over any state-owned airport also exist in Colombia.

7.12.5 Directions for change

At present, hardly any incentives are being offered in India to encourage private sector participation in airports. It is pertinent to spell out incentives being offered to private investors more clearly either by policy announcements by GoI or by removing legal obstacles by way of amending the AAI Act etc. The role of private sector needs more identification with dilution of control by AAI and transferring it more the role as a facilitator and regulator of private investment. There is also a need to have policy decisions faster than the way it has been happening now in order to augment capacity with PSP in the sector. State support is required not only in terms of guarantees, concessional financing and equity participation, but also through single window clearances and also development of related infrastructure.

[155] BOT concession agreement for construction of runway and maintenance of the new runway and maintenance of the existing runway for the El Dorado International airport on Bogota in Colombia

Table 7.7: Incentives Available for Airport Development and International Experience

	Gujarat	Andhra Pradesh	Karnataka	Government of India	International experience Colombia
	No policy for private sector participation	No specific policy/law	No State policy or specific State law	Airport is a Central subject	Specific policy framed by Aerocivil -– the supreme Columbian Authority for air transportation.
Guarantees		-Airport is developed jointly with equity participation by the State and the Central Governments, together holding 26 per cent stake. The private developer will hold the remaining 74% The State and the Central Governments to arrange an interest-free loan. Contractual issues are under finalization.	The State Government has signed concession agreement, state support and land lease agreements. Financial closure is to be completed soon. Project estimated to be nearly evenly divided between equity & debt and the State Government to provide financial support as equity, and the rest to be raised by domestic and international FIs. State Support Agreement envisages exposure of State Government in the form of subordinate/additional debt also.	Government to contribute in the equity participation in Greenfield and existing projects.	**The Government guaranteed a minimum level of revenues (floor pricing), in a rare case of a government's accepting commercial risk.** **If the landing fee structure or traffic volume or both cannot support the required revenue stream, the government would compensate the concessionaire from a trust equivalent to 30 percent of the annual landing fee.**
Tariff setting		Investors free to fix their own tariffs for various airport services without detriment to development of airport in shorter/longer period under the control of AAI.	A bill in the parliament is yet to be amended which will take Bangalore International Airport project out of the purview of AAI. Until the law is amended, AAI will control all user charges, including airline charges.		-Basic service charges to airlines and passengers. Aerocivil regulates all the rates.
Market risk		Greenfield airport project under PPP on BOO basis	Project is under BOT arrangement Compensation to be paid by the GoI to the promoters in case of any change in the civil aviation policy resulting in closure of the airport or rendering the whole project economically unviable Project exempted from compensation to be paid		

Table 7.7: Incentives Available for Airport Development and International Experience

	Gujarat	Andhra Pradesh	Karnataka	Government of India	International experience Colombia
			to airlines for termination of bilateral rights after the closure of the existing Bangalore airport. Government has the power to terminate any project agreements if the project is not completed within the deadline, while the promoters can also back out if agreements are not finalized in a given time frame.		
Law and policy regime			Union Cabinet has approved a legislative amendment to end State restrictions on private airports except in air traffic control and security. State Government has amended the entries in the fourth schedule relating to aviation turbine fuel to be sold to turbo-propo aircrafts to fall in line with the amendments to the Central Sales Tax Act from April 2001.	Key issues are: • Structuring the proposed leasing contracts • Establishing a regulator to oversee private operations under the lease	Policy implemented by the Aerocivil.
Process issues: Bidding and state support	Forest clearance and environmental clearance required from MoEF Air space management, safety and security of airports clearances required from Airport Authority of India	Selection on the basis of bidding - Two parties submitted detailed proposals and after due evaluation preferred bidder has been selected for the project State government to make available land and related infrastructure Government to help in obtaining fresh water and power supply to the investors.	Selection of players in consortium on the basis of open competitive bidding State Government expecting a`no-objection' from the Ministry of Defence for the site at Devanahalli State Government arranged for the land for the project.		Airport concession agreement is subject to the general state-contracting regime (Law 80, 1993). Accordingly, a public competitive bidding takes place.
FDI	Approval for foreign			100% FDI allowed	Foreign bidders are given the same

Table 7.7: Incentives Available for Airport Development and International Experience

	Gujarat	Andhra Pradesh	Karnataka	Government of India	International experience Colombia
	investment and foreign loans, if required to be attained by the Ministry of Finance / RBI			in airports. FDI up to 74% approved through the automatic route.	treatment and the same conditions as, requirements, procedures and criteria for awarding the contract as applied to domestic bidders, provided that the offers of Colombian goods and services in the foreign bidder's country of origin receive the same treatment as granted to its nationals for awarding contracts executes with state owned enterprises and government bodies.
Personnel policy		Investors are given complete freedom to follow their own personnel and employment policy without being governed by the rules and practices in other airports			
Tax incentive	As per section 80-I A of Income Tax Act 1961[156]	As per section 80-I A of Income Tax Act 1961	As per section 80-I A of Income Tax Act 1961	As per section 80-I A of Income Tax Act 1961	
Duration/ exclusivity			The concessional agreement provides for an 'exclusivity zone' clause to the consortium—meaning no new airport will be allowed to come		-The Aerocivil transfers to the concessionaire an airport for its management and economical exploitation for a certain period of

[156] Deduction of an amount equal to 100% of profits and gains derived for 10 consecutive assessment years. This deduction may at the option of the assessee be claimed for any ten consecutive assessment years out of the 20 years beginning from the year in which the undertaking or the enterprise develops and begins to operate the facility. This shall be applicable to enterprises that fulfill the following conditions:

Table 7.7: Incentives Available for Airport Development and International Experience

	Gujarat	Andhra Pradesh	Karnataka	Government of India	International experience Colombia
			up in 150 km vicinity The concession agreement will come into effect from the time it is signed between the Centre and BIAL. The agreement is to be for 30 years, with the provision of extension by another 30 years. BIAL has got an approval for concession agreement, which stipulates that a concession fee of four per cent of the gross revenues will be paid to the Union Government.		tine, usually 15 years. - At the expiry of the contract, the whole of the infrastructure if transferred to the Aerocivil.
4. Any concessional financing		GoI has in principle agreed to exempt levy of taxes / fees for Greenfield Airport, which can be collected by the airport in the form of development cess.			
Levy of special fee/charges		Charging of Advance Development Fee by way of additional Passenger Service Fee at the existing airports for help in financing of the greenfield airport Levy of User Development Fee (UDF) at the new airport.	Levy of User Development Fee (UDF) at BIAL Levy of Advance Development Fee (ADF) by way of additional Passenger Service Fee (PSF) at the existing airports for help in financing of the greenfield airport.		-Complimentary service charges: include services that are complimentary or somehow connected to the airport activities that are not subject to a fee regulation by the Aerocivil. -Occasional direct services charges: include serives that are connected to the management and economical exploitation of the airport, that are different from aviation services, such as temporary infrastructure services. These are not regulated by Aerocivil.
Collateral		Hyderabad Airport Development		Developments are	Private sponsors are granted the

Table 7.7: Incentives Available for Airport Development and International Experience

	Gujarat	Andhra Pradesh	Karnataka	Government of India	International experience Colombia
development		Authority (HADA) constituted for undertaking developments around the airport		accompanied by and large for all projects in and around the surrounding areas	rights raise revenues by selling concessions for commercial activities (such as restaurants, parking facilities and duty free shops)

7.13 Incentives for Private Infrastructure Investment: Consultations with private sector

Experience has shown that the success of any intervention depends upon active participation and endorsement of all the stakeholders. In this case, since the TA is targeted particularly at private investors in the four short listed states, the perception of this stakeholder group is particularly important to the identification and design of any strategy identified for promoting PSP. Hence, it was felt that a dialogue with the private sector would provide valuable inputs in the identification of appropriate incentives.

The detailed list of incentives presented above were discussed in detail during a Brainstorming Session organized in Bangalore on 24 February 2004. The target audience comprised primarily private investors. In addition, some infrastructure financing organizations such as IDFC and IL&FS also were invited. To ensure a complete representation of all stakeholder groups, the nodal agencies from the four states were invited.

The sessions were structured in a manner to allow free discussion on various incentives. The inaugural presentation aimed at providing a background to incentives and the context in which this event was being organized. The subsequent session presented the detailed incentive structure in all the sectors in all the states and feedback and comments were sought from the participants on their appropriateness and need for improvement.

The key issues that were raised in the discussion are as follows:

7.13.1 Complexity and ambiguity

It is important that the contractual arrangements should be unambiguous and responsibilities of various agencies and parties are laid out clearly. At the same time it is important that enough flexibility and consultations are provided for the document is finalized so as to adequately reflect the concerns of all stakeholders, including the private sector. It was pointed out in the context of definition of ports that definitions of eligible infrastructure projects should be harmonized or harmoniously interpreted across central and state laws and regulations.

7.13.2 Residual value of projects

One issue that needs to be addressed is the issue of residual value of the asset, particularly in BOT or concession type of contracts. While most contracts require such assets to be transferred to the government at the end of the contract at zero value, these assets could clearly be valued positively as most such contracts involve large investments that have a useful life much beyond the life of the contract itself. While there was a view that such issues could be addressed within the frame of the contract's financial design, particularly when the investor is carrying out the financial feasibility analysis, it was felt that some such provision would help in improving the viability of such projects. Such a provision would also help to ensure that the assets would be maintained effectively. These are currently being addressed as part of the contract in terms of minimum maintenance standards in the contract. Such a provision would also ensure that user charges are more reasonable by improving the viability of the project. This would also imply easier step-in by new operators in case of failure of the operator making the project viable even for the new operator.

7.13.3 Tariff setting

In terms of tariff, while the need for independent regulation is articulated for several reasons, it is also necessary to ensure the public acceptability of the PSP process. Tariff setting processes would also vary considerably across sectors and hence a differential approach is suggested. In addition, while guaranteed payments reduce risk premiums considerably, there is also a case for other financing mechanisms to be continued in parallel to the extent these are feasible. For instance, while the annuity scheme has been successful in the roads sector, there is clearly a role for tolling in cases where traffic levels allow at least part recovery of the project cost. The need for adopting hybrid or innovative approaches to structuring the projects was stressed. In addition, tariffs should be set at

reasonable levels to ensure acceptability. Since acceptability is determined essentially in consumer perception and would vary across infrastructure sectors, this would imply differential potential for PSP in different infrastructure sectors or the need for financial or budgetary support, at least in the initial periods. It was pointed out that for these reasons, the potential for viable tariff setting is higher in sectors such as ports where the consumers are mostly other business entities than in sectors such as roads and, particularly, water.

7.13.4 Dispute resolution issues

Investors stressed the importance of effective provisions in the contract and mechanisms for dispute resolution. It was pointed out that often while interpreting the contract by the parties, particularly the government at the operating level the spirit or context of the original contract is overlooked. This results in adversarial interpretation and positions and leads to avoidable recourse to the dispute resolution process. It was also pointed out that the arbitration process is often marred by long delays in appointments of arbitrators etc. leading to loss of value in the contract.

7.13.5 Consistency and legitimacy issues

It was pointed out that while changes of government are inevitable in a democracy, these should not be occasions for review (and sometimes threats of termination) of ongoing contracts. Greater transparency and wider consultation were suggested as possible palliatives in this regard. However, it was stressed that commitment of government across all political parties was paramount. In the absence of such a commitment from the government towards the regulatory reforms program, even the institutions of independent regulation would not be effective.

Importance of consistency and commitment to the provisions of contracts was highlighted in the context of cases where government gone beyond the contractual provisions to capture the upside in returns retrospectively. It was pointed out that contracts should be well-designed so that they provide a clear basis for the investor to carry out the financial analysis, and yet have provisions to progressively share in returns so that resentment against any windfall gains does delegitimise or politicize the contract.

Independent regulation and other such mechanisms that provide some legitimacy to the PSP process are important for private investors. Such a step would be taken to indicate to private operators that some legitimacy in the process can be perceived and communicated to the government and civil society groups, hence minimizing opposition to private investment. Another mechanism here would be strategies such as revenue sharing arrangements and ceilings for tariffs. However, there is a fear in strategies such as revenue sharing that while the government would want to share the higher revenues while not take part in the downsides. Nevertheless, such changes should not be retrospective and should be only taken into account only for new projects.

7.13.6 Role of Union and State Governments

Since several incentives are provided for by the Union Government, there is a case for the Union Government to consult and collaborate with the state governments to make the incentive structure more effective. The state governments also have a role in developing projects in terms of feasibility studies, etc before the project comes for PSP. This would ensure that the project costs are lower as also are risk premiums.

It was specifically pointed out, in the context of the liberalization of the ECB norms by the central government that the schemes for tax or financial should not have the effect of discriminating against smaller investors. Other than suggestions from one large investor about guaranteed return on equity, no specific suggestions came out about the adequacy of the current fiscal and financial incentives or the need for providing new incentives of this type.

7.13.7 Credibility in Guarantees

Government guarantees become more credible when backed with dedicated financing such as the case for the annuity scheme for road sector being backed by the cess on fuels. In the absence of such funds, guarantees are not perceived as adequate

and a substantial risk premium is seen to attach to them. A point was in this context, in the absence of such funds, in case of default in payment, the processing to enforcing payment out of the consolidated fund of the government can be very time time-consuming and costly.

7.14 Senisitisation of Users to User Charges and Labour Issues

Many governments around the world use the decision to attract private investment as a springboard for advertising to tell people that private investment is good for them. However, with the increasing backlash against globalisation and by extension, increased control over what have been traditional areas of Government service delivery, the term "privatisation" has become increasingly a cause for tension and negative reaction. Recently, as a result, the terminology "privatisation" has disappeared from the public pronouncements in many countries to be replaced by alternative service delivery and other synonyms. The process of selling private control of public infrastructure is delicate and generally best left to the concessionaire. The success and failure of the concessionaire is directly linked to the public perception of the changing cost of service and the quality of service delivery. There will always be winners and losers in any sytem that changes dramatically but the organization best able to discuss and present this issue is the organization most directly responsible, i.e. the concessionaire.

All of the PSP options outlined in this document are unlikely to lead to labour reduction. On the contrary, most will lead to labour increases. We have outlined the current structure of labour law in Volume 2 and in Chapter 3 above. As with issues of cost and service, we also believe that issues to deal with labour changes, whether in conditions of service or changes of status are best left to the companies directly involved.

7.15 Adequacy of Capital Markets

7.15.1 Introduction

Increased international contribution and investment in private sector participation (PSP) projects in India is contingent on a stable political and macro-economic environment, easy access to local insurance, capital and credit at attractive rates, as well as political support, incentives and a favourable and stable regulatory climate. This is particularly true in the development and reform of transportation infrastructure. Since the introduction of economic reforms in 1991, India has made great strides in attracting international participation and investment in this area. However, impediments remain in attracting international private sector participation in India's transportations sectors, in particular, India's sizeable fiscal deficit, which plays out in capital and credit markets, existing economic risks, lack of transparency as well as potential social instability. Nevertheless, there is no question that the environment for participation and investment in India's transportation sectors has improved. The following sections provide an overview of the current economic environment in India and related capital, credit and insurance markets, as well as a discussion of the regulatory environment and political/social risks for prospective international investors.

7.15.2 Economic Environment

Economic reforms since 1991, which include trade investment and financial sector liberalization, have enabled the Indian economy to grow rapidly, averaging about 5.5 to 6% annually. This growth is expected to continue into the future; real GDP growth is expected to reach 7.3% in 2004/05[157], and industrial production is expected to continue to grow. Despite this growth, inflation has been moderate, forecasted to pick up only slightly in 2004-05 to about 4.5%[158].

[157] Economist Intelligence Unit, India Country Report, May 2004

[158] India Interim Budget 2004-2005 Budget, http://indiabudget.nic.in/ub2004-05/bh/bh1.pdf

Foreign exchange reserves are strong in India, the latest figures from the Reserve Bank of India Indicating currency assets of USD 1,13,091 million[159]. In general, central banking monetary policies are generally conservative in nature, and not prone to decisions that might cause major fluctuations in the value of the currency [160]. The rupee is expected to be stronger against the US dollar in 2005, expected to average Rs 44.3/USD. Nevertheless, the government is expected to continue to try to reduce upward pressure on the currency by encouraging capital outflows and discouraging discretionary inflows[161].

India is also faring well in terms of its balance of payments; total exports last year were USD 37.6 billion and although India still suffers from a significant trade deficit, the current account is expected to record a rising surpluses from 0.5% of GDP in 2003 to 0.9% in 2005[162]. This will undoubtedly help the government pay off its external debt. This is all good news for infrastructure development. Previously, India's current account deficit limited its capacity to borrow foreign currency for private infrastructure. According to the World Bank[163], it is generally accepted that a sustainable current account deficit for the country is in the range of 3% of GDP per annum. With the current deficit running at over 2% in 2000, it was unlikely that offshore funding could provide much more than an amount equivalent 1% of the country's GDP, meaning that offshore funding played a relatively insignificant role in Indian private infrastructure projects. With a positive current account balance at present and projected into the future, the Indian government is in a better position to borrow funds from abroad, from international financial institutions (IFIs) and other sources, to finance local infrastructure development projects.

[159] Reserve Bank of India, weekly statistics for week ended May 21st, 2004

[160] "Political Risk Service: India County Forecast," PRS Group. Dec 2002

[161] Economist Intelligence Unit, India Country Report, May 2004

[162] Economist Intelligence Unit, India Country Profile, 2003

[163] India - Country Framework Report for Private Participation in Infrastructure 2000.

These statistics represent an attractive investment environment; economic stability seems certain given India's growing economy, stable central banking policies, and trade and labour liberalization. However, a large government fiscal deficit and high interest rates may thwart further private sector investment in India's local infrastructure.

The "consolidated" budget deficit, including central and state governments and state-owned businesses, has been running at about 11% of GDP since 1999, among the worlds highest (government debt is around 60% of GDP). Some two-fifths of this is accounted for by the governments of the 28 states and of the capital, Delhi[164]. Large interest payments on the huge debt overhang are also a major source of deficit, especially since interest rates have been aligned to market rates as part of the ongoing financial sector reform[165].

This deficit has some important implications for the development of its transportation infrastructure, particularly in terms of local capital and credit markets, potentially having the effect of squeezing the availability of money supply and driving up interest rates. This should be a concern for international firms who wish to borrow locally and investors contemplating participating or investing in India's infrastructure development, as will be outlined in the following section.

Credit and Capital Markets in India

The Reserve Bank of India (RBI) is India's central bank. Though the banking industry is currently dominated by public sector banks, numerous private and foreign banks exist. India's government-owned banks dominate the market, although their performance has been mixed, only few being consistently profitable. In line with India's economic reforms started in 1991, several public sector banks are currently being restructured, with

[164] Anon, Finance and Economics: Small savings, big headache: India's finances, The Economist, London, March 28, 2003

[165] Sheel, Alok. Political Economy of India 1800-2001, International Journal of Commerce & Management, Indian: 2001, Vol. 11, Iss. 2.

the government reducing its ownership stake in many cases[166].

In terms of financing infrastructure development projects and project bid bonds, there is a relatively robust (albeit small) domestic project loan market. Among the long-term/development finance institutions (e.g., IL&FS, IFCI, IDBI, and IDFC), the concepts and principles of project finance appear to be widely understood and practiced on a number of small-scale transactions.

As outlined in a 2003 PricewaterhouseCoopers report on doing business in India, the opening up of the Indian infrastructure sector to private investment in the early 1990's generated interest from financial institutions such as ICICI Bank, Industrial Development Bank of India (IDBI), Industrial Finance Corporation of India (IFCI) and India's largest bank, namely the State Bank of India (SBI), which took the lead in financing infrastructure projects. Projects were also able to gain access to foreign debt though it was either funded or guaranteed by Indian institutions/banks. In addition, other banks like Canara, Punjab National and Federal are now participating actively in infrastructure finance. Insurance companies and provident funds have also joined in the fray, particularly since the liberalization of this sector. It is noted, however, that new entrants to this financial sector have limited appraisal capabilities and will need to follow the lead of SBI and IDFC[167].

We understand that institutions such as IDFC are capable of providing loan tenors of up to 15-20 years for the most robust private participation projects. However, we also note that the outstandings of such long-term project debt is not large due to the lack of demand (i.e., limited numbers of bankable projects). Total outstanding credit to private infrastructure as of June 2000 was Rupees 85.4 bn (< 5% of total bank credit)[168]. Furthermore, due to the leveraged nature of the banking system in India, banks favour shorter-term instruments with strong credits and greater liquidity[169]. Nevertheless, long tenures (construction + up to 12 years) are available with a sculpted repayment profile[170].

Tenders in India for infrastructure projects are a lengthy, inconsistent process, Earnest Money Deposit (EMD) is approx 1-2 % of project cost, and more than 6 months may be required to obtain refund of the deposit[171].

In looking at other credit mechanisms for infrastructure development projects, specifically the PSIF – II, it has been suggested that: (i) the terms and conditions of PSIF - II credits are too stringent in relation to what is available in the existing domestic credit market and (ii) while PSIF – II provides a longer borrowing term than the commercial bank, long-term infrastructure bank and debt capital markets, the facility (at the project company level) may not be as price competitive in absolute terms as the domestic credit markets.

Many market participants have highlighted the absence of a short-term inter-bank rate, such as the London inter-bank offered rate (LIBOR), for the Indian market. Borrowing from longer term floating rate instruments is currently indexed to the prime-lending rate, which lending institutions can determine arbitrarily[172].

The ADB (ADB), among other IFIs have allocated funds to the government of India at the LIBOR rate (before a US dollar / Indian Rupee currency swap), earmarked for infrastructure development projects, in theory making investment into such projects more attractive for international investors, however, given the Indian government's current fiscal deficit, there may be a latent issue surrounding capital adequacy, limiting the attractiveness and availability of low interest loans to international investors for such projects.

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[166] Investment in India - Banking - Banking System http://finance.indiamart.com/investment_in_india/banks.html

[167] Pricewaterhousecoopers, Doing Business in India, 2003

[168] Private Sector Assessment – India 2002 by Crisil Infrastructure Advisory.

[169] India: Country Framework Report for Private Participation in Infrastructure, World Bank

[170] Pricewaterhousecoopers, Doing Business in India, 2003

[171] Pricewaterhousecoopers, Doing Business in India, 2003

[172] India: Country Framework Report for Private Participation in Infrastructure, World Bank

Issues of Capital Adequacy

Capital adequacy in its simplest terms is the requirement of the capital which any lending agency faces as per the norms of the said country. This norm is put to prevent indiscriminate lending by the banks to the borrowers or lending to an extent, which is not backed by the fundamentals of the lending agencies[173]. At present the RBI capital adequacy requirement is 9% and is expected to go up to 12% in 2004.

Given these capital adequacy norms, the borrowing needs of the Indian government to service its fiscal deficit have strained the financial sector; high government borrowing levels have limited the supply of credit, which in turn has led to rises in interest rates and insurance premiums. This crowding out of private investment has the potential of limiting the attractiveness and availability of loans to firms and investors interested in developing India's transportation infrastructure.

Policy measures relating to capital adequacy levels and investment guidelines for provident funds and insurance companies also encourage funds to be invested in financing the deficit rather than private sector and infrastructure development. Cutting the capital adequacy requirement without cutting the deficit will simply increase market borrowing by the public sector and further crowd out private borrowing through even higher interest rates, which will particularly hurt long-term lending[174].

In the commercial banking market, it is understood that the government of India is the largest borrower given its inherently lower credit risk for lenders[175]. Nevertheless, India has a relatively large state dominated primary bond market, which would have the effect of limiting the crowding out of private investments for commercial banks loans. Activity in the secondary market is still relatively limited[176].

Moreover, it has been argued that this crowding out of private sector investment by government in India is fallacious since in the Indian context companies now have access to external commercial borrowings and a fairly large number of companies are able to raise resources through American Depository Receipts and Global Depository Receipts, and therefore, there is no squeeze on the lendable resources of the banking system[177]. Indeed, interest rates for infrastructure development financing have been decreasing, having dropped from 20% in 2000 to 12% in 2003. This decline in interest rates is expected to continue to decline with increasing liberalization of financial sectors.

In addition, volumes in the Indian offshore syndicated loan market have grown rapidly in the past year, which should have the same effect on interest rates in India. Last year was a watershed for the Indian offshore syndicated loan market. According to Dealogic, 35 offshore loan deals were completed in 2003, twice as many as in 2002. Volume grew to US$2.51 billion from US$1.58 billion, and this momentum is continuing into 2004[178], further suggesting that the issue of capital adequacy described above is decreasing in significance for firms and investors whishing to get involved in infrastructure development in India. It should be noted, however, that foreign lenders are generally cautious about lending to Indian infrastructure projects, according to a PricewaterhouseCoopers report.[179]

The liberalization of the insurance industry in India further decreased the significance of the above capital adequacy issue, making more funds available to the government and private investors alike.

Nevertheless, in order to promote more efficient functioning of the commercial bank as well as the capital markets where infrastructure is concerned, there is a need to: (i) widen the appeal of project finance credit among the commercial banking

[173] http://www.banknetindia.com/board/659.html

[174] India: Country Framework Report for Private Participation in Infrastructure, World Bank

[175] Private Sector Assessment – India 2002 by Crisil Infrastructure Advisory.

[176] India: Country Framework Report for Private Participation in Infrastructure, World Bank

[177] Agarwal, Aman, Public Finance, Theory and Practice, Finance India, June 2002

[178] Anon, India Dives Offshore Again, Asiamoney, London, April 2004.

[179] Pricewaterhousecoopers, Doing Business in India, 2003

institutions and (ii) facilitate capital market issuance by non-government issuers.

Insurance Market in India

There have been positive changes in the insurance sector in India. The government announced in its 1998 budget two measures to channel long-term funds toward infrastructure. The first is the introduction of competition into the insurance sector, ending the monopoly of state-owned insurance. Promoting competition and allowing greater freedom in the insurance industry's investments would cut insurance costs.[180]. The Insurance Regulatory Development Authority has issued licenses to 16 companies, and there is no limit to the number of licenses which they can issue[181]. For example, global insurance brokers Marsh Inc. and Aon Corp, to which licenses were issued, will now be able to deliver a comprehensive range of services such as risk assessment, insurance placement, claims servicing, loss prevention and risk control to clients in India, including in infrastructure sectors[182].

Capital Adequacy Issue Conclusions

As liberalization of the financial sector continues, and restrictions on foreign capital diminish, this suggests that the necessary funds are available in India for firms and investors wishing to invest in India's infrastructure sectors, thereby not limiting access to necessary capital solely to foreign firms and investors.

The question of whether ADB and other IFI funds allocated to infrastructure development projects would be available at a competitive rate depends on the US dollar/Indian Rupee swap rate being used, the duration of the loan, and transaction fees. It is not expected that that interest rates would increase significantly in the future due to government borrowing needs, on the contrary, this threat appears at the present to be diminishing in significance.

[180] India: Country Framework Report for Private Participation in Infrastructure, World Bank

[181] India Country Commercial Guide 2002, Strategis

[182] Ha, Ruquet, Marsh, Aon granted licenses in India, national Underwriter, Erlanger, March 17, 2003.

7.15.3 Foreign Investment Risk

The Indian government has removed a number of restriction on foreign direct investment (FDI), making the local climate much more attractive for international firms and investors. This has resulted in a surge of investment since the 1991, which has grown from US$100 million to US$4 billion in2001-02[183]. Industrial and investment policies have become simpler, more liberal and more transparent since 1991. In particular, the Indian government has done away with the complex FDI pre-entry approvals. Today, FDI can enter most sectors through the automatic route, under which companies need only notify the Reserve Bank of India within 30 days of receipt of funds and again within 30 days of issuing of shares to non-resident investors. Automatic route is available for equity participation of up to 100% for investment in the roads sector, mass rapid transport systems (MTRS) and in the construction and maintenance of ports and harbours. Companies wishing to invest in airports, however, require government approval for FDI over 74%[184]. Investing companies in infrastructure sector are limited to an equity cap of 49% and require approval from the Foreign Investment Promotion Board (e.g. for infrastructure trust funds)[185].

> "*In respect of the companies in infrastructure/service sector, where there is a prescribed cap for foreign investment, only the direct investment will be considered for the prescribed cap and foreign investment in an investing company will not be set off against this cap provided the foreign direct investment in such investing company does not exceed 49% and the management of the investing company is with the Indian owners. The automatic route is not available.*"

[183] Pricewaterhousecoopers, Doing Business in India, 2003

[184] India Investment Policy, http://www.tidco.com/india_policies/india_infra/india_infra_index.asp

[185] India Investment Policy, http://www.tidco.com/india_policies/india_infra/india_infra_index.asp

Tax policy has also become more attractive and promoted FDI: under the provisions of Section 80 I (A) of the Income Tax Schedule, a five-year tax holiday followed by 30% deductions for companies is available for capital gains on investments in all infrastructure sectors except telecommunications[186]. In the road and port infrastructure sectors specifically, this corporate tax holiday is extended to 10 years to be availed in 20 and 15 years of commission of the project for road and port investments respectively.

Profit remittances and capital repatriation are permitted with little formality. Management fees, royalties, and fees for technical services in infrastructure projects can be repatriated automatically[187], and so are not subject to bureaucratic procedures. The remittance of profits from technology transfer is also permitted, but subject to a number of bureaucratic procedures (e.g. agreement must be registered with the Reserve Bank of India, lump sum payment up to US$ 2million in 3 installments, etc.)[188]. Nevertheless, in a recent study by FCCI, it was noted that 69% of foreign investors in India feel the fund repatriation system in India is satisfactory[189]. The transfer of capital abroad by resident Indians is still subject to controls. India already has full currency convertibility on the current account, but not on the capital account[190]. A weak banking sector and a high fiscal deficit remain obstacles to the full opening of the capital account[191].

Despite liberalization and other these positive signs for FDI into infrastructure, investors should be aware that Indian industry remains highly regulated by a powerful bureaucracy armed with many rules and broad discretion[192]. The required paperwork can be time consuming[193]. This is corroborated by a PricewaterhouseCoopers study which notes as a key learning the importance of being able to handle bureaucracy to succeed in India[194]. Efforts are being made to reduce bureaucracy in India, however, and indeed the amount of red tape is diminishing[195].

In general, the investment risk of equity, operations, taxation, repatriation, and exchange in India is rated as moderate[196]. The overall country risk rating for India is A4, as rated by the French Insurance group COFACE, which is moderately high (A1 is the best, D is the worst).

7.15.4 Political Risks

Political stability in India is expected, and government policies under the newly elected Congress party should continue to support reforms and developments in infrastructure sectors. The Congress party, under the leadership of ex-finance minister and respected economic reformer Manmohan Singh, favours economic reforms, even more so than the BJP which it replaced, having become more accepting of the need for greater openness and market modernization. It is expected that privatization will proceed although with much opposition to the sale of state-owned enterprises in certain sensitive sectors[197].

Much emphasis has been placed on infrastructure projects. In the 2002 budget, for example, US$12.6 billion was allocated to infrastructure projects. As evidenced in the 2004/2005 interim budget, there continue to be positive signs for infrastructure development and attracting foreign investors to these sectors. In particular, the Indian government reaffirmed its commitment to infrastructure reform and development initiatives by preserving and strengthening the IDBI, designating it as the lead developmental finance institution. The government

[186] India: Country Framework Report for Private Participation in Infrastructure, World Bank

[187] Pricewaterhousecoopers, Doing Business in India, 2003

[188] Pricewaterhousecoopers, Doing Business in India, 2003

[189] FICCI, Climate for Investment in India, 2003, http://www.ficci.com/ficci/media-room/speeches-presentations/2003/Feb/feb7-dupont-amitmitra.ppt

[190] Anon, Capital Controls Eased, Country Monitor: India, Jan 20, 2003

[191] Economist Intelligence Unit, India Country Profile, 2003

[192] India Country Commercial Guide 2002, Strategis

[193] India Country Commercial Guide 2002, Strategis

[194] Pricewaterhousecoopers, Doing Business in India, 2003

[195] India's Economic Priorities, India Economic Summit, Nov. 2000

[196] "Political Risk Service: India County Forecast," PRS Group. Dec 2002.

[197] Economist Intelligence Unit, India Country Report, May 2004

has vowed to provide the necessary support to IDBI for this task and confirmed that IDBI's effort will be complemented by other premier institutions and banks such as the IDFC and SBI[198], in which it has a 60% stake. In addition, the Industrial Infrastructure Fund will provide credit at highly competitive rates for power generation, seaports, airports, roads, tourism, telecommunication, and urban infrastructure like municipal services, water supply, sewage disposal and environmental projects[199].

Political corruption remains an issue in India, which certainly hinders the attractiveness of foreign investment, particularly in infrastructure, a sector monitored closely by the state. Further testifying to the significance of the corruption issue is India poor ranking on Transparency International Corruption Index, placing 83rd overall[200].

Of equal concern for international investors is the potential for social unrest in India, in particular, the growing rich/poor divide, which threatens national stability. Goldman Sachs published a report on the Indian economy in November, 2003 which points to concerns about the growing gap between rich and poor as India's economy takes off.

[198] India Interim Budget 2004-2005 Budget, http://indiabudget.nic.in/ub2004-05/bh/bh1.pdf

[199] India Interim Budget 2004-2005 Budget, http://indiabudget.nic.in/ub2004-05/bh/bh1.pdf

[200] Transparency International Corruption Perceptions Index 2003, http://www.transparency.org/pressreleases_archive/2003/2003.10.07.cpi.en.html

8

The Road Map for Effective PSP

While the above chapters have catalogued a widespread and capable focus on PSP throughout the four target states, it still remains that bankable projects are scarce. The following roadmap highlights steps that we feel will both improve the marketability of the States to investors as well as smoothen the procedural steps required by the States to develop bankable PSP projects.

8.1 The Road Map for More Effective Infrastructure Investment

This chapter deals with the practical steps that we recommend for each of the States individually to help improve the climate and the process for private sector investment in that state. While the recommendations are specific to each of the states, they may also be generic and can equally apply to any of the four states or to any other states in India. In what follows we deal with each states separately and deal with the various issues following from what are listed in Chapter 2 as the

key constraints on PSP. To allow for a sense of the importance of each issues, we also provide a timetable and schedule for implementation which indicates where we feel the attention should be focused. While this timetable is indicative of the schedule of recommended action, many of the recommendations are open ended and may require some years to achieve, as for instance passing of new legislation.

8.1.1 Generic Recommendations for Application to All States

Policies and Legislation

As we noted, many policies now exist at the State level. However, some are out of date and some need to deal with emerging issues. The process of setting and updating policy will never be complete. As governments change, policy also changes. So it is a futile task to hope that all policy will always be written down and clear to all who wish to work within it. However, some guide can always be provided.

Our recommendations are based on the review carried out in Chapter 3 and supported by the more detailed census of policies and legislation provided in Volume 2. Most of the actions in relation to policy and legislation are State-specific and are covered under each State accordingly, but a few are generic:

- A coordinating agency, needs adequate trained staff, financial resources and a clear set of implementing rules, model concessions or other agreements and clear procedures for application, in order to effectively promote private sector participation. [201] The draft concession agreements included in Volume 4 provide a solid foundation for this standardisation. These draft concession agreements should be used as templates for future development of concessions in each state.
- A conciliation and arbitration clause as outlined above in chapter 8 should be inserted in any of the concession agreements prepared for the infrastructure sector in the four states. We have included it in the draft concession agreement templates. The recommended clause takes into account the provisions of the IDEA and the GIDA and is structured to work within those provisions;
- Example sectoral specific policy statements have been developed in the major focus areas. While States may not need to update their policy in every case, the example policy statements can be used as templates to ensure that investor specific provisions are included at the sector level in State policies.

Regulation

In general we recommend minimum regulation, and regulation through concession agreements where possible. As noted in chapter 3, we do not recommend that the States develop a separate regulatory body for any of the sectors with the exception of Water supply and sewerage, and possibly for public passenger transport if there is PSP in UMT and in other modes of public transport (eg buses) to warrant such a regulator.

We do not consider that there is any need for a public passenger transport regulator in any of the States at present, but we have given our outline proposals for such a regulator in the event the situation materially changes.

For water we consider, on balance, that network regulators should be established at state-level by extending the existing SERCs to cover the water sector as well. These network regulators would be responsible for economic, technical and customer-service regulation. However, we recognise that some states may prefer to establish a stand-alone water regulator given the particularly sensitive and complex issues in the sector.

Specific action plans for establishing water regulation are set out separately for each State.

[201] Standardised concession agreements for all four sectors have been prepared and are included as examples in volume 4.

[202] .

The PSP Process and Capacity Building

We identify five stages in the Project Cycle for PSP projects: Project Identification, Evaluation of PSP Mode, Project Preparation, Private Developer Selection, and Project Implementation. The second stage, Evaluation of PSP Mode, is critical in removing one of the main constraints on increased PSP activity in the States, namely the shortage of bankable projects. At this second stage in the Project Cycle, it is essential to select projects that are both worthwhile and will attract private sector interest.

We recommend that a Rapid Assessment methodology should be used at this stage, and the establishment of a PFI Unit in the Department of Finance to take responsibility for the Rapid Assessment. The PFI Unit would evaluate the amount of government financial support required, and integrate its activities with the annual budget process. The two main decisions coming out of the Rapid Assessment would be the appropriate PSP mode, together with a realistic estimate of the financial support that will be required to ensure a bankable project. The project would only proceed to the next stage, Project Preparation, if the estimated level of financial support can be afforded in budgetary terms.

We also suggest that states consider preparing Multi-Year Financial Plans to demonstrate the long term budgetary impact of PSP projects with other government capital expenditures required to support social and economic development. Our specific proposals are set out for each State separately.

Institutional Strengthening

There is no "right and wrong" institutional structure for PSP in infrastructure. The choices are generally between a **centralised** model with a dedicated unit responsible for managing the whole of the project cycle for selected projects; a **line department** model without any specially constituted central agency responsible for PSP across multiple sectors; or a **hybrid** of the two. Andhra Pradesh and Gujarat have adopted hybrid models, while Karnataka and Madhya Pradesh essentially have line department models.

Whatever model is chosen, there are three broad conditions that determine the effectiveness of the institutional arrangements:

- Sustained political commitment
- Clear responsibilities during the project cycle
- Single window agency for clearances.

We have assessed the arrangements in each State (as in February 2004) against these conditions, and have set out our main proposals for each State below.

Environment

- MOEF's streamlining work will bring considerably clarity and simplicity to the EC clearance process. Until such time as this becomes law, investors are urged to use the scoping form and classification tables taken from the MOEF study and adapted for this work, to define the environmental risks and EA needs of their proposed project;
- Investors should also make use of ECOSMART's EIC to have them assemble relevant and technically credible datasets, needed for environmental screening and future EIA;
- Investors should use Tables 6.1 and 6.2 on this document to help guide them through the EC clearance process
- The authority for provide environmental clearances and EIA reviews should be divested to the state level, provided that the state meets basic institutional capacity skills as is exemplified by AP, Karnataka and Gujarat. Only projects extending across state borders and where national lands are involved, should have central government involvement;
- All maritime states need to work toward encouraging the central government to transfer clearance powers to the state DOE[203] , instead of the Ministry of Shipping and the State Public Works Department;

[203] The request for transfer to state authority was officially tables with the central government by all maritime states (collectively) more than a decade ago. To date this had not been acted on.

- For AP, Karnataka and Gujarat it will be important to streamline the ports-development environmental clearance process and prepare a step-by-step guide to Environmental Clearance for Port Development.
- Costs and responsibility for environmental clearance will rest with the Government for those projects initiated by the Government. For projects initiated by the private sector, costs for environmental clearance will be with the private sponsor. After construction begins, environmental issues related to implementation will be the responsibility of the investor. Costs for subsequent post construction environmental compliance and certification of compliance will be to the account of the investor.

Resettlement and Rehabilitation

- All states should review the Andhra Pradesh guidelines on R&R with a view to adopting those or similar guidelines;
- The current IL&FS policy is being applied to all applications coming forward under PSIF II. The IL&FS policy will continue to mirror the ADB standards and guidelines. All states should review that policy and apply it's requirements to all projects which are now being developed for possible PSIF II support;
- Consistent with the State specific recommendations to create steering committees to direct the development of PSP projects, we also recommend that an R&R committee be established to oversee the application of State policy regarding R&R. This will overcome what is now perceived to be a lack of interest in this key area of concern;
- This TA has developed a Land Acquisition and R&R checklist for States. All States should use the checklist to guide them in applying the IL&FS policy as above;
- Costs for land acquisition will remain with the Government. Costs for resettlement and rehabilitation under future expanded guidelines will normally be to the account of the investor. However, in most cases the Government will need to take a lead in this area and in many cases costs incurred may be a pre-requisite for obtaining private sector participation in the project. This may then be considered an incentive provided by the Government to attract private sector involvement.

Incentives

As was noted earlier, much of the problem with PSP in India is a shortage of bankable projects. This may be overcome by moving toward more PPP projects or O&M projects. In these cases the Governments will need to become active partners in the development and financing of the project.

- It is important to ensure that the States have the flexibility to implement a full range of incentives across all the target sectors. We have discussed in detail the types of incentives that are potentially viable in chapter 7. We urge all States to ensure that they have the necessary flexibility to apply these incentives if it is shown that they are critical to the success of the private initiative.
- A draft terminology for incorporation of incentives in enabling legislation is included in the draft legislation prepared for MP and Karantaka and as an amendment for the Gujarat GIDA. APIA legislation already contains a flexible incentives clause.

8.1.2 Andhra Pradesh

Policies and Legislation

- Andhra Pradesh should adopt a general Road and Highway Act. As with Gujarat and Madhya Pradesh, the new law need not be a novel piece of legislation and can simply follow the guidelines issued by the GOI for a Model State Highway Act;
- We recommend that in enacting a new highway law, care should be taken to address the right of the State to:
  1. levy tolls on state highways;
  2. delegate that right of levy to a to a private party of its choice;
  3. enter into agreements with a private party for the purpose of constructing, operating and maintaining a state highway or part thereof; and confer upon such private party the power to regulate and control traffic on the state highway or part thereof which is the object of the agreement.

- The draft policy statements are meant to offer a template for further development of policy in each state. In AP, the new highway act should begin with a statement of policy covering many of the topics covered in the draft statement. Further clarification of policy would also be desirable in the other areas of focus.

Regulation

- Andhra Pradesh has a preference for a stand-alone water regulator, while recognising that it will be some time before quality of service regulators will be appropriate at lower regional and municipal levels. If the GOAP plans to increase PSP in the water sector, we recommend that it takes steps to establish a water regulator on the lines set out in this report. It should also review the experience of Gujarat (see below).

PSP Process

- Organize a PFI Unit under the direct responsibility of the Department of Finance[204];
- If the GOAP establishes an Infrastructure Projects Fund under the auspices of the APIA, the APIA may create a PFI type unit to manage the Fund. In this case, the PFI Unit reports to the APIA, not the Department of Finance. However, this recommendation is only valid so long as the Fund has a funding source that **is totally independent of the GOAP budget and will not require a GOAP guarantee**;
- Capacity Building:
  1. Preparation of a PFI Unit Manual
  2. Dissemination and review of the Manual with the APIA, line departments and other government agencies that prepare PSP projects to familiarize them with the PFI Unit's requirements.
  3. Training of designated PFI Unit staff in the Rapid Assessment of PSP projects
  4. Train Sector Specialists in PFI Requirements;'
  5. Where necessary, train Planning Department or DOF Staff in Multiyear Financial Planning.

Institutional Strengthening

- The GoAP should request APIA to commission a study by consultants to identify the infrastructure projects that are appropriate for implementation through PSP over the next five years, working closely with line departments and other public bodies.
- The number of organisations with lead responsibility for project preparation should be limited as far as practical by using APIIC where appropriate, and building up special units only if there is expected to be a pipeline of PSP projects in a sector. APIA's role during the evaluation of the PSP mode and project preparation should be supportive.
- Consideration should be given to the establishment of a committee to manage the bidding process with representatives from the line department and other public bodies concerned with project preparation, the Finance Department (or PFI Unit), APIA, and possibly an outside expert if appropriate.
- Consideration should be given to the single window agency model set out in section 5.2.3, and measures taken either to introduce it or to introduce other arrangements that will achieve the essential features of the model.
- APIA should be actively involved in the monitoring of all PSP projects over a certain size, through the establishment of a formal monitoring framework, in order to help ensure timely implementation of approved PSP projects.
- The APIA's authority should be strengthened either through the Chief Minister or the Cabinet conferring on the APIA primary responsibility for specific roles, or through the inclusion of Ministers as members of APIA and making the Chief Minister or other senior Minister the Chairman of the Authority (which would require an amendment to the Act).

[204] If the GOAP establishes an Infrastructure Fund under the auspices of the APIA, the APIA may create a PFI type unit to manage the Fund. In tis case, the PFI Unit reports to the APIA, not the MOF. However, this recommendation is only valid if the GOAP provides a new "ear-marked" source of revenue designated only for PSP Projects and DOES NOT use any other GOAP budget funds or the GOAP's guarantee as financial contributions to PSP Projects

- In addition, the APIA's activities must be adequately funded either through the establishment of the Fund provided for in the Act, or from the State budget.
- The growth of APIA should be demand-driven, not supply-driven, but the two Crisil consultants should be replaced as soon as practicable by two APIA employees through an appropriate handover process.

The above recommendations were presented to the Government of Andhra Pradesh during a meeting which was hosted by the Chief Secretary and attended by a cross section of the Department Secretaries and other officers including the APIA. The following table 8.1 illustrates the actions taken on some of the recommendations and planned activity on the others.

While the formal legislative structure for support of PSP in AP is as good as it is in other States, the commitment of the Governemnt to support that process with real resources, both human and financial is lacking. The APIA while it has significant authority and a legal foundation, has never had the staff resources needed to function effectively. This is a key limitation and while senior Government officials argue that the process is healthy and being followed, the financial and human commitment to truly develop and support PSP in the infrastructure sector is lacking.

Table 8.1: Action Plan Checklist for Andhra Pradesh

Recommendation		Action			Timetable for Implementation		
		Agree	Disagree	Requires further Consideration	Months	1-3 years	>3 years
Policies and Legislation							
Ports	Proposed Scheme for Regulating Minor Ports Fees	Yes		Not Critical Now			
Roads	Proposed Additions to Road Legislation	Yes		Under Develop		1-2 Yrs	
	Draft Road Policy as prepared for Karnataka	Yes		Under Develop	Current		
UMT	Draft UMT Policy Prepared for AP	Yes		Will consider	4 – 5 mo		
Water	Draft Water Policy Prepared for Karnataka	Yes		Will consider			
Regulation							
Progress on establishment of Water Regulatory Authority			No	Multisector to be Considered			
PSP Process							
Focus Activity on PSP/PPP Modes with Practical Viability		Yes			Current		
Initiate Full Review and Prioritisation of Potential PSP/PPP Projects		Yes		CCG Group	Current		
Ensure Sufficient Funding for Project Development is Available				Need further consider-ation of develop. fund.	6 months		
Institutional Strengthening							
Establish a PFI Unit within the DOF			No	Consider within APIA		1 Yr	
Establish a Multisector Bid Co-ordination/Management Committee		Yes		Transparency is key.	As need		
Develop a Single Window Clearance Capability in APIA			No	Line Departments and Commissioner of Ind-ustries	Current		
Clarify and Strengthen Role/Capability of APIA		Yes			Current		
Obtain Key Clearances before Tendering		Yes		Line Departments	Current		
Develop Line Department Capacity for Contract Compliance		Yes		Strongly Needed	Current		
Standard Documents							
Apply Key Clauses in Standard Concession Agreements		Yes			Current		

8.1.3 Gujarat

Policies and Legislation

- A number of legal documents have been provided to the Gujarat Government as noted in chapter 3. These include a number related to the potential changes to the Highway Act and the Maritime Act. These various additions and comments on the legislation are with the GIDB. We recommend that Gujarat consider the recommended changes for possible incorporation into the legislation as it is amended in future. Of particular importance is the change in the cap on incentives which should be incorporated into the GIDA as soon as is practicable;
- The draft policy statements are meant to offer a template for further development of policy in each state. In Gujarat, we recommend clarification of policy in water and sewerage and UMT in particular;
- Gujarat should review the Land Acquisition and Resettlement policy of Andhra Pradesh and the Draft National Policy with the objective of developing a similar policy.

Regulation

- The GoG has already taken first steps to establish a stand-alone water regulator. We support the general proposals and recommend that these should be finalised and implemented. We have set out our own views on such a regulator in Chapter 3.

PSP Process

- Organize a PFI Unit under the auspices of the Department of Finance;
- Prepare a Multi-Year Financial Plan based on the results of the Revised Vision 2010 Study.
- Capacity Building:
  1. Preparation of a PFI Unit Manual
  2. Dissemination and review of the Manual with the GIDB, line departments and other government agencies that prepare PSP Projects to familiarize them with the PFI Unit's requirements.
  3. Training of designated PFI Unit staff in the Rapid Assessment of PSP projects.
  4. Optional – Training of Planning Department or Department of Finance staff in Multi-Year Financial Planning[206]

Institutional Strengthening

- The Draft Rules (on which we have commented separately) should be finalised as soon as possible and issued by GoG;
  1. The Draft Rules should include a maximum time which the GIDB has to respond to a project proposal, proposed concession agreement, or other such statutory requirement;
  2. We support the proposals in the Draft Rules for the establishment of a Committee (PBAC) to guide the private developer selection process;
- The GIDB should play a strong consensus-building role to ensure that the outcome of the Crisil study is wide agreement on the PSP projects that should be pursued;
- During project preparation the GIDB should maintain close relations with the organisation primarily responsible, through being supportive and not interfering or "second-guessing", so that there are no big surprises when a project is formally submitted to the GIDB for approval.
- Consideration should be given to the single window agency model set out in section 5.2.3, and measures taken either to introduce it or to introduce other arrangements that will achieve the essential features of the model;
- GIDB should be actively involved in the monitoring of all PSP projects over a certain size, through the establishment of a formal monitoring framework, in order to help ensure timely implementation of approved PSP projects.

The following table 8.2 highlights the status of commitment and action taken in Gujarat related to the above recommendations. In many areas Gujarat has followed the recommended approach more consistently than have other States.

[205] South Africa Act No. 7 of 1998. On line version at: http://www.nra.co.za/downloads.html

[206] This activity is listed as "optional" because it implies a significant commitment by the GOG to initiate the detailed Multi-Year Financial Planning process.

Table 8.2: Action Plan Commitments for Gujarat

Recommendation		Action			Timetable for Submit/Implement		
		Agree	Disagree	Requires further Consideration	Months	1-3 years	>3 years
Policies and Legislation							
GIDA	Comments on GIDA and Suggested Amendments	Yes			3/05		
	Comments and Amendments to Draft Rules	Yes			3/05		
Ports	Review of Gujarat Ports Policy & BOOT Principles re GIDA	Yes				2 Yrs	
	Comment on Gujarat Maritime Authority & Ports Act	Yes				2yrs	
	Proposed Scheme for Regulating Minor Ports Fees	Yes				1-2 yrs	
Roads	Proposed Additions to Road Legislation	Yes		Submission	3/05		
	Draft Road Policy as prepared for Karnataka	Yes		Submission	3/05		
UMT	Draft UMT Policy Prepared for AP	Yes		National Policy			
Water	Draft Water Policy Prepared for Karnataka	Yes			3/05		
Resettlement	Review Resettlement Policy for AP			Consider			
Regulation							
Progress on establishment of Water Regulatory Authority		Yes			3/05		
PSP Process							
Focus Activity on PSP/PPP Modes with Practical Viability		Yes		Consider	Current		
Ensure Sufficient Funding for Project Development is Available		Yes		In Place	Current		
Institutional Strengthening							
Establish a PFI Unit within the DOF		Yes		Review Options			
Develop a Single Window Clearance Capability in GIDB		Yes			Current		
Obtain Key Clearances before Tendering		Yes			Current		
Develop Line Department Capacity for Contract Compliance		Yes			Current		
Standard Documents							
Apply Key Clauses in Standard Concession Agreements		Yes			Current		

8.1.4 Karnataka

Policies and Legislation

- Review the draft Karnataka PSP Enabling Act and amend as necessary for consideration by the State Legislature. This is specifically important given the recent change of Government;
- The Karnataka Highways Act, 1964 is broadly satisfactory in terms of tolling and PSP. We have provided draft additions to clarify some aspects for possible insertion by the Karnataka State Government;
- The draft policy statements are meant to offer a template for further development of policy in each state. We recommend that the draft road policy be used as a basis for updating the 1998 Road Policy. The draft Water and Sewerage Policy is also directly applicable and should be reviewed and approved . Further, clarification of policies for the other sectors along the lines of the draft templates would also be desirable;
- Review the AP and National policy on Land Acquisition and Resettlement with the objective of developing a similar policy.

Regulation

- The GoK is considering the establishment of a State Water Council that could, initially at least, regulate the urban water supply and sanitation sector. We have prepared a Draft consolidated water supply and sanitation policy for Karnataka which includes a detailed Action Plan. The GoK should review this Plan and implement it as appropriate.

PSP Process

- Organize a PFI Unit under the Secretary of Budget and Resources, Department of Finance within the PFAC;
- Expand the role of the PFAC (or other unit within the MOF, if this is not appropriate), to include Multi-Year Financial Planning;
- Link the PFI Unit's PSP Project evaluation process into the GOK's annual budget and Multi-Year Financial Planning Process.
- Capacity Building – in general follow the recommendations set out above for Andhra Pradesh and Gujarat, with an emphasis on the following:
  1. Coordinate the work plan of the FPAC Fiscal Reform Program currently under preparation with the creation of a PFI Unit within the Budget and Resources Division.
  2. Expand the Fiscal Reform Program to include capacity building for Multi-Year Financial Planning. Link the capacity building efforts of the Multi-Year Financial Planning effort with PFI Unit training.

Institutional Strengthening

- If the GOK wants to strengthen the process for the identification of potential PSP projects, it could commission a study by consultants to identify the infrastructure projects that are appropriate for implementation through PSP over the next five years.
- There may be scope for rationalising the institutional arrangements for project preparation so that the number of organisations with primary responsibility is limited to a manageable number. iDeCK could continue to provide assistance with project preparation, but should not be the responsible agency as it is a private sector organisation.
- Establish a committee to manage the bidding process with representatives from the line department and other public bodies concerned with project preparation, the Finance Department, and possibly KIDD and/or an outside expert. Depending on the membership of this committee, and possibly depending on the size of the project, the committee might be given final decision-making powers, or might be charged with making a recommendation to the Cabinet on the final selection.
- Consider establishing the single window agency model set out in section 5.2.3, and measures taken either to introduce it or to introduce other arrangements that will achieve the essential features of the model.
- If the GOK intends in its new infrastructure policy to strengthen the present role of the KIDD, the monitoring of project implementation could be a valuable role that it could perform, to help ensure timely implementation of approved PSP projects.

Table 8.3: Action Plan Commitments for Karnataka

Recommendation		Action			Timetable for Implementation		
		Agree	**Disagree**	**Requires further Consideration**	**Months**	**1-3 years**	**>3 years**
Policies and Legislation							
Enabling Act	Propose Review and Amend Draft Act for PSP			Will review			
Ports	Proposed Scheme for Regulating Minor Ports Fees	Agree in Concept					
Roads	Proposed Additions to Road Legislation	Yes				1-3 yrs	
	Draft Road Policy as prepared for Karnataka	Yes			Under Development		
UMT	Draft UMT Policy Prepared for AP	Agree in Concept		Will review for application	Current		
Water	Draft Water Policy Prepared for Karnataka	Agree				Customisation needed	
Land Acquisit.	Review AP and National Land Acquisition Policy	Agree Concept				1-3 yrs	
Regulation							
Progress on establishment of Water Regulatory Authority		Agree				Needs careful drafting	
PSP Process							
Organise PFI Unit in DOF within PFAC		Agree			Coordinate with US AID		
Role of PFI/PFAC - Impact of PSP on Multiyear Financial Planning		Agree			Coordinate with US AID		
Focus Activity on PSP/PPP Modes with Practical Viability		Agree			IDD review		
Ensure Sufficient Funding for Project Development is Available		Agree			Needs budget allocation		
Institutional Strengthening							
Initiate Full Review and Prioritisation of Potential PSP/PPP Projects		Agree					
Rationalise Project Preparation Institutional Arrangements							
Establish a Multisector Bid Co-ordination/Management Committee		Agree Concept			Departmental Coordination		
Develop a Single Window Clearance Capability		Agree			IDD Review		
Clarify and Strengthen Role/Capability of KIDD				Will review	New Gov't		
Develop Line Department Capacity for Contract Compliance		Agree		Will review			
Standard Documents							
Apply Key Clauses in Standard Concession Agreements		Agree			Many used		

8.1.5 Madhya Pradesh

Policies and Legislation

- MP should review the draft MP PSP Enabling Act and amend as necessary for consideration by the State Legislature;
- Madhya Pradesh has a Highway Bill, 2001 which, like the draft Gujarat Highways Act, follows the guidelines issued by the GOI for a Model State Highway Act[207]. However, the GOI refused to accept the Madhya Pradesh Highway Bill, 2001 as drafted. In addition to a number of very minor changes, the GOI asked that Chapter VII of the proposed Bill ("Levy of Betterment Charges in lieu of Diversion Premium") be removed. A revised draft has been sent to the GOI for final approval and the enactment of the Bill into law could happen sometime in 2004. The Madhya Pradesh Highway Bill, 2001 also needs a Chapter similar to the one outlined for the draft Gujarat Highways Act;
- The draft policy statements are meant to offer a template for further development of policy in each state. In MP, we recommend that development of a draft water and sewerage policy and the UMT policy along the lines of the draft templates would also be desirable;
- Karnataka should review the Land Acquisition and Resettlement policy of Andhra Pradesh with the objective of developing some policy which is similar. The new policy can also be based on the draft National policy.

Regulation

- The GoMP is not planning any PSP in the water sector at present, and its needs for a water regulator are not pressing. Further, it is considering incorporating water supply and sanitation in its proposed Public Utilities Commission, which could be an appropriate course of action.

PSP Process

- If there is to be a substantial expansion of PSP activity, the Madhya Pradesh Infrastructure Investment Finance Board (MPIIFB) should be expanded into a PFI Unit under the direction of the Department of Finance;
- Consider the preparation of a Multi-Year Financial Plan, as described above for Andhra Pradesh, Gujarat, and Karnataka, but adapted to the institutional requirements of MP. Coordinate the Multi-Year Financial Planning activities with the MPIIFB;
- Capacity Building - in general follow the recommendations set out above for Andhra Pradesh and Gujarat, with an emphasis on the following:
- Train the MPIIFB staff in PFI Unit analysis;
- Consider training in Multi-Year Financial Planning and coordinate this activity with MPIIFB capacity building.

Institutional Strengthening

Our proposals are largely dependent on whether the GoMP plans to extend the PSP programme to new sectors. If it does we propose that consideration is given to:

- The commissioning of a study by consultants to identify the infrastructure projects that are appropriate for implementation through PSP over the next five years.
- The establishment of a committee to manage the bidding process with representatives from the line department and other public bodies concerned with project preparation, the Finance Department, and possibly an outside expert. Depending on the membership of this committee, and possibly depending on the size of the project, the committee might be given

[207] The salient features of the 2001 Bill are: declaration of Highways, Highway Authorities, and their powers and functions (Chapter II), development and maintenance of Highways (Chapter III), restriction of ribbon development (Chapter IV), prevention of unauthorised occupation and encroachment on a highway and removal of encroachment on a highway and removal of encroachment (Chapter V), supplemental provisions relating to compensation (Chapter VI), levy of betterment charges in lieu of diversion premium (Chapter VII), supplemental provisions to secure safety of traffic and prevention of damage to highways (Chapter VIII); penalties (Chapter IX) and miscellaneous (Chapter X).

final decision-making powers, or might be charged with making a recommendation to the Cabinet on the final selection.

- The introduction of the single window agency model set out in section 5.2.3, or other arrangements that will achieve the essential features of the model.

Environmental

- Simplify the environmental clearance function and publicise the process for private sector investors.

Table 8.4: Action Plan Commitments for Madhya Pradesh

Recommendation		Action			Timetable for Implementation		
		Agree	Disagree	Requires further Consideration	Months	1-3 years	>3 years
Policies and Legislation							
Enabling Act	Propose Review and Amend Draft Act for PSP	Agree				Review and Draft	
Roads	Proposed Additions to Road Legislation	Agree				Review and Draft	
	Draft Road Policy as prepared for Karnataka	Agree		Will Review	Within Year		
UMT	Draft UMT Policy Prepared for AP	Agree		Will Review	Within Year		
Water	Draft Water Policy Prepared for Karnataka	Agree		Will Review	Within Year		
Land Acquisit.	Review AP and National Land Acquisition Policy	Agree		Will Review	Within Year		
Environment	Clarify and Publish Clearance Rules for Environment	Agree		Will Review		Needs drafting	
Regulation							
No major regulatory agencies are recommended							
PSP Process							
Organise PFI Unit in DOF/MPIIFC		Agree				Needs planning	
Role of PFI/MPIIFC - Impact of PSP on Multiyear Financial Planning		Agree					
Focus Activity on PSP/PPP Modes with Practical Viability		Agree					
Ensure Sufficient Funding for Project Development is Available		Agree			Limited financial resources in MP		
Institutional Strengthening							
Initiate Full Review and Prioritisation of Potential PSP/PPP Projects		Agree		Not many candidates			
Establish a Multisector Bid Co-ordination/Management Committee			Non Needed	Bid process good. Will consider advantages			
Develop a Single Window Clearance Capability		Agree			As needed		
Develop Line Department Capacity for Contract Compliance		Agree			As needed		
Standard Documents							
Apply Key Clauses in Standard Concession Agreements		Agree			Current		

9

Tables and Appendices

9.1 Appendices

The following tables and papers are a selection of the various materials prepared under the TA which have direct relevance to the chapters in this document. For a wider coverage of the materials contained in this document, please refer to the project website www.indiainfrastructureinvestment.com.

Appendix A:

Table 5.2: Andhra Pradesh – main PSP institutions

Agency	Authority	Role	PSP Responsibilities	PSP Policies
General PSP institutions				
Andhra Pradesh Infrastructure Authority (APIA)	Established under "AP Infrastructure Development Enabling Act, 2001" (AP IDEA 2001)	General nodal agency for PSP in infrastructure	Broad powers to promote and facilitate PSP in infrastructure in AP (see Working Paper 1, Chap 2, Section II and its Appendix A for details)	GoAP "Vision 2020" GoAP "Infrastructure policy" Dec 2000
Andhra Pradesh Industrial Infrastructure Corporation (APIIC)	AP Industries and Commerce Department	Original role: land acquisition and development for industry	Development of PSP projects, typically involving public land, including Gangavaram port, APSEZ, Pharmacity, and Visak industrial water May be stakeholder in PSP projects.	
Roads				
AP Transport, Roads & Buildings Department	GoAP Minister for Roads, Buildings and Ports	Policy and overall responsibility	Potential PSP for State highways, major district roads, or other district roads, conforming to Indian Roads Congress standards.	GoAP "Policy Framework for private participation in the road sector" Sept 1997 There is no State highways act, but AP Motor Vehicles Act has been amended to permit tolls on toll roads
Andhra Pradesh Road Development Corporation (APRDC)	AP Transport, Roads & Buildings Department	Mobilise funds for road development	Potential source of funds for PSP projects	
Hyderabad Urban Development Authority (HUDA)	AP Municipal Administration and Urban Development Department	General development functions under the AP Urban Areas (Development) Act, 1975	Potentially PSP for some Hyderabad roads (eg Outer Ring Road project)	

APPENDIX A

Agency	Authority	Role	PSP Responsibilities	PSP Policies
Visakhapatnam Urban Development Authority (VUDA)	AP Municipal Administration and Urban Development Department	General development functions under the AP Urban Areas (Development) Act, 1975	Potentially PSP for some Visakhapatnam roads	
Other Urban Local Bodies or Authorities	AP Municipal Administration and Urban Development Department	General development functions under the AP Urban Areas (Development) Act, 1975	Potentially could get involved in PSP in their respective urban areas.	
AP Panchayat Raj Department	GoAP Minister of Panchayat Raj	General development functions in rural areas	Potentially could get involved in PSP in rural roads, except rural roads owned by AP Forests Department. Would have to conform to GOI Ministry of Rural Development "Rural roads manual" giving design standards for rural roads.	GOAP "Rural road policy framework" 1999
Power				
GOI Ministry of Power	GOI Minister of Power	Policy and overall responsibility for the power sector at the national and inter-State levels; and for the National Power Policy and tariff policy, in consultation with State governments and the CEA.	Not directly involved in PSP at the State level	"The Electricity Act, 2003"
Central Electricity Authority (CEA)	The Electricity Act, 2003	National Electricity Plan, setting of technical standards, and other planning and co-ordination	PSP projects have to conform with its standards	
AP Department of Energy	AP Minister for Energy	Policy and overall responsibility, subject to national legislation and national institutions with jurisdiction at both national and State levels.	Reform of the power sector in accordance with national legislation, which will open up the scope for greater PSP in the sector.	GoAP "Power Sector Reforms" dated Feb 1997, which remain to be updated to conform with the national "The Electricity Act, 2003"

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Agency	Authority	Role	PSP Responsibilities	PSP Policies
Central Electricity Regulatory Commission (CERC)	Electricity Act, 2003	National regulatory body for central generation and generation supplying more than one State, inter-State transmission, and inter-State trading (purchase for resale). Enforces CEA technical standards, economic regulation, licensing where required (inter-State transmission, and trading), and sets customer service standards	Not directly involved in PSP at the State level	
AP Electricity Regulatory Commission (APERC)	Established under "AP Electricity Reform Act, 1998" (APERC Act, 1998)	State regulatory body for intra-State generation, transmission, distribution, supply (sale to licensee or customer), and trading (purchase for resale). Enforces CEA technical standards, economic regulation, licensing where required (transmission, distribution except rural distribution, and trading), and setting customer service standards	Regulatory body for power PSP projects at the State level	
Proposed Appellate Tribunal for Electricity	To be established under "The Electricity Act, 2003"	Proposed appeals tribunal for dealing with appeals against CERC or any State ERC Orders	If established could be an appeals tribunal for a PSP project	
AP Generation Corporation Ltd (APGenco)	Established under APERC Act, 1998	Intra-State electricity generation	Might potentially introduce PSP in part of its operations	
AP Transmission Corporation Ltd (APTransco)	Established under APERC Act, 1998	Intra-State electricity transmission	Might potentially introduce PSP in part of its operations	
4 x DISCOMs	Established under APERC Act, 1998	Intra-State electricity distribution and supply	Might potentially introduce PSP in part of its operations	

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Agency	Authority	Role	PSP Responsibilities	PSP Policies
Ports				
AP Transport, Roads & Buildings Department	GoAP Minister for Roads, Buildings and Ports	Policy and overall responsibility for minor ports	Oversight of PSP in Kakinada LNG terminal and Krishnapatnam minor port, which are in progress. Potentially there could be PSP in other state-owned ports (1 intermediate port, and 8 minor ports).	GOAP "Guidelines for privatisation of minor ports" 1997
Andhra Pradesh Industrial Infrastructure Corporation (APIIC)	AP Industries and Commerce Department	Original role: land acquisition and development for industry	PSP development and bid management for Gangavaram Port	
Airports				
AP Transport, Roads & Buildings Department	GoAP Minister for Roads, Buildings and Ports	Responsible for airports in AP, but subject to national laws and bodies as civil aviation is a national matter	Oversight of potential PSP project to develop a new greenfield airport at Hyderabad following the Bangalore International Airport model, and possibly another project to upgrade Visak airport.	
Hyderabad International Airports Ltd (HIAL)	74% private	Potential SPV for new greenfield airport	Potentially involved in a new Hyderabad airport	
GOI Ministry of Civil Aviation	GOI Minister of Civil Aviation	National policies for airports, including rules for airport facilities, air traffic services, and passengers and goods by air.	Any PSP would have to conform with GOI policies	GOI "Draft civil aviation policy"
Office of the Directorate General of Civil Aviation	GOI Ministry of Civil Aviation	Regulation of air transport services to, from and within India, and for the enforcement of civil aviation regulations, air safety and airworthiness.	Any PSP would have to conform with GOI regulations	

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Agency	Authority	Role	PSP Responsibilities	PSP Policies
Airports Authority of India (AAI)	GOI Ministry of Civil Aviation	Air traffic control (ATC) Air navigation services Security Existing civil airports	AAI is likely to continue to play a part in any airport where PSP is introduced	GOI "policy on airport infrastructure"
Bureau of Civil Aviation Security	GOI Ministry of Civil Aviation	Policy and overall responsibility for airport security	Security in any PSP airport project	
GOI Department of Customs and Excise	GOI Ministry of Finance	Customs and excise	Customs in any PSP airport project	
GOI Department of Immigration	GOI Ministry of Foreign Affairs	Immigration	Immigration in any PSP airport project	
Urban mass transit				
AP Municipal Administration and Urban Development Department	GoAP Minister of Administration and Urban Development	Policy and overall responsibility for urban infrastructure	Oversight of potential Phase 2 of Hyderabad Mass Transit System, which could be a PSP project	
Hyderabad, Secunderabad, Visakhapatnam and Vijayawada Municipal Corporations	Hyderabad Municipal Corporations Act, 1955 as amended, and related municipal corporations acts	Development of urban infrastructure in the municipal area	Development of potential mass transit system PSP projects, subject to GOI requirements, and legislation where necessary.	
Hyderabad Mass Rapid Transit System (HMRTS)	Municipal Corporation of Hyderabad (50%) and GOI Ministry of Railways (50%)	Operation of mass transit system in Hyderabad	Potential involvement in the development of Phase 2 of Hyderabad mass transit system	

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Agency	Authority	Role	PSP Responsibilities	PSP Policies
Hyderabad Urban Development Authority (HUDA)	AP Municipal Administration and Urban Development Department	Planning Project development	May also be involved in potential Phase 2 of Hyderabad mass transit system	
Cyber parks/IT parks				
Andhra Pradesh Department of Information Technology and Communication	AP Chief Minister	Policy and overall responsibility for telecommunications and IT development.	Oversight of any PSP in cyber parks/IT parks	AP FIRST Information Technology Policy, 2000 GoAP hardware policy August 2001 GoAP software policy GoAP BPO policy
Andhra Pradesh Industrial Infrastructure Corporation (APIIC)	AP Industries and Commerce Department	Original role: land acquisition and development for industry	Nodal agency selected for development of potential Hardware Park and Visak Software Park	
AP FIRST	AP Chief Minister	Design of suitable IT policies, strategies and plans; and reviewing their implementation.	Could play an advisory role in any PSP in cyber parks/IT parks	
Consultative Committee on the IT Industry	G.O.M. No. 3 of the Information Technology and Communications (IT&C) Department, 2000	Co-ordination between the various relevant agencies under the Central and State Governments, and the IT industry.	Could play an advisory role in any PSP in cyber parks/IT parks	
SEZs				
GOI Ministry of Commerce and Industry	GOI Minister of Major Industries	Policy and overall responsibility	Approval of applications for SEZs received from GoAP (applications must first be submitted to Chief Secretary GoAP).	India's Export-Import Policy 2002-07 and 2003-04
Committee comprising Development Commissioner and Customs	Union level	Monitor functioning of SEZs under India's Export-Import Policy	Manages development and operation of SEZs, including registration of business unit, allocation of land, permission for construction of building and approval of building plans, environmental clearances and services provision. Powers of Labour Commissioner delegated to Development Commissioner, who also represents AP Pollution Control Board for clearances.	

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Agency	Authority	Role	PSP Responsibilities	PSP Policies
Andhra Pradesh Industrial Infrastructure Corporation (APIIC)	AP Department of Commerce and Industry	Original role: land acquisition and development for industry	Nodal agency for AP SEZ s programme	
Water supply and sewerage				
AP Municipal Administration and Urban Development Department	GoAP Minister for Municipal Administration and Urban Development	Policy and overall responsibility for urban development	Potential role in PSP in some PSP water projects	No specific GoAP policy, but goal of "Health for All" includes commitment to provide drinking water at every habitation
Hyderabad Metropolitan Water Supply and Sewerage Board (HMWSSB)	AP Municipal Administration and Urban Development Department. Despite 74th amendment HMWSSB does not report to the Municipal Corporation of Hyderabad	Water supply and sewerage in Hyderabad and 10 adjacent municipalities. Supervises construction funded by Public Health Engineering Department, and manages operation and maintenance	Responsible for development of PSP in Krishna Bulk Water Supply Project (which was not successful), and could potentially be involved in others	
Andhra Pradesh Industrial Infrastructure Corporation (APIIC)	AP Industries and Commerce Department	Original role: land acquisition and development for industry	Assisted with the development of the Visak water project	
Visakhapatnam Industrial Water Supply Company (VIWSCo)	51% L&T and partners, 32% APIIC, 17% Visakhapatnam Municipal Corporation	SPV for the Visak water project	Project implementation in progress, although full financial closure not yet achieved.	
Hyderabad Urban Development Authority (HUDA) and Visakhapatnam Urban Development Authority (VUDA)	AP Municipal Administration and Urban Development Department	Planning Project development	Potentially could be involved in water supply PSP project in Hyderabad and Visakhapatnam respectively	

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Agency	Authority	Role	PSP Responsibilities	PSP Policies
Urban local bodies (ULBs)	AP Municipal Administration and Urban Development Department	Urban water supply and sewerage	Potentially could be involved in urban water supply PSP projects in their respective areas	

Table 5.3: Gujarat – main PSP institutions

Agency	Authority	Role	PSP Responsibilities	PSP Policies
General PSP institutions				
Gujarat Infrastructure Development Board (GIDB)	Gujarat Infrastructure Development Act, 1999	General nodal agency for PSP in infrastructure	PSP promotion, advice on policy, developing concepts of projects, prioritisation, vetting of projects, co-ordination and monitoring, and other functions it may be entrusted with by the GoG	"Gujarat Infrastructure Agenda: Vision 2010"
Infrastructure Finance Company Gujarat	Now 100% GoG-owned, following withdrawal of AIA Capital and IDFC as shareholders	Planned to be vehicle for advisory work on PSP	Currently dormant	
Gujarat Urban Development Company Limited	GoG Department of Urban Development & Urban Housing	Nodal company for urban infrastructure (eg project management)	Potentially could play a role if there is PSP in municipal infrastructure (eg roads, water, sanitation)	
Roads				
Gujarat Roads & Buildings Department	GoG Minister for Roads & Buildings	Policy and overall responsibility	Oversight of PSP for State highways, major district roads, or other district roads, conforming to Indian Roads Congress standards.	GOG Gujarat Roads Policy dated Dec 1996
Gujarat State Road Development Corporation Ltd	GoG Roads & Buildings Department	Securing PSP in selected road projects	Has small privatisation cell to arrange the bidding procedure and selection of contractors for PSP in selected state highways	
Task Force	Established by Chief Minister Reports to GIDB	Advisory	Advisory body with experts from Maharashtra and Gujarat	
Urban bodies (municipal corporations, development authorities and other Urban Local Bodies)	GoG Department of Urban Development & Urban Housing	Urban infrastructure	Potentially could get involved in PSP in roads in their respective urban areas.	

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Agency	Authority	Role	PSP Responsibilities	PSP Policies
Power				
GOI Ministry of Power	GOI Minister of Power	Policy and overall responsibility for the power sector at the national and inter-State levels; and for the National Power Policy and tariff policy, in consultation with State governments and the CEA.	Not directly involved in PSP at the State level	"The Electricity Act, 2003"
Central Electricity Authority (CEA)	The Electricity Act, 2003	National Electricity Plan, setting of technical standards, and other planning and co-ordination	PSP projects have to conform with its standards	
Gujarat Department of Power	GoG Minister for Power	Policy and overall responsibility, subject to national legislation and national institutions with jurisdiction at both national and State levels.	Reform of the power sector in accordance with national legislation, which will open up the scope for greater PSP in the sector.	Gujarat power policy, Dec 1995 Gujarat captive power policy, Nov 1998
Central Electricity Regulatory Commission (CERC)	Electricity Act, 2003	National regulatory body for central generation and generation supplying more than one State, inter-State transmission, and inter-State trading (purchase for resale). Enforces CEA technical standards, economic regulation, licensing where required (inter-State transmission, and trading), and sets customer service standards	Not directly involved in PSP at the State level	
Gujarat Electricity Regulatory Commission (GERC)	Gujarat Electricity Industry (Reorganisation and Regulation) Act 2003	State regulatory body for intra-State generation, transmission, distribution, supply (sale to licensee or customer), and trading (purchase for resale). Enforces CEA technical standards, economic regulation, licensing where required (transmission, distribution except rural distribution, and trading), and sets customer service standards	Regulatory body for power PSP projects at the State level	
Proposed Appellate Tribunal for Electricity	To be established under "The Electricity Act, 2003"	Proposed appeals tribunal for dealing with appeals against CERC or any State ERC Orders	If established could be an appeals tribunal for a PSP project	

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Agency	Authority	Role	PSP Responsibilities	PSP Policies
Gujarat State Electricity Corporation Limited (GSECL)	Gujarat Electricity Industry (Reorganisation and Regulation) Act 2003. GEB subsidiary, responsible to GoG Minister of Power	Development and operation of intra-State generation, excluding Independent Power Producers (IPPs)	Might potentially introduce PSP in part of its operations	
Gujarat Electricity Board (GEB)	Gujarat Electricity Industry (Reorganisation and Regulation) Act 2003. Responsible to GoG Minister of Power	Transmission Distribution Supply	Might potentially introduce PSP in part of its operations	
Ahmedabad Electricity Company Surat Electricity Company	Private	Generation Transmission Distribution Supply	Already private	
Ports				
Gujarat Ports & Fisheries Department	GoG Minister for Ports & Fisheries	Policy and overall responsibility for minor ports	Oversight of PSP in state-owned ports or greenfield ports.	GoG "Integrated Port Policy" 1995 GoG "BOOT principles under port policy - 1995", July 1997
Gujarat Maritime Board (GMB)	Gujarat Ports & Fisheries Department	Minor port development, operation and regulation in accordance with the Indian Ports Act, 1908.	Has small privatisation cell to arrange the bidding procedure and selection of contractors for PSP in selected minor port projects	
Gujarat Port Infrastructure Development Corporation Ltd (GPIDCL)	100% GMB owned	Equity participation in joint minor ports	Potentially could participate in a PSP port project	
Airports				
Gujarat Industries and Mines Department	GoG Minister of Industries and Mines	Department responsible for airports at State level	There may be some potential for PSP in existing airports, but there are no plans for new greenfield airports. PSP possibilities include expansion of Ahmedabad and Surat, and new terminal at Huj.	
GIDB	Gujarat Infrastructure Development Act, 1999	General nodal agency for PSP in infrastructure	Has initiated a Master Plan for civil aviation in Gujarat	

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Agency	Authority	Role	PSP Responsibilities	PSP Policies
GOI Ministry of Civil Aviation	GOI Minister of Civil Aviation	National policies for airports, including rules for airport facilities, air traffic services, and passengers and goods by air.	Any PSP would have to conform with GOI policies	GOI "Draft civil aviation policy"
Office of the Directorate General of Civil Aviation	GOI Ministry of Civil Aviation	Regulation of air transport services to, from and within India, and for the enforcement of civil aviation regulations, air safety and airworthiness.	Any PSP would have to conform with GOI regulations	
Airports Authority of India (AAI)	GOI Ministry of Civil Aviation	Air traffic control (ATC) Air navigation services Security Existing civil airports	AAI is likely to continue to play a part in any airport where PSP is introduced	GOI "policy on airport infrastructure"
Bureau of Civil Aviation Security	GOI Ministry of Civil Aviation	Policy and overall responsibility for airport security	Security in any PSP airport project	
GOI Department of Customs and Excise	GOI Ministry of Finance	Customs and excise	Customs in any PSP airport project	
GOI Department of Immigration	GOI Ministry of Foreign Affairs	Immigration	Immigration in any PSP airport project	
Urban mass transit				
GIDB	Gujarat Infrastructure Development Act, 1999	General nodal agency for PSP in infrastructure	Has initiated 4 studies that might result in PSP projects: Integrated Public Transit System (IPTS) Ahmedabad; Mass Rapid Transit System (MRTS) Ahmedabad; IPTS Surat; IPTS Vadodara.	
Steering Committees	Comprise representatives of the local bodies involved in the project, the responsible department where appropriate, GIDB, and various experts	There is a separate Steering Committee for each of the 4 potential UMT projects to steer its identification and preparation.	The first responsibility is to identify viable projects, and to evaluate whether any are suitable for PSP. If any project proceeds to the preparation stage it is planned that GIDB would initiate the preparation of the documentation to be approved by the Steering Committee and subsequently the GIDB.	
Cyber parks/IT parks				
Gujarat Informatics Ltd	GoG Science and Technology Department	Nodal agency for IT	Nodal agency for PSP in the IT sector	

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Agency	Authority	Role	PSP Responsibilities	PSP Policies
SEZs				
GOI Ministry of Commerce and Industry	GOI Minister of Major Industries	Policy and overall responsibility	Approval of applications for SEZs received from GoG	India's Export-Import Policy 2002-07 and 2003-04
Committee comprising Development Commissioner and Customs	Union level	Monitor functioning of SEZs under India's Export-Import Policy	Manages development and operation of SEZs, including registration of business unit, allocation of land, permission for construction of building and approval of building plans, environmental clearances and services provision. Powers of Labour Commissioner delegated to Development Commissioner, who also represents AP Pollution Control Board for clearances.	
Gujarat Industries Development Corporation (GIDC)	Gujarat Department of Industries and Mines	Industrial parks and SEZs	Nodal agency for SEZs	
Water supply and sewerage				
GIDB	Gujarat Infrastructure Development Act, 1999	General nodal agency for PSP in infrastructure	Developing a strategy for PSP in water supply	
Gujarat Water Supply Department	Gujarat Department of Narmada, Water Resources, & Water Supplies	Supply of bulk water to all urban bodies and to Gujarat Urban Development Corporation	Potentially could be involved in a PSP project for bulk water	
Municipal Corporations, Urban Development Authorities, and other urban local bodies	Gujarat Department of Urban Development & Urban Housing	Water supplies and other urban infrastructure within their areas	Potentially could be involved in urban water supply PSP projects. GIDB is targeting West Ahmedabad and Surat as the most promising pilot schemes starting with management contracts.	
Gujarat Water Supply and Sewerage Board (GWSSB)	Gujarat Water Supply Department	Water supplies to rural areas	Potentially could be involved in a rural water supply PSP project	

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Agency	Authority	Role	PSP Responsibilities	PSP Policies
Gujarat State Drinking Water Infrastructure Corporation Ltd. (GSDWIDL)	Gujarat Water Supply Department	Bulk transmission of drinking water in the State	Potentially could be involved in a bulk water PSP project	

Table 5.4: Karnataka – main PSP institutions

Agency	Authority	Role	PSP Responsibilities	PSP Policies
General PSP institutions				
Karnataka Infrastructure Development Department (KIDD)	GOK Minister for Infrastructure Development	Identification and promotion of PSP in infrastructure	Acts as nodal agency for certain large PSP projects (eg new international airport at Bangalore)	GOK "Infrastructure policy of Karnataka" Dec 1997 GOK "Public sector reform and privatisation policy" Feb 2001
Infrastructure Development Corporation (Karnataka) (iDeCK)	49% GOK, 49.5% IDFC, 1.5% HDFC	Project development	Primarily an advisory role in the development of PSP projects.	
Karnataka State Industrial Investment & Development Corporation (KSIIDC)	GOK Minister for Industries and Commerce	Promotion of industrial development through equity participation	GoK equity participation in PSP projects (eg new international airport at Bangalore)	
Karnataka Urban Infrastructure Development and Finance Corporation (KUIDFC)	Company 100% owned by GOK, established 1993	Finance corporation for infrastructure development in urban areas.	So far, it has mainly been the agent for aid funded projects, but could be involved in PSP projects in urban areas.	
Karnataka Industrial Areas Development Board (KIADB)	GOK Minister for Industries and Commerce	Acquires land for industrial development purposes (including SEZs, apparel parks, food parks, printing parks), makes appropriate compensation payments, arranges provision of services such as power and water, markets its developed land, and collects fees from its tenants.	Nodal agency for SEZs, and potentially involved in other PSP projects involving land acquisition.	
Bangalore Agenda Task Force	Headed by Commissioner for Bangalore	Bangalore development policy	Promoting and lobbying for small scale PSP projects.	

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Agency	Authority	Role	PSP Responsibilities	PSP Policies
Roads				
Karnataka Public Works Department (KPWD)	GOK Minister for Public Works	Policy and overall responsibility	Oversight of PSP for State highways, major district roads, or other district roads, conforming to Indian Roads Congress standards.	GOK "Policy on road development in Karnataka" Aug 1998
Karnataka Road Development Corporation (KRDCL)	GOK Minister for Public Works	Development, construction and maintenance of strategic roads	Potential role in PSP in strategic roads	
Karnataka Urban Development Department (KUDD) Urban local bodies (ULBs)	GOK Minister for Urban Development	General development functions in urban areas	Potentially could get involved in PSP in roads in their respective urban areas.	
Karnataka Rural Development & Panchayat Raj Department	GOK Minister for Rural Development & Panchayat Raj	General development functions in rural areas	Potentially could get involved in PSP in rural roads, except some roads under the Irrigation Department and the Forests Department. Would have to conform to GOI Ministry of Rural Development "Rural roads manual" giving design standards for rural roads.	
Nandi Infrastructure Corridor Enterprises Ltd (NICEL)	Private	SPV for Bangalore-Mysore Infrastructure Corridor	Developed and is now starting to implement the major Bangalore-Mysore Infrastructure Corridor PSP project	
Power				
GOI Ministry of Power	GOI Minister of Power	Policy and overall responsibility for the power sector at the national and inter-State levels; and for the National Power Policy and tariff policy, in consultation with State governments and the CEA.	Not directly involved in PSP at the State level	"The Electricity Act, 2003"
Central Electricity Authority (CEA)	The Electricity Act, 2003	National Electricity Plan, setting of technical standards, and other planning and co-ordination	PSP projects have to conform with its standards	

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Agency	Authority	Role	PSP Responsibilities	PSP Policies
Karnataka Department of Energy	GOK Minister for Energy	Policy and overall responsibility, subject to national legislation and national institutions with jurisdiction at both national and State levels. Directions concerning distribution and supply	Reform of the power sector in accordance with national legislation, which will open up the scope for greater PSP in the sector.	GOK Jan 1997 GOK Jan 2001
GOI Ministry of Power	GOI Minister of Power	Policy and overall responsibility for the power sector at the national and inter-State levels; and for the National Power Policy and tariff policy, in consultation with State governments and the CEA.	Not directly involved in PSP at the State level	"The Electricity Act, 2003"
Central Electricity Authority (CEA)	The Electricity Act, 2003	National Electricity Plan, setting of technical standards, and other planning and co-ordination	PSP projects have to conform with its standards	
Central Electricity Regulatory Commission (CERC)	Electricity Act, 2003	National regulatory body for central generation and generation supplying more than one State, inter-State transmission, and inter-State trading (purchase for resale). Enforces CEA technical standards, economic regulation, licensing where required (inter-State transmission, and trading), and sets customer service standards	Not directly involved in PSP at the State level	
Karnataka Electricity Regulatory Commission (KERC)	Established under "Karnataka Electricity Reform Act, 1999" (KER Act, 1999)	State regulatory body for intra-State generation, transmission, distribution, supply (sale to licensee or customer), and trading (purchase for resale). Enforces CEA technical standards, economic regulation, licensing where required (transmission, distribution except rural distribution, and trading), and sets customer service standards	Regulatory body for power PSP projects at the State level	
Proposed Appellate Tribunal for Electricity	To be established under "The Electricity Act, 2003"	Proposed appeals tribunal for dealing with appeals against CERC or any State ERC Orders	If established could be an appeals tribunal for a PSP project	

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Agency	Authority	Role	PSP Responsibilities	PSP Policies
Karnataka Power Corporation Ltd (KPCL), Visvesvaraya Vidyuth Nigam Ltd (VVNL)	GOK Minister for Energy	Intra-State electricity generation	Might potentially introduce PSP in part of its operations	
Karnataka Power Transmission Corporation Ltd (KPTCL)	GOK Minister for Energy	Intra-State electricity transmission	Might potentially introduce PSP in part of its operations	
4 x ESCOMs	GOK Minister for Energy	Intra-State electricity distribution and supply	Might potentially introduce PSP in part of its operations	
Ports				
Karnataka Public Works Department Directorate of Ports and Inland Water Transport (DPIW)	GOK Minister for Ports and Inland Water	Policy and overall responsibility	PSP in state-owned ports (of which there are currently 2 intermediate ports, and 7 minor ports).	GoK Feb 1997
Airports				
Karnataka Infrastructure Development Department (KIDD)	GOK Minister for Infrastructure Development	Identification and promotion of PSP in infrastructure	Developing and promoting the PSP project for a new international airport at Bangalore	
Bangalore International Airports Ltd (BIAL)	74% private, 12.5% KSIIDC, 12.5% AAI	SPV for greenfield airport	In process of finalising PSP project for a new international airport at Bangalore	

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Agency	Authority	Role	PSP Responsibilities	PSP Policies
Karnataka State Industrial Investment & Development Corporation (KSIIDC)	GOK Minister for Industries and Commerce	Promotion of industrial development through equity participation	Equity participation in new international airport at Bangalore	
GOI Ministry of Civil Aviation	GOI Minister of Civil Aviation	National policies for airports, including rules for airport facilities, air traffic services, and passengers and goods by air.	Any PSP would have to conform with GOI policies	GOI "Draft civil aviation policy"
Office of the Directorate General of Civil Aviation	GOI Ministry of Civil Aviation	Regulation of air transport services to, from and within India, and for the enforcement of civil aviation regulations, air safety and airworthiness.	Any PSP would have to conform with GOI regulations	
Airports Authority of India (AAI)	GOI Ministry of Civil Aviation	Air traffic control (ATC) Air navigation services Security Existing civil airports	AAI is likely to continue to play a part in any airport where PSP is introduced	GOI "policy on airport infrastructure"
Bureau of Civil Aviation Security	GOI Ministry of Civil Aviation	Policy and overall responsibility for airport security	Security in any PSP airport project	
GOI Department of Customs and Excise	GOI Ministry of Finance	Customs and excise	Customs in any PSP airport project	
GOI Department of Immigration	GOI Ministry of Foreign Affairs	Immigration	Immigration in any PSP airport project	
Urban mass transit				
Bangalore Mass Rapid Transit Ltd (BMRTL)	100% owned by GOK	Development of Bangalore Metro project	Development of a potential PSP project in consultation with Delhi Metropolitan Rail Corporation. However, the project is now likely to proceed as a 50/50% GOI/GOK project without concessioning.	

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Agency	Authority	Role	PSP Responsibilities	PSP Policies
Cyber parks/IT parks				
Karnataka Department of Information Technology and Biotechnology	GoK Minister for Industries and Commerce	Policy on IT development and promotion	PSP in cyber/IT parks	GOK IT policy 1997 GOK Millenium IT policy 2000 GOK Millenium BPO policy 2001
SEZs				
GOI Ministry of Commerce and Industry	GOI Minister of Major Industries	Policy and overall responsibility	Approval of applications for SEZs received from GOK	India's Export-Import Policy 2002-07 and 2003-04
Committee comprising Development Commissioner and Customs	Union level	Monitor functioning of SEZs under India's Export-Import Policy	Manages development and operation of SEZs, including registration of business unit, allocation of land, permission for construction of building and approval of building plans, environmental clearances and services provision. Powers of Labour Commissioner delegated to Development Commissioner, who also represents AP Pollution Control Board for clearances.	
Karnataka Industrial Areas Development Board (KIADB)	GOK Minister for Industries and Commerce	Industrial infrastructure	Nodal agency for SEZs Acquired Hassan SEZ land and developed the services; acquired land for other SEZs.	GOI policy GOK "State policy for Special Economic Zone" Feb 2002
Water supply and sewerage				
Bangalore Water Supply and Sewerage Board (BWSSB)	GOK Minister for Urban Development	Development and operation of Bangalore water supplies and sewerage. Self-regulating.	Already outsources, or is planning to outsource, substantial O&M through short-term management contracts in Bangalore and surrounding municipalities. Potentially could progress to concession agreements.	GOK "State Water Policy" 2002 GOK "Urban drinking water and sewerage" May 2003
Karnataka Urban Water Supply and Drainage Board (KUWSDB)	GOK Minister for Urban Development	Capital works for bulk supply to urban and some rural areas. Manages construction of distribution on behalf of ULBs. Some O&M where relevant ULB unable to maintain. Self-regulating.	Potentially could be involved in PSP in bulk water supply	

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Agency	Authority	Role	PSP Responsibilities	PSP Policies
Karnataka Urban Infrastructure Development and Finance Corporation (KUIDFC)	Company 100% owned by GOK, established 1993	Finance corporation for infrastructure development in urban areas. So far, it has mainly been the agent for aid funded projects, but could be involved in PSP projects.	BWSSB is planning that it should be the asset manager and nodal agency for finance purposes, for management contracts under the Greater Bangalore Water Supply Project.	
Karnataka Urban Development Department	GOK Minister for Urban Development	Policy, regulatory and administrative role for all (422) urban local bodies in Karnataka.	Potentially could be involved in urban water supply PSP projects.	
Urban local bodies (ULBs)	Karnataka Urban Development Department	Construction, operation and maintenance of water supply and sewerage distribution in urban areas	Potentially could be involved in urban water supply PSP projects.	
Karnataka Rural Development & Panchayat Raj Department	GOK Minister for Rural Development & Panchayat Raj	Policy, regulatory and administrative role for rural panchayats	Potentially could be involved in rural water supply PSP projects	"Rural water supply and sanitation in Karnataka: Strategy Paper 2000-2005", Oct 2000
Karnataka Rural Water Supply and Sanitation Agency (KRWSSA)	Executive Committee chaired by the Secretary, Karnataka Rural Development & Panchayat Raj Department	Established 2002 mainly to handle a large World Bank funded rural water supply and sanitation project	Potentially could be involved in rural water supply PSP projects	
Gram Panchayats	Karnataka Rural Development & Panchayat Raj Department	Construction, operation and maintenance of water supply and sewerage distribution in rural areas with support of Zilla Panchayat Engineering Division of Department for Rural Development & Panchayat Raj	Potentially could be involved in rural water supply PSP projects	

Table 5.5: Madhya Pradesh – main PSP institutions

Agency	Authority	Role	PSP Responsibilities	PSP Policies
General PSP institutions				
Madhya Pradesh State Economic Development Council	Created by previous MP State government as a high level body chaired by the Chief Minister to plan and monitor public and private projects	Not yet decided by the new government whether to reconstitute it or not	None at present	
MP Infrastructure Investment Fund Board (MPIIFB)	MP Adhosanrachna Vinidhan Nidhi Board Adhiniyam, Act No 6 of 2000	Funding for investment in infrastructure projects	Involved in roads (see below), but potentially could be involved in other sectors	
Madhya Pradesh State Industrial Development Corporation (MPSIDC)	100% owned by GoMP Reports to MP Department of Industries and Commerce	Promotion of industrial development	Developing SEZs and IT Parks	
Roads				
MP Public Works Department (MP PWD)	GoMP Minister for Public Works	Policy and overall responsibility for road sector	Identifies roads for development, notifies MPRSNN to conduct pre-feasibility study of suitability for PSP, provides support to consultants appointed by MPRSNN, transfers assets for PSP projects to MPRSNN for the duration of the concession agreement, and guarantees budgetary support for repayments of funding from MPIIFB.	
MP Rajya Setu Nirman Nigam Ltd (MPRSNN)	Under MP Public Works Department	Nodal agency for developing PSP in roads	Pre-feasibility studies of potential PSP road projects, selection of developer through competitive bidding, enters into concession agreements, secures funding from MPIIFB, arranges for supervision and quality control, collects user fees, and transfers assets back to PWD after end of concession period.	

APPENDIX A

Agency	Authority	Role	PSP Responsibilities	PSP Policies
MP Infrastructure Investment Fund Board (MPIIFB)	MP Adhosanrachna Vinidhan Nidhi Board Adhiniyam, Act No 6 of 2000	Investment in infrastructure projects	Provides funding for consultants appointed by MPRSNN, appoints consultants to vet applications for funding of PSP projects, where appropriate approves and provides funds for PSP projects, and appoints consultants to supervise compliance.	
Urban Local Bodies, including municipalities	MP Department of Urban Administration and Development	Urban roads	Potentially could get involved in PSP in roads in their respective urban areas.	
Rural Roads Development Authority	Rural Development De[artment	Rehabilitation of rural roads leading to ongoing maintenance by Panchayats	PSP in rural roads is unlikely in the near future.	
Power				
GOI Ministry of Power	GOI Minister of Power	Policy and overall responsibility for the power sector at the national and inter-State levels; and for the National Power Policy and tariff policy, in consultation with State governments and the CEA.	Not directly involved in PSP at the State level	"The Electricity Act, 2003"
Central Electricity Authority (CEA)	The Electricity Act, 2003	National Electricity Plan, setting of technical standards, and other planning and co-ordination	PSP projects have to conform with its standards	
MP Department of Energy	GoMP Minister for Energy	Policy and overall responsibility, subject to national legislation and national institutions with jurisdiction at both national and State levels.	Reform of the power sector in accordance with national legislation, which will open up the scope for greater PSP in the sector.	"White paper on the status of the power sector in Madhya Pradesh" dated June 2003
Central Electricity Regulatory Commission (CERC)	Electricity Act, 2003	National regulatory body for central generation and generation supplying more than one State, inter-State transmission, and inter-State trading (purchase for resale). Enforces CEA technical standards, economic regulation, licensing where required (inter-State transmission, and trading), and sets customer service standards	Not directly involved in PSP at the State level	

APPENDIX A

Agency	Authority	Role	PSP Responsibilities	PSP Policies
Madhya Pradesh Electricity Regulatory Commission (MPERC)	Madhya Pradesh Vidyut Sudhar Adhiniyam 2000 (Reform Act that came into force with effect from 3 July, 2001	State regulatory body for intra-State generation, transmission, distribution, supply (sale to licensee or customer), and trading (purchase for resale). Enforces CEA technical standards, economic regulation, licensing where required (transmission, distribution except rural distribution, and trading), and sets customer service standards	Regulatory body for power PSP projects at the State level	
Proposed Appellate Tribunal for Electricity	To be established under "The Electricity Act, 2003"	Proposed appeals tribunal for dealing with appeals against CERC or any State ERC Orders	If established could be an appeals tribunal for a PSP project	
Madhya Pradesh Power Generating Company Ltd. (MPPGCL)	Madhya Pradesh Vidyut Sudhar Adhiniyam 2000	Intra-State electricity generation	Might potentially introduce PSP in part of its operations	
Madhya Pradesh Power Transmission Company limited (MPPTCL)	Madhya Pradesh Vidyut Sudhar Adhiniyam 2000	Intra-State electricity transmission	Might potentially introduce PSP in part of its operations	
3 Regional Power Distribution Companies	Madhya Pradesh Vidyut Sudhar Adhiniyam 2000	Intra-State electricity distribution and supply	Might potentially introduce PSP in part of its operations	
Ports – there are no ports in Madhya Pradesh				
Airports – there are no plans for PSP in airports in Madhya Pradesh				
Urban mass transit – there are no plans for PSP in UMT in Madhya Pradesh				
Cyber parks/IT parks				
Madhya Pradesh State Industrial Development Corporation (MPSIDC)	100% owned by GoMP Reports to MP Department of Industries and Commerce	Promotion of industrial development	Oversight of PSP projects being implemented by AKVNs	GoMP IT Policy Draft GoMP "Science and Technology Policy" dated May 2003

APPENDIX A

Agency	Authority	Role	PSP Responsibilities	PSP Policies
Indore Audyogik Kendra Vikas Nigams (Indore AKVN)	Subsidiary of MPSIDC	Implementation of projects in Indore region	Development of Crystal IT Park	
SEZs				
GOI Ministry of Commerce and Industry	GOI Minister of Major Industries	Policy and overall responsibility	Approval of applications for SEZs received from GoMP	India's Export-Import Policy 2002-07 and 2003-04
Committee comprising Development Commissioner and Customs	Union level	Monitor functioning of SEZs under India's Export-Import Policy	Manages development and operation of SEZs, including registration of business unit, allocation of land, permission for construction of building and approval of building plans, environmental clearances and services provision. Powers of Labour Commissioner delegated to Development Commissioner, who also represents AP Pollution Control Board for clearances.	
Madhya Pradesh State Industrial Development Corporation (MPSIDC)	100% owned by GoMP Reports to MP Department of Industries and Commerce	Promotion of industrial development	Oversight of SEZ projects being implemented by AKVNs	GoMP "State policy for Special Economic Zone" dated Feb 2002
Indore Audyogik Kendra Vikas Nigams (Indore AKVN)	Subsidiary of MPSIDC	Implementation of projects in Indore region	Development of Indore SEZ	
Water supply and sewerage				
MP Public Health and Engineering Department (PHED)	GoMP Minister of Public Health and Engineering	Capital development of water supply projects	Could potentially be involved in PSP water supply projects (but none are planned)	
14 Municipal Corporations, 86 Municipal Councils, and 237 Nagar Panchayats.	MP Urban Administration & Development Department	Management of urban infrastructure including operation and maintenance of water supplies in their respective urban areas	Could potentially be involved in urban PSP water supply projects (but none are planned)	

APPENDIX A

Agency	Authority	Role	PSP Responsibilities	PSP Policies
8 Urban Development Authorities	MP Urban Administration & Development Department	Taking over increasing responsibility for planning and development of urban infrastructure in their respective areas	Could potentially be involved in PSP water supply projects (but none are planned)	

Appendix B: Project Categorization Lists . Copied from MOEF Framework

Table No: 2.1 Developmental Activities requiring Environmental Clearance from MoEF

S.No.	Developmental Activity	Threshold (New)		Changes/Expansion
		Capacity	Extent of physical coverage	
Industrial Manufacturing:				
1.	Cement Plant	200 MTD of product	-	• Increase in corresponding installed capacity thresholds (for new projects) by more than or equal to 50%. • Project Proposals involving product substitution / change in product mix / increase in capacity utilisation / modernisation, only if requiring an increase of 50% of the corresponding threshold criteria.
2.	Petroleum Refining Industry	10,00,000 MTA of crude processed.	-	
3.	Petrochemical Industry (Basic & Intermediates)	1,00,000 MTA of combined product.	-	
4.	Fertiliser Industry	50,000 MTA of combined product	-	
5.	Distillery (Alcohol distillery)	100 KLD of product	-	
6.	Pesticides & Pesticide Intermediates. (exl. Formulation)	50 MTD of combined product	-	
7.	Pharmaceutical Industry (Drug & drug intermediates)	100 MTA of combined product	-	
8.	Sugar Industry	4000 MTD of crane crushing.	-	
9.	Chlor Alkali Industry	200 MTD of Caustic Soda	-	
10.	Pulp & Paper Industry	30,000 MTA of product	-	
11.	Primary Metallurgical Industries. (Integrated Iron & Steel Plants, Copper Smelter, Zinc smelter, Aluminium smelter, Lead Smelting)	0.8 Million MTA of product	-	
12.	Leather (Tanning & Processing) Industry	5000 skins/day	-	
13.	Dyes & dye intermediates.	5 MTD	-	
14.	Asbestos Industry (manufacturing of products containing Asbestos fibre)	Irrespective of any threshold		

Infrastructure:				
15.	**Power Generation & Transmission:**			
	Nuclear Power (including related projects such as Heavy Water Plants, Nuclear Fuel Complex, rare earths etc;)	Irrespective of any threshold		
	Thermal Power generation			
	Co-generation Captive Power Plant	More than 250 MW (both coal and gas/naphtha based) and coming up along the main industry.		Increase in corresponding installed capacity thresholds (for new projects) by more than or equal to 50%.
	Utility Projects	500 MW (coal based and using fluidised bed tech); 250 MW (coal based and using conventional technologies); 500 MW (gas/naphtha based)		
16.	River Valley Projects (including Hydel Power, major irrigation and their combination including flood control)	More than 20 MW Hydroelectric power generation	1000 ha. Command area development (irrigation and flood control)	Increase in dam height or addition of a new turbine of same / half the capacity of individual turbine installed.
17.	Mining			
	Exploration & prospecting of minerals	-	500 ha.	Not Applicable.
	Mining of major minerals	-	25 ha.	Increase in corresponding installed capacity thresholds (for new projects) by more than or equal to 50%.
18.	Oil & Gas (Upstream & downstream)			
	Offshore exploration	More than 5 exploration wells	-	Not Applicable.
	Onshore exploration	-	5 ha. Of land	Not Applicable.
	Production	Irrespective of any threshold criteria		
	Transportation through pipeline (crude and refinery/petrochemical products)	Only if passing through an Environmentally Sensitive Area (including Reserve Forest, National Parks, Sanctuaries, Biosphere Reserves, critically polluted areas, CRZ and notified eco-fragile areas)		

S.No.	Developmental Activity	Threhold (New)		Changes/Expansion
		Capacity	Extent of physical coverage	
	Storage	Only if located in an Environmentally Sensitive Area (including Reserve Forest, National Parks, Sanctuaries, Biosphere Reserves, critically polluted areas, CRZ and notified eco-fragile areas)		
19.	Transportation			
20.	Roads/Highways	-	> 30 km length, for a new highways / bypasses or irrespective of any threshold if passing through an Environmentally Sensitive Area (including Reserve Forest, National Parks, Sanctuaries, Biosphere Reserves, critically polluted areas, CRZ and notified eco-fragile areas)	Involving construction of more than 60 m road including RoW
21.	New Railway Corridor	Only if passing through an Environmentally Sensitive Area (including Reserve Forest, National Parks, Sanctuaries, Biosphere Reserves, critically polluted areas, CRZ and notified eco-fragile areas)		
22.	Ports, Harbours (except for minor ports), Ship breaking yards	Irrespective of any threshold		Any additional berth / jetty construction.
23.	Airports	Irrespective of any threshold		Any additional runway construction.
24.	Industrial estates / parks, EPZ's, SEZ's, Biotech Parks, Knowledge Parks, Common Environmental Infrastructure.	Irrespective of any threshold		Any revision in the master / developmental plan of the facility.
25.	Any developmental project located in an Environmentally Sensitive Area (including Reserve Forest, National Parks, Sanctuaries, Biosphere Reserves, critically polluted areas, CRZ and notified eco-fragile areas through Notifications.			

APPENDIX B

Table No: 2.2 Developmental Activities requiring REIA for Environmental Clearance at State Level (Cat-B1)

S.No.	Category of Developmental Activity	Remarks
1.	All developmental activities mentioned under the Category-A and falling within the intermediate thresholds mentioned, wherever applicable. Higher threshold shall be that mentioned for Category-A projects and the lower threshold being 10% of that mentioned for Category-A.	In the manufacturing segment, product substitution and change in product mix should be considered for clearance at state-level.
2.	All industrial / other developmental activities other than those mentioned under category-A but require to undertake consents/authorisation procedures under various Environmental Acts and found to require REIA for environmental decision-making after undertaking case-by-case screening.	-
3.	Infrastructure developmental activities that do not fall in the above two lists, but are expected to grow in recent future and have a potential to cause adverse impact on the environment. An indicative list of such activities are presented below:	
	Telecommunication infrastructure (laying of cables, erection of towers).	-
	Resort, Recreational and Tourism Development.	
	Urban infrastructure (large housing complexes: more than 100 dwelling units, office complexes: more than 5000m2, hospitals: more than 50 beds, hotels: more than 200 rooms, water supply projects: more than 4500 m3/day.)	
	Largescale Aquaculture and Mariculture (more than 100 ha.)	
	Large-scale Entertainment infrastructure (Cinema Multiplexes with more than 2 screens)	

Table No: 2.3 Developmental Activities requiring case-by-case screening for Environmental Clearance at State Level

S.No.	Category of Developmental Activity	Remarks
1.	All industrial / other developmental activities other than those mentioned under category-A, B1 but require to undertake consents/authorisation procedures under various Environmental Acts	Activities determined as not requiring REIA for environmental decision-making (after a cas-by-case screening) will be given EC based on info provided in the EA form.

Table No: 2.4 Developmental Activities that require exemption from the EC application process (indicative list)

S.No.	Category of Developmental Activity	Remarks
1.	All activities that are presently excluded from consent/authorisation requirements under various Environmental Acts. An indicative list of such activities are presented below:	At present, each state has drawn its own exclusion lists
	Cycle assembly units, without electroplating	
	Motor rewinding.	
	Units making sports gear.	
	Units fabricating tractor trailer, agricultural equipment, etc.	
	Unit fabricating stove, cooker, kitchen equipment without electroplating.	
	Pump and motor assembling units.	

Appendix C: Brochure for IFC Training Program

APPENDIX C

Sustainable Finance: Competitive Business Advantage Workshop

Information for Participants

In the financial sector, the business case for managing environmental and social issues is well established. One side of the coin are the risks to be managed: Projects harming the environment may become bad credit risks. Clients involved in controversial activities may trigger media campaigns which harm your reputation. On the other side, there are investment opportunities in a variety of sectors from power generation to organic farming and eco-tourism.

A systematic approach to sustainability issues benefits financial institutions in several ways, for example by reducing risks, by realizing investment opportunities, by building reputation, or by improving access to international capital markets.

The sustainable finance workshop is a learning experience with a difference: A clearly defined deliverable. Structured as a management seminar tailored to financial professionals, it tackles environmental and social issues from a practical business perspective. Participants are coached in a highly interactive and productive process that delivers an outline sustainability management system ready for implementation.

1 *The Sustainable Finance Workshop: A Learning Experience with a Difference*

Three characteristics set the IFC Sustainable Finance Workshop apart from traditional seminars on environmental or social issues.

Clearly defined deliverable: In the workshop you will acquire the know-how and the skills to deal with sustainability issues. However, the course is not intended to be a mere class exercise. You are expected to be productive and to work on an outline environmental management system. This will be tailored to your institution and ready for implementation at the end of the workshop.

The financial professional's business perspective: The concepts and language used in the workshop are those familiar in the financial sector. Taking a business perspective means will be tailored to the needs of the audience.

You will then receive the detailed agenda and preparatory materials that will help you to get ready for the workshop. Expect to work on some steps of the EMS Workbook and prepare inputs for sharing your experience with other participants.

If available, please bring along some of your organization's documents that could be shared with the workshop participants. These might include:

- recent business/annual report
- organizational chart
- any policy documents and/or procedures related to sustainability issues (environmental management, risk management)
- information on your current EMS
- case studies you would like to present

After the workshop you will receive a reference CD-ROM containing the training materials and additional documentation.

7 *Further Information*

The Sustainable Finance Workshop will be held in Dhaka, Bangladesh on October 19-21, 2004. Up to date information on this workshop is available from Nazma Hoque at the South Asia Enterprise Development Facility.

Contact details:

Nazma Hoque
South Asia Enterprise Development Facility
10 Gulshan Avenue, Dhaka 1212
Bangladesh
Email NHoque@ifc.org
Tel 880 2 9861711-20
Fax 880 2 989 4744

A workshop presented by IFC's Sustainable Financial Markets Facility, which is currently supported by funding from the governments of Italy, Netherlands, Norway and Switzerland.

analyzing environmental and social issues in terms of financial risks, investment opportunities and reputation. Sustainability jargon is kept to a minimum.

High interactivity: Expect a high level of interaction and as little as 20% lecture-style presentations. The workshop is designed to create synergies between participants' expertise, thought-provoking inputs by trainers and support by seasoned coaches.

2 *Target Audience*

The workshop is tailored to management staff in financial institutions who are in charge of sustainability issues, environmental management or credit risk management. A modular structure makes the course suitable for both beginners and advanced professionals well familiar with environmental and social issues.

3 *Practical Approach, Business Perspective*

Capacity-building is the first objective of the workshop. You will acquire the skills for analyzing, discussing and managing sustainability issues within your institution and with relevant stakeholders.

The focus, however, is on the second objective: To set up an outline environmental management system (EMS) that deals with the issues relevant to your institution and in your business environment. Guidance is provided in the form of a workbook designed to accompany your work on the EMS and to serve as a blueprint before, during and after the training event.
Implementing an EMS benefits financial institutions in two ways:

- Firstly, by capitalizing on the business case linked to sustainability issues.
- Secondly, by ensuring compliance with IFC guidelines/policies.

It is this practical focus that distinguishes the Sustainable Finance Workshops from similar courses that traditionally focus on awareness-raising. You will start to deal with sustainability issues and to set up your EMS while still in the workshop, while experienced coaches are on hand to provide you with any support you may require.

If your institution already has an environmental or sustainability management system running, the workshop is a good opportunity to review it.

4 *Content: Six Steps towards a Sustainability Management System*

In the workshop you will take six steps towards your EMS. Each step is initiated by a presentation providing you with a thorough understanding of the issues at hand and a range of conceptual tools you may find useful in your work.

Step 1: The Business Rationale
Step 2: Sustainability Policy
Step 3: Analysis and Planning
Step 4: Procedures
Step 5: Internal Reporting
Step 6: Reporting to Stakeholders

Break-out sessions will be available for those interested in particular business areas such as insurance, or for participants with expertise in managing sustainability issues.

5 *Training and Coaching by Experienced Professionals*

The trainers delivering the sustainable finance workshops and the coaches supporting you in your work on the EMS have a sound background in both finance and sustainability issues.

- This encompasses, first of all, a thorough understanding of a bank's mechanics and business activities.
- Secondly, trainers are both familiar with environmental, social and development problems and have the expertise to discuss these from a business perspective.
- Thirdly, you will be able to draw from the coaches' experience in setting up and maintaining management systems dealing with risk, sustainability, environmental issues and quality.

6 *Getting Ready for Sustainable Finance*

Prior to the workshop you will be asked to state your expectations of the event, as well as your background and your experience in managing environmental and social issues. On this basis, the objectives and contents of the workshop

APPENDIX D: Draft Terms of Reference for Project Development Fund

Terms of Reference for the Establishment of A Fund to Support Development of Projects for Private Sector Investment in Infrastructure in India

Background

The Private Sector Infrastructure Facility at State Level Project (PSIF II) was formally presented to the Board of Directors of the Asian Development Bank in November of 2001. This was the second in a series of loans to support private sector activity in the infrastructure sector in India. The participating financial institutions for these loans were Infrastructure Leasing & Financial Services Limited (ILFS) and the Industrial Development Bank of India (IDBI). This loan comprised US dollars 100 million to each organisation to be applied to selected and approved projects in the Target States (the "States") of Gujarat, Madhya Pradesh, Karnataka and Andhra Pradesh. The loans were set up to be competitive financially with those generally available through the commercial banks but with a longer term (up to 25 years) to make them more attractive in situations where longer term credit was needed.

The Loan agreement also included provision for technical assistance to the four states to provide support in identifying gaps and deficiencies in the legal, regulatory, institutional or operational areas that were impeding the access and use by the private sector of the available funding. TA 3791-IND: Enhancing Private Sector Participation in Infrastructure Development at State Level was carried out by a consortium of international and domestic consultants between June 2003 and August 2004.

The results of the TA pointed out a number of areas where improvements could be made by the States to increase the level of investment by the private sector in infrastructure projects in the States. One of the key recommendations which developed out of the TA, was the need to establish a project development fund to allow for the proper development of projects to a point where they were clearly "bankable" and the project risk had been properly allocated between the Government and the investor. This fund would be used by the proposing departments and the coordinating agencies charged with development of private sector initiatives in each state to allow for the proper development of the project to a point where the private sector could confidently make the investment knowing the relative risks and rewards.

Justification

The lack of development of bankable projects by the State organisations remains the key impediment to successful investment by the private sector. Within states, there remains a sense of unreality and wishful thinking regarding the interest, willingness to accept risk by the private sector and fundamental bankability of proposed projects. In some of the key agencies and line departments, there remains a fundamental lack of understanding of the importance of markets, willingness to pay, conservative revenue forecasting, use of incentives, realistic risk assessment, competent and realistic financial analysis and commitment to terms of agreements and enforcement of agreed responsibilities. Until the process of development of bankable projects is improved through improvement of the capacity of the responsible state institutions, it is unlikely that the pace of investment in infrastructure will increase in India.

Much of the requirement for developing bankable projects rests with the sponsoring agencies in the states. This increases the cost of project development. It should not be considered unreasonable to spend up to 10 to 20 crores Rupees ($200 - $400,000) to develop a bankable project to the point where private sector investor is selected and implementation can begin.

If the nodal agencies or the line departments are required to spend this kind of money to develop bankable projects, the rigor attached to the pre-screening and the justification presented to the Chief Minister and the Minister of Finance for funding will improve dramatically. At that point the number of possible projects will be far fewer but much more potentially viable. A directed focus on the project screening process will also allow the state governments to more efficiently use scarce government resources and incentive mechanisms in a smaller number of viable PSP projects. Experience has shown that spending money to develop a project - to map out its market, its risk, its revenue, provision of incentives and a well structured concession or sale agreement will pay off in return to the sponsor. The money will come back in the form of improved investments, higher prices paid to the sponsors and improved atmosphere for investment.

Fund Structure

The PSP Infrastructure Development Fund (PSPIDF) will be established to provide project development seed money to each state on an as needed basis. The fund use in each state will be on a partially cost recovery basis. The objective of the fund is to move potential PSP projects from initiation to closure efficiently and to improve the success rate of private finance initiatives for infrastructure development in India. The cost of project development for those projects which find investor finance will be recovered as a first call on the investor contribution. While this will allow for cost recovery of those projects which close, it will not allow recovery of cost for projects which do not close. Therefore, the fund will not be fully self supporting but will inevitably require topping up from time to time from State Government budgets. The intent of the establishment of the fund at this time is to provide the seed money to allow States to provide more fully developed projects to the private sector and to assist in the closure of those projects.

Size and Distrubution of the Fund

The fund is proposed to be US$100 million to be divided among states on the basis of population and need. The fund will administered by the Department of Finance according to a set of criteria established by the Private Finance Initiative (PFI) Unit or the Department of Finance in each state. The criteria will include the following:

- Project sponsoring agency;
- Prefeasibility study at sufficient detail to allow for early determination of project financial viability;
- Determination of economic viability and need for the infrastructure investment.

Based on the above criteria, the Department of Finance or the PFI Unit will recommend allocation of a budget for project development, bid preparation, investor selection and negotiation from the fund. It will be clear in the bidding documents that the cost of project development will be recovered from the investor as part of the bid bond. However, in some cases, the cost of project development and clearance of resettlement or environmental clearances may remain with the Government as an "incentive" to the private sector developer. In those cases, reimbursement of the development cost to the fund will be made by the State from the State budget.

In certain cases, investor sponsored projects may also use the fund. In those cases where it becomes clear that the project will only proceed with the full support and financial contribution of the government as well as the private sector, the Department of Finance or the PFI Unit may determine that the fund would be used to develop certain parts of the project to a point where the investor and the government are jointly able to proceed. As above, in those cases, reimbursement of the development cost to the fund will be made by the State from the State budget.

Implementation Arrangements

The executing agency for the PSPIDF will be the Federal Ministry of Finance. One specialist from the MOF will be assigned to assess the applications from each state. Fifty percent of the fund will be allocated to each state

on the basis of population. Additional drawdown of the fund will be done on application for those states who show that the fund monies originally allocated have been used constructively and that further project development support is needed. The states will be required to present a plan for reimbursement of the fund on a 3 year rolling forward budget basis. Reimbursement of the net monies used by each state will be required no later than 3 years after the allocation of the fund monies to those states. The interest carrying cost of the loan from the ADB to the GOI, will be onlent to the states at interest cost plus a premium to be established by the MOF.

Terms of Loan

The terms of the loan will be the same as for other ADB loans to the Government of India.

APPENDIX D

APPENDIX E: Draft Terms of Reference for Establishment of PFI Unit in Four States

Terms of Reference for Technical Assistance to Establish "PFI Units" in Four States

1. Background

The Private Sector Infrastructure Facility at State Level Project (PSIF II) was formally presented to the Board of Directors of the Asian Development Bank in November 2001. This was the second in a series of loans to support increased private sector participation (PSP) in the infrastructure sector in India. The participating financial institutions for these loans were Infrastructure Leasing & Financial Services Limited (ILFS) and the Industrial Development Bank of India (IDBI). This loan comprised US dollars 100 million to each organisation to be applied to selected and approved projects in the Target States (the "States") of Gujarat, Madhya Pradesh, Karnataka and Andhra Pradesh. The loans were set up to be competitive financially with those generally available through the commercial banks but with a longer term (up to 25 years) to make them more attractive in situations where longer term credit was needed.

The Loan agreement also included provision for technical assistance to the four states to provide support in identifying constraints to increased PSP in the States, to assist in addressing the constraints where possible, and to recommend what further measures are required including any further interventions for support by the ADB. TA 3791-IND: Enhancing Private Sector Participation in Infrastructure Development at State Level was carried out by a consortium of international and domestic consultants between June 2003 and September 2004.

The results of the TA pointed out a number of areas where improvements could be made by the States to increase the level of investment by the private sector in infrastructure projects in the States. One of the key recommendations which developed out of the TA, was the need to develop a capability in each State to evaluate potential PSP projects, at an early stage in the project cycle, to assess whether the proposed project has a reasonable likelihood of being "bankable", the extent to which such bankability would depend on financial support from the government, and whether any such financial support is agreed in principle by the government. The evaluation would also examine whether the mode of PSP appeared to be the most appropriate, or whether an alternative PSP mode should be developed (especially if the level of financial support required to make the original proposal bankable is considered to be beyond the available resources of the government).

The TA recommended that such evaluations – referred to in the consultants' report as "Rapid Assessments" - should be conducted after a project had been identified as a potential PSP project, but before full project preparation starts. Since project preparation can be costly in terms of money and time, it was considered that a decision should be made, before embarking on this process, to assess in a preliminary way the project's bankability and any financial support that might be required. The TA also recommended that the analytical capability for conducting these Rapid Assessments – referred to in the consultants' report as a Private Finance Initiative (PFI) Unit - would most appropriately be located in the Department of Finance, so that assessments of financial support can be linked into the budgetary process. However, it was recognised that there were special circumstances in some of the States that might make it more appropriate to locate the capability somewhere other than the Department of Finance.

The TA proposed that the Rapid Assessments should be based on three criteria:

- Impact on the budget – preliminary estimation of the financial internal rate of return (FIRR) and the extent of government financial support required to achieve banakability, including equity contributions and their equivalent (such as land transfers), loans, loan guarantees and other contingent financial liabilities; tax incentives; indirect costs (such as improvements to roads, water supply or other related infrastructure), etc.

- Value for money – preliminary comparison of the FIRR and EIRR (ie the financial and economic internal rate of return) to assess the differences between the project's private and social benefits; and a preliminary assessment of whether the economic benefits of the project would justify the level of financial support required to achieve bankability.
- Risk allocation – preliminary assessment of the risks that could be transferred to the private sector.

The proposed PFI Unit would be trained in the techniques for conducting such assessments, but would not be expected to be responsible for the whole exercise, nor for the final decision-making. In particular, the agency responsible for the project (eg a line department) should be responsible for collecting and assembling the information and data required for the assessment, using consultants and advisers as necessary; and the decision-making process would follow appropriate procedures, according to the organisational arrangements in each State for the various stages in the project cycle. The role of the PFI Unit would be to ensure that the assessment is made to a consistent standard in all cases, and to help determine the appropriate PSP mode and the level of financial support required from budgetary resources.

If a project progresses beyond this evaluation stage, the PFI Unit would continue to have a watching brief, but would not be directly involved in later stages of the project cycle unless the PSP mode or level of financial support has to be materially reviewed or amended. Throughout the project cycle it is envisaged that the PFI Unit would remain at "arms length" from the private developer, and simply receive project reports for review. It would not interact with the developer and would only clarify questions it may have with the relevant line department or other government agency.

These general recommendations were discussed in a preliminary way with each of the four States. The Government of Andhra Pradesh (GoAP) has a general nodal agency for infrastructure projects, the Andhra Pradesh Infrastructure Authority (APIA), established under the Infrastructure Development Enabling Act (IDEA). The IDEA, inter alia, provides for the establishment of an Infrastructure Projects Fund (the Fund) to finance the activities of the APIA and to further the objects and purposes of the Act. The GoAP is of the opinion that it may be preferable to develop any PFI-style capability in the APIA, especially if the Fund is created, rather than the Department of Finance. This will need to be reviewed in more detail with the Principal Secretary of Department of Finance and the Chief Secretary of Andhra Pradesh.

There is also a general nodal agency, the Gujarat Infrastructure Development Board (GIDB), in Gujarat. While the PFI may best be located in the Department of Finance, there remain important questions of the allocation of responsibility between the PFI Unit and the GIDB which under its act has responsibility for deciding on and approving PSP projects in Gujarat. The GIDB has a well established process for progressing PSP projects, and that analyses similar to those recommended for a PFI Unit are already carried out by GIDB and line departments. Detailed discussion will need to be held on the structure, roles and respective responsibilities of the PFI Unit and the GIDB and how best the PFI Unit can be inserted into the existing organisational structure of Gujarat.

In Karnataka, the government (GoK) is considering an expansion of PSP activity through being more proactive than previously. It accepts in principle the concept of a PFI Unit at an early stage in the project cycle. The location of the Unit might be in the Department of Finance, where it might be meshed into a Fiscal Reform Program which is being funded by USAID. Another potential location is the Infrastructure Development Department (KIDD). As with the other states, further detailed discussion of appropriate location, roles and respective responsibilities of the various affected institutions will be needed.

In Madhya Pradesh the State Industrial Development Corporation and the Roads and Bridge Corporation share the same Executive and respectively manage the PSP input into their areas of focus. There exists some project development funding available for preparing PSP projects. Expansion of the current activity may require additional funding. Interest in hosting the PFI Unit has been expressed by the Secretary of Finance but alternative arrangements may also be viable and institutionally sensible. As with the other states, a full review of

the options including the appropriate location for the PFI Unit, the respective roles and respective responsibilities of the various affected institutions will be needed.

2. Objective

The objective of this proposed technical assistance is to take forward the recommendations that have been made concerning the establishment of a "PFI Unit" capability in the States, in order to carry out Rapid Assessments of PSP projects after the identification of projects and before detailed project preparation commences.

3. Scope

The project should be carried out in three stages:

Stage 1 – Inception

The consultants should discuss in detail, in each of the four states, the TA recommendations for a PFI Unit to carry out Rapid Assessments of PSP projects after the identification of projects and before detailed project preparation commences. A detailed scope of work should then be prepared to assist in the design of such PFI Units in those States that intend to introduce the concept. This scope of work should be presented in an Inception Report after [2] months for consideration by ADB in consultation with the States. The Report should set out the planned work programme, staffing and inputs, and the costs of providing the services.

After approval by the ADB of the Inception Report, amended as necessary, the project will proceed to Stage 2.

Stage 2 – Design of Unit

For each of the states that ADB agrees should be included in Stage 2, the scope of work agreed at the Inception stage should be carried out. This scope of work is expected to include:

- The location of the "PFI Unit"
- The role of the Unit and its position in the PSP process
- The division of roles and responsibilities between the Unit and other parts of government (eg line departments, other government agencies and any general nodal agency for PSP)
- Reporting arrangements and accountability
- Organisation and staffing including job descriptions
- Any measures that can be taken to minimise staff turnover to provide continuity
- Funding requirements
- The draft of an operational manual, covering the techniques to be used by the Unit.

At the end of Stage 2, the consultants should present a report setting out their proposals for the design of the Unit in each of the participating states, together with their proposals for assistance in the establishment of the Units.

After approval by the ADB of the Stage 2 Report, amended as necessary, the project will proceed to Stage 3.

Stage 3 – Establishment of Unit

For each of the states that ADB agrees should be included in Stage 3, the scope of work agreed at the end of Stage 2 should be carried out. This scope of work is expected to include:

- Assistance with the recruitment and selection of staff
- Development of training material for the staff
- Training of the staff to the extent necessary
- Assistance as necessary in explaining the role and operations of the Unit to other government departments and public bodies with which the Unit will interact.

4. Level of Effort

Phase I

The TA will be conducted in four states. Phase I can be conducted by a core team traveling to each state and using the experience gained in the states to provide a sound foundation for consistent recommendations and agreement in development of the terms of reference for the PFI Unit in the individual States. The team involved in the Phase I activity should include the following:

- Foreign Team Leader / PSP – Institutional Development Specialist (2 months field);
- Foreign Financial Analyst (1 month field)
- Local Legal Specialist (1 months)
- Local Institutional Specialist (1 month field and 1 month home).

Phase II

Phase II will require frequent visits to the four states but preparation of the institutional development plan, manuals, job descriptions and training modules can best be done with a centralised team. Phase II will require 4 calendar months with the following inputs of staff time:

- Foreign Team Leader / PSP – Institutional Development Specialist (2 months field time and 1 month home time);
- Foreign Financial Analyst (2 months field time and 1 month home time);
- Foreign HRD Specialist (2 months field time);
- Foreign Training Specialist (2 months field time and 1 month home time);
- Local Institutional Specialist (1 month field and 1 month home);
- Local HRD Specialist (2 months field and 2 months home);
- Local Training Specialist (1 month field and 1 month home).

Phase III

Phase III will take place in each state individually. We anticipate that a resident implementation manager will be needed in each state. Phase III will require 6 calendar months with the following inputs of staff time:

- Foreign Team Leader / PSP – Institutional Development Specialist (2 months field time and 1 month home time);
- Foreign HRD Specialist (1 month field time);
- Foreign Training Specialist (4 months field time and 1 month home time);
- Local Institutional Specialist (one for each state for 6 months – 24 mm);
- Local HRD Specialist (floating from State to State - 6 mm);
- Local Training Specialist (one for each state for 6 months – 24 mm).

5. Budget

The following table indicates the approximate budget for the above activity.

Item	Units	Approximate Rate	Dollar Total
Foreign Time	20 pm	$22,000	$440,000
Local Time	65 pm	Rp 320,000	$462,000
Air Travel Int'n	10 trips	$4,500	$45,000
Local Air Travel	30 trips	$500	$15,000
Living Allowance	720 days	$140	$100,800
Long Term	24 months	$2500	$60,000
Total			$1,122,800

5. Implementation arrangements

The selection and appointment of the TA consulting team will follow the QBS approach for consultant procurement.