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FOR ASIA AND THE PACIFIC**

**No. 72**

**Private Sector Participation in the Transport Sector:  
Institutions in the ESCAP Region**



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## Editorial statement

The *Transport and Communications Bulletin for Asia and the Pacific* is a peer-reviewed journal published once a year by the Transport and Tourism Division (TTD) of the United Nations Economic and Social Commission for Asia and the Pacific (ESCAP). The main objectives of the *Bulletin* are to provide a medium for the sharing of knowledge, experience, ideas, policy options and information on the development of transport infrastructure and services in the Asian and Pacific region; to stimulate policy-oriented research; and to increase awareness of transport policy issues and responses. It is hoped that the *Bulletin* will help to widen and deepen debate on issues of interest and concern in the transport sector.

As the demand for providing infrastructure and services becomes more and more pressing, Governments in the Asia-Pacific region have increasingly turned to the private sector for additional resources as well as to capitalize on the private sector's efficiency and innovation in many fields, including that of transport infrastructure and services. Many Governments have spelled out their policy and regulatory framework to promote, facilitate and regulate private sector involvement in infrastructure projects and related public services. Innovative models of private sector participation (PSP) and public-private partnerships (PPP) have emerged. However, the number and success of PSP/PPP projects depend greatly on the capacity of government agencies to identify, formulate and manage such projects, examine suitable options and negotiate with the private sector for project implementation.

Knowledge of PPPs and the necessary skills in the management and financing of PPP projects is often lacking in the public sector. As a solution to this problem, some Governments in the region have created dedicated PPP units to consolidate skills and bring forward portfolios of projects crossing all sectors.

Although the number of such units in Europe is growing and they are structuring more and more successful projects, the number of such units in Asia and the Pacific to date is not many. It is only in a few countries, namely, the Republic of Korea, the Philippines, Bangladesh and India (at the provincial level), that such units are known to exist. In most other countries, the laws governing each sector together

with the regulatory agencies oversee the participation of the private sector. There is a need to make policy makers aware of the benefits of establishing PPP units for capacity-building in the public sector and harnessing the potential of the private sector as well as to take seriously the development objectives of PPPs and their social acceptability.

In consideration of the importance and wide interest in the subject, *private sector participation in the transport sector* was chosen as the theme for both the current and next issue of the Bulletin. While volume 72 focuses mainly on institutional development, volume 73 will focus on policy aspects. It may be mentioned here that each volume of the *Bulletin* focuses on a particular theme of interest, primarily in the transport sector. The themes for the last two issues of the *Bulletin* were logistics for the efficient transport of domestic goods and governance for sustainable development in the transport sector.

Four articles, primarily on institutional development in the region, have been selected for the current issue (No. 72). The first article provides an overview of PSP/PPP units in Governments and special legal instruments on PSP/PPP in the region. It also contains an overview of trends and issues in private sector participation focusing mainly on the transport sector and makes a comparison between the trend in the region and the global trend. The three other articles in the volume provide more details on the structure and functions of special PSP/PPP units in the Philippines, the Republic of Korea and Bangladesh. They also provide some details on the PPP project implementation processes in those countries and the accomplishments of the special PPP units. The articles discuss important policy issues related to PSP/PPP development. It is expected that they will generate further debate on the issues that have been discussed and increase awareness of their policy implications and responses. It is also expected that the articles will increase awareness of the benefits of having special PPP units in Governments and stimulate discussions for the establishment of similar units in other countries.

The *Bulletin* welcomes analytical articles on topics that are currently at the forefront of transport infrastructure development and services in the region and on policy analysis and best practices. Articles should be based on original research and should have analytical depth. Empirically-based articles should emphasize policy implications

emerging from the analysis. Book reviews are also welcome. See the inside back cover for guidelines on contributing articles.

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# **PRIVATE SECTOR PARTICIPATION IN THE TRANSPORT SECTOR: TRENDS, ISSUES AND INSTITUTIONS IN THE ASIA-PACIFIC REGION**

A.S.M. Abdul Quium\*

## **ABSTRACT**

*This paper deals with the current trend of private sector participation in the transport sector with a focus on Asian developing countries. The demand for transport infrastructure and services is increasing rapidly owing to growth of production and domestic and external trading activities and incomes and ongoing urbanization. As the availability of public funds to meet the growing demand remains limited, Governments in the region increasingly see the necessity of private involvement through various forms of partnership arrangements to supplement the public sector programmes. The paper discusses recent trends in private participation and forms of participation in the transport sector and special facilitation units in Governments and legal instruments to promote private sector participation in countries of the region. The paper concludes with a number of suggestions and raises issues which require attention by Governments and international bodies to promote public-private partnerships in infrastructure development in the region.*

## **INTRODUCTION**

Governments worldwide have increasingly turned to the private sector for additional resources, increased efficiency and sustainable development in many fields, including that of transport infrastructure

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and services. Following trends in other fields, private sector involvement in the transport sector has now become quite common in many countries in the Asia-Pacific region. To facilitate private involvement, sector reforms have been initiated, albeit at a slow pace, and many Governments are also considering various other steps. Existing assets including public transport systems are being privatized and deregulated. As a result, highways, urban rail systems and new port and airport facilities are increasingly being built following various models of private sector participation.

The trend of private sector participation in infrastructure development that began in a few countries in the 1970s and 1980s has gradually spread to other countries during the last decade. Developing countries have been at the forefront of this trend and are pioneering innovative approaches to provide infrastructure services by the private sector. Now almost all these countries have some private activity in infrastructure development. Many Governments in the Asia-Pacific region have spelled out their policy and regulatory frameworks. The private sector and Governments are now working together increasingly on projects that are materially improving the supply of infrastructure and public services. In some countries, Governments have gone further, beyond their usual tasks of policy formulation, streamlining of administrative Processes and creating a supportive legal environment. They have established specialized units and devised suitable instruments to provide active support for private sector activities in infrastructure sectors.

Although Governments have increasingly turned to the private sector since the early 1980s, the history of private participation in infrastructure development is quite old. Private sector participation (PSP) in the transport sector dates back to seventeenth century canal and road concessions in Europe and the United States of America. Private companies built the American railways in the nineteenth century. Many early public transport systems in European and American cities were also developed in this century by the private sector under various municipal charter or franchise arrangements with revenues coming from fares and land development (ADB 2000; Menckhoff and Zegras 1999). The situation in many countries in Asia was not very different either.



For example, railways in the Indian subcontinent were first introduced in 1853 through private initiatives.<sup>1</sup>

At later dates, owing to various reasons Governments nationalized many of the earlier transport systems developed by the private sector. However, more recently and as in other sectors of the economy, the paradigm shift towards a market economy has led to a revival of private sector participation in the transport sector.

Unfortunately, as in other infrastructure sectors, private participation in the transport sector was badly affected during its infancy by the financial crisis of the late 1990s. The crisis-affected national economies are now recovering, however. Furthermore, the ongoing process of globalization has greatly expanded the scope for international trade in goods and services, with consequent unprecedented demand for transport infrastructure and services for the movement of goods and people both within and across the national boundaries of the countries in the Asia-Pacific region. The increasing level of urbanization in the region is also creating additional transport demand.<sup>2</sup> In the face of continuing public budget constraints and inefficiencies, as well as a desire to involve all stakeholders that can assist in the development process, it is expected that private participation in this sector will be revived to meet these growing demands.

Against this background, this paper provides an overview of recent trends in private participation in the transport sector in the Asian developing countries. In addition to providing an overview of recent trends in private participation the paper discusses forms of participation and presents an overview of the special public-private partnership (PPP) units and special purpose instruments devised by many Governments in the region for the promotion of private activity in infrastructure sectors. Finally, some concluding remarks are made based on the observations and findings presented in the paper.

<sup>1</sup> The Great Indian Peninsular Railway Company introduced the first railways in India near Mumbai.

<sup>2</sup> An estimated 37 per cent of the Asian population now live in urban areas, and that is expected to increase to 46 per cent by 2020 and 53 per cent by 2030. In terms of absolute numbers, the urban population was 594 million in 1975, increased to 1,352 million in 2000 and is projected to increase to 1,970 million by 2020 (United Nations 2000). Now, 17 of the world's 19 megacities are located in Asia.

## I. TRENDS IN PRIVATE SECTOR PARTICIPATION IN TRANSPORT INFRASTRUCTURE<sup>3</sup>

### A. Global trend of development in infrastructure sectors

Data from the World Bank shows that between 1990 and 2001 the cumulative total of investments in the infrastructure sector with private sector participation in all developing countries was about US\$ 754 billion.<sup>4</sup> Within this period, private sector participation in infrastructure development grew dramatically between 1990 and 1997, but gradually declined from its peak level in 1997 as a result of the financial crisis that began in mid-1997. As shown in figure 1, the total investment fell from US\$ 128 billion in 1997 to US\$ 119 billion in 1998 and to US\$ 77 billion in 1999. Although it went up in 2000 to US\$ 90 billion, it dropped again in 2001 to its 1995 level of US\$ 57 billion.

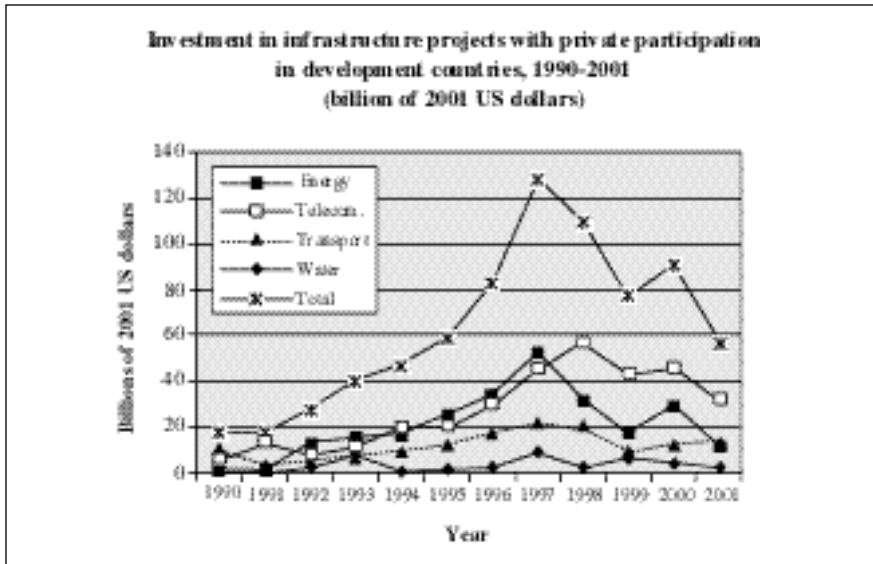
More than twothirds of investments were used for the creation of new assets and the remaining one third went to Governments as the sale proceeds of some existing assets. Telecommunications and energy have led the growth of private sector activity in infrastructure sectors. Cumulative investments in these two sectors in 1990-2001 represented about 77 per cent of flows to all infrastructure sectors in that period. The shares for the transport and water sectors were 18 and 5 per cent, respectively (figure 2).

The financial crisis that started in mid-1997 has affected all infrastructure sectors. However, the impact has been worst in the energy and transport sectors. In both of these sectors, private activity in 1999

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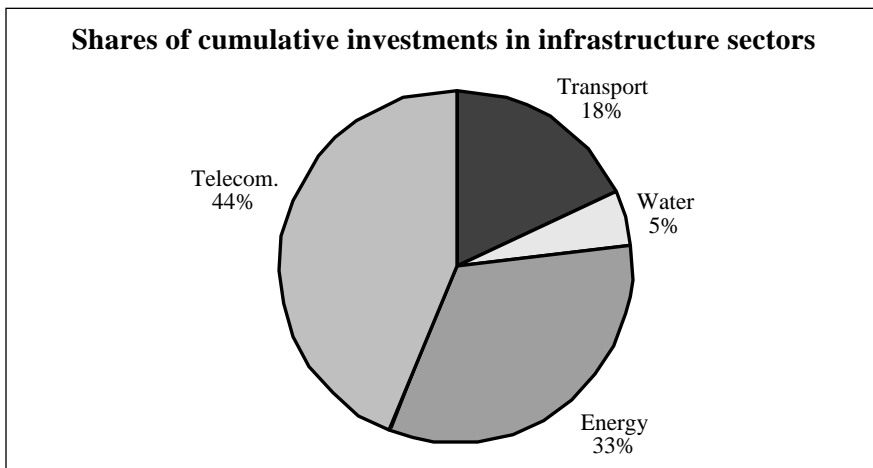
<sup>3</sup> The data presented in this section are mostly from the World Bank's PPI (private participation in infrastructure) database and were obtained through personal communications and from notes prepared by the Private Sector and Infrastructure Network of the World Bank Group. These notes are available at <<http://rru.worldbank.org/viewpoint/index.asp>>. As mentioned in this paper, Asian developing countries means countries in the ESCAP region, unless otherwise stated.

<sup>4</sup> The World Bank's PPI database records total investment in infrastructure projects with private participation and not private investment alone. All values are in 2001 US dollars. The PPI database deflates the nominal figures by using the United States consumer price index.



Source: Based on data provided in Note Number 250, prepared by the Private Sector and Infrastructure Network of the World Bank Group.

**Figure 1. Investment in infrastructure projects with private participation in developing countries, 1990-2001**



Source: Based on data provided in Note Number 250, prepared by the Private Sector and Infrastructure Network of the World Bank Group.

**Figure 2. Shares of cumulative investments in infrastructure sectors, 1990-2001**

dropped to about one third of the respective pre-crisis levels in 1997. While private activity in telecommunications and water has started to recover, there has been only marginal improvement in the transport sector and the energy sector is still declining.

Among the regions, Latin America and the Caribbean, and South-East and East Asia have led the growth in private sector participation. These two geographical regions together have captured more than 75 per cent of the total investments.

### **B. Trends in the development of infrastructure sectors in the Asian region**

A global analysis of private activity in developing countries revealed that about 33 per cent of total investments were made in Asian developing countries (excluding the Central Asian countries). Among the top 10 countries in the world, 7 were from Asia. As shown in table 1, China, Malaysia, the Republic of Korea, the Philippines, Indonesia, India and Thailand (in that order according to size of investments) attracted a total commitment of about US\$ 236 billion, which was about 95 per cent of total investments in Asian developing countries. With the exception of India, the remaining 6 countries were from East and South-East Asia. In total, the 7 countries made investments in 697 projects in all infrastructure sectors. The average size of involvement was lowest in China (US\$ 190 million) and highest in the Republic of Korea (US\$ 1.28 billion).

### **C. Trend in the transport sector**

The share of the transport sector with private participation in all developing countries was 18 per cent during the period 1990-2001. While total investment flows to South-East and East Asian developing countries fell slightly between 2000 and 2001, in the same period investment flows to the transport sector in those countries rose from US\$ 5.4 billion to US\$ 7.5 billion.

Within the transport sector, the share of road projects with private participation in all developing countries was about 57 per cent during 1990-2001. In that period, the road sector in developing Asian countries

**Table 1. Top seven Asian countries by investment in all infrastructure sectors with PSP, 1990-2001**

Country	Total investment (billions of US dollars)	Number of projects in all infrastructure sectors
China	53.8	283
Malaysia	36.6	63
Republic of Korea	33.2	26
Philippines	32.1	67
Indonesia	28.9	62
India	27.7	122
Thailand	23.9	74
Total	236.2	697

*Source:* World Bank, "Public policy for the private sector", Note Number 250, available at <<http://rru.worldbank.org/Viewpoint/index.asp>>

had a cumulative flow of US\$ 34.60 billion, which was about 59 per cent of investments in road projects in all developing countries. In the same period, cumulative flows in railway projects, port facilities and airport projects in developing Asian countries were US\$ 10.14, 10.97 and 3.22 billion, respectively. The details of investments by country and subsector are shown in table 2.

Some of the main findings as revealed from analyses of investment data from the World Bank's PPI database on infrastructure projects and other sources are summarized in the following paragraphs.

Private sector participation in infrastructure projects has grown rapidly, but the public sector still dominates. Although no reliable overall figures are available, understandably the private sector shares only a fraction of total investments in infrastructure sectors. For example, even in Malaysia, which is the second-most-successful country in attracting private investments in infrastructure, the government allocation planned for the transport sector during 2001-2005 is about RM 21.22 billion against an expected total of RM 3.5 billion by the private sector, which is about 14 per cent of the total investments by

**Table 2. Transport sector project investments in Asian countries with private sector participation, 1990-2001 (millions of 2001 US dollars)**

Transport subsector							
Ports		Airports		Rail		Roads	
China	3,139.85	China	1,737.64	Malaysia	5,585.70	China	16,604.75
Indonesia	2,180.05	Philippines	519.90	Thailand	2,415.11	Rep. of Korea	8,221.97
Malaysia	2,140.88	Turkey	432.49	China	2,140.42	Malaysia	6,003.41
India	1,110.44	Cambodia	204.42	Philippines	862.10	Philippines	1,306.90
Philippines	608.72	India	149.26			Indonesia	1,147.29
Pakistan	479.05	Malaysia	138.19			Thailand	857.07
Rep. of Korea	429.95	Thailand	20.40			India	452.29
Turkey	353.23	Viet Nam	16.94				
Sri Lanka	255.11						
Thailand	124.32						
Viet Nam	89.18						
Myanmar	56.45						
Total for Asia (billions of US\$)	10.97		3.22		10.14		34.60
Global total (billions of US\$)	18.00		12.80		28.80		77.00
Global share of subsector (percentage)	13.18		9.37		21.08		56.37
Asian share of subsector (percentage)	18.61		5.46		17.21		58.71
Asian share of the global total for subsector (percentage)	60.93		25.15		36.21		44.92

*Source:* Based on data from the PPI database of the World Bank and the BOT Centre of the Philippines.

- Notes:*
- (1) The original figures were rounded to two places after the decimal, and as such they may not sum up to the totals shown in the table.
  - (2) The PPI database did not include figures for two urban rail projects in Manila. All calculations shown in the table are based on the exclusion of these two projects.
  - (3) Total for Asia means total for the countries shown in the table.

both sectors.<sup>5</sup> In other countries, the private sector's share is expected to be even smaller.

Initially, private sector projects in all infrastructure sectors were concentrated in only few countries of the world. They have now spread to most of the developing countries. At the beginning of the 1990s, the top 10 countries accounted for 98 per cent of annual investment flows, which came down to 67 per cent in 2001. Although it has now spread to more countries, private participation has still remained concentrated in a few countries, particularly in the transport sector.

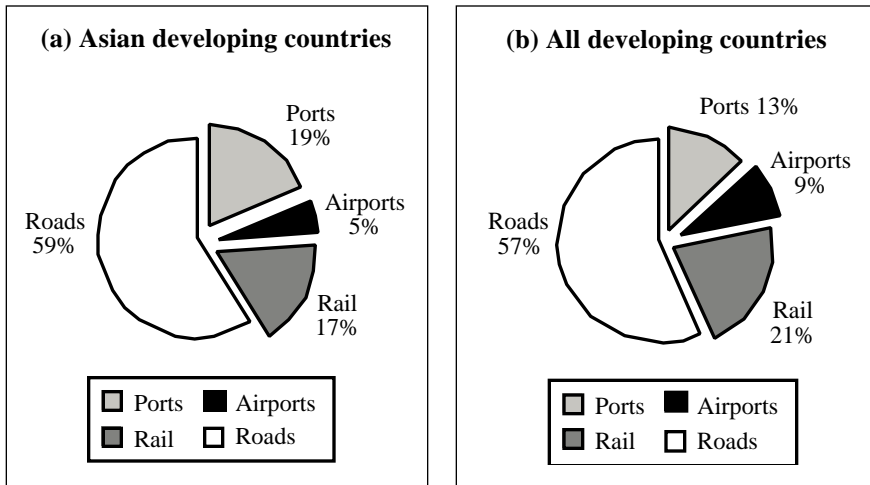
Globally, of the top 10 countries, 7 are from Asia (China, Malaysia, the Republic of Korea, the Philippines, Indonesia, India and Thailand). These 7 Asian countries attracted 95 per cent of all private activities in Asian developing countries. This concentration of private involvement was slightly higher for the transport sector, which was almost 97 per cent.

While the global share of the transport sector PSP projects was 18 per cent, in Asian developing countries it was about 22 per cent. Only 16 Asian developing countries in the ESCAP region have some form of private sector involvement in transport infrastructure projects. However, only 3 countries, China, Malaysia and the Republic of Korea, accounted for more than 78 per cent of investment commitments in the transport sector.

Within the transport sector, the global share for road projects was about 57 per cent. It was slightly higher (about 59 per cent) for the Asian countries. The investment share of port projects in Asian countries (18.61 per cent) was also higher than its global share (13.18 per cent). Consequently, investments in airport and rail projects in Asian countries were relatively lower than their respective global levels (figure 3).

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<sup>5</sup> *Eighth Malaysia Development Plan*, pp. 300-301.



Source: Based on data provided in Note Number 250, prepared by the Private Sector and Infrastructure Network of the World Bank Group.

**Figure 3. Share of transport subsectors**

Private participation in port projects was relatively widespread compared with other subsectors in transport. Although port projects drew 18.61 per cent of transport sector investments in Asian developing countries, 12 countries had port projects. In contrast, the road projects drawing 58.71 per cent of investments were limited to the 7 major countries and concentrated in China, the Republic of Korea and Malaysia. There were airport projects in 8 countries and only 4 countries had rail projects.

The total number of airport projects was 19, the majority of which (10) were located in China. While India and Cambodia had two projects each, the Lao People’s Democratic Republic, Malaysia, the Philippines, Thailand and Viet Nam had a single project each.

The 65 port projects with private participation were located in 12 Asian countries. In addition to China, the major countries were Indonesia, Malaysia and India. Although Thailand had a number of port projects, the total investment in them was much smaller than in the other countries.



The 14 rail projects were located in 4 countries: Malaysia, Thailand, China and the Philippines. The majority of these were urban rail projects. These rail projects marked the re-emergence of private railway operation in Asian developing countries after a long period of nationalization and public sector management. The implementation of urban rail mass transit projects with private participation in Bangkok, Kuala Lumpur, Beijing and Manila has inspired many other countries in the region to consider similar projects for other big cities in the region.

The 175 road projects were all located in the 7 major countries with China clearly being the lead country in terms of both number of projects and their value. The two other countries with large investment commitments in this subsector were the Republic of Korea and Malaysia. India also had a large number of road projects (25) with private sector participation, most of which were initiated in recent years.

## **II. THE ASIAN EXPERIENCE OF PRIVATE PARTICIPATION**

### **A. Form of participation**

Table 3 provides information on the forms of private participation in 14 Asian countries for 465 projects closed in 1997-2001. It is clear from the table that unlike Latin American countries, which favoured the simpler operation and management contracts type of participation to improve sector efficiency, Asian countries have favoured more complex forms of participation, namely, the BOT type (i.e., concessions and greenfield projects), whereby a private entity enters into a long-term contract with the public sector to undertake major capital investments and also assumes different project and investment risks. The primary motive for favouring the BOT form of participation in Asian developing countries was that the Governments did not have the funds for the creation of new infrastructure facilities necessary to meet the growing demand for such infrastructure services.

**Table 3. Form of PSP in 14 Asian countries  
for projects closed in 1997-2001  
(number of projects)**

Sector	Form of private sector participation							Total
	BTO	ROT	BROT	BOT	BOO	Divestitures	Others	
Energy			3	47	50	50	1	151
Telecommunications			19	21	72	13	–	125
Transport	3	33	15	30	4	26	8	119
Water		10	7	46	1	3	3	70
Total	3	43	44	114	127	92	12	465

Source: Ueda, 2002.

Notes: BTO = Build-transfer-operate; ROT = Rehabilitate-operate-transfer; BROT = Build-rehabilitate-operate-transfer; BOT = Build-operate-transfer; BOO = Build-own-operate.

Table 4 provides more detailed information about private participation in the transport sector by regions, which attracted most of the Asian private investment flows in this sector. It provides information for a longer period, greater number of countries and much larger number of projects than that provided in table 2.<sup>6</sup> As can be seen from the data in table 3, the preferred form of participation was not similar for all infrastructure sectors. While BOO was clearly the preferred form of participation in the energy and telecommunication sectors, BOT or ROT types of participation were more common in the transport and water sectors.

The data provided in table 4 show a clear preference for greenfield and concession projects than the two other types: divestitures and management contracts. Of the total 270 transport projects, the shares of these two less preferred types of participation were approximately 11 and 4 per cent, respectively. Preference concerning the form of private participation was very similar in both subregions.

An important feature of private participation was that greenfield projects represented more than half of the investment commitments in

<sup>6</sup> Unfortunately, the classification of participation forms in the two tables is somewhat different as data were not available in the same format. Nevertheless, they are similar and do not distort the overall picture.

**Table 4. Infrastructure projects with private participation in South-East and East Asia, and South Asia by sector and type of participation, 1990-2001 (number of projects)**

Sector	South-East and East Asia					South Asia				
	D	G	M	C	Total	D	G	M	C	Total
Airports	7	4	1	5	17	0	1	1	0	2
Ports	2	24	6	20	52	0	8	0	5	13
Rail	2	6	1	2	11	0	0	0	0	0
Roads	18	41	1	89	149	0	14	1	11	26
Total	29	75	9	116	229	0	23	2	16	41

*Source:* PPI database, World Bank.

*Notes:* D = Divestitures; G = Greenfield project; M = Maintenance and lease contracts; C = Concessions.

Asian developing countries, particularly in low-income countries. The focus has been more on the creation of new infrastructure facilities to keep pace with the growth of demand for such new facilities. This has also been the case because in many of these developing countries very little infrastructure was in place. However, aggravated by the financial crisis of the late 1990s, there appears to be a change in government strategy in many countries. Izaguirre and Rao (2000) note that in 1999, for the first time, private activity in divestitures exceeded that in greenfield projects in the developing countries in South-East and East Asia.

### **B. Experience of completed projects**

The Asian Development Bank conducted a detailed study on private participation in infrastructure in Asian countries (ADB 2000). The Bank's study was based on case studies of private participation in infrastructure projects in its member countries. It observed that in Asia's roads sector, private participation has been equated with major toll roads involving large investments. However, after more than a decade of making efforts, not many road projects have been implemented

outside China and most of them are concentrated in only a handful of countries.<sup>7</sup>

The experience of project implementation has been mixed in most countries. Frustrating experience for those concerned is not uncommon. In many instances toll collection has been a serious problem. For example, many BOT road projects in India are facing serious problems in toll collection. The developer of the first BOT road project in the Indian State of Tamil Nadu (the Coimbatore bypass) faced serious financial problems due to difficulties in toll collection.<sup>8</sup> A second BOT project in the state and the Mumbai-Pune Expressway has also faced similar problems. However, in the case of a number of other projects in India, this has not been a problem. An important observation about private road projects in Asian developing countries is that very few projects are profitable on a stand-alone basis without government support and their cumulative impact on expanding the capacity of the road network so far has been small.

In contrast to the mixed experience about private participation in the roads sector, the Asian Development Bank study notes positive results in both the airport and port sectors. Private participation in ports, however, has rarely involved pure privatization as land and infrastructure are not generally sold. Private investment in port infrastructure has generally been limited to cargo terminals. In general, the transfer of cargo-handling facilities to the private sector has been very successful. For the airport sector, private participation in terminal operations has produced significant improvements in financial performance and quality of service.

The number of rail projects has been very small and some of these are still in the implementation stage. As such, it is difficult to

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<sup>7</sup> China was considered as a special case for various reasons which do not apply to most other countries.

<sup>8</sup> *The Financial Express* of India, in its 29 April 2002 issue (available at <[www.financialexpress.com/fe\\_full\\_story.php?content\\_id=7764](http://www.financialexpress.com/fe_full_story.php?content_id=7764)>), reported that the developer could collect an average daily toll of only 75,000 rupees against a daily operating expense of 50,000 rupees and another 90 million rupees of yearly interest costs alone for the borrowed capital. This implies that, after meeting the operating expenses, the remaining toll revenue was barely sufficient to cover just about 10 per cent of the interest costs.

generalize the experience of private participation in this subsector at this stage. However, the limited experience from Bangkok and Kuala Lumpur suggests that ridership levels did not meet the expectations of the private operators and the projects faced financial difficulties. Importantly, the public sector ultimately had to come forward in support of these projects in both Bangkok and Kuala Lumpur.<sup>9</sup>

However, it may be worthwhile to mention here that at least in the case of Bangkok, the project objectives have been achieved to a large extent. An interesting study on the city's popularly known "Skytrain" project illustrated the potential external benefits that the project can generate under different scenarios. It estimated the present value of net benefits over 25 years of project life due to reduced levels of congestion on the roads at one third of the cost of the project, a benefit that cannot be captured by the operator.<sup>10</sup>

### **III. PSP/PPP FACILITATION UNITS AND SPECIAL INSTRUMENTS**

#### **A. Dedicated units**

The number and success of private sector projects depends greatly on the capacity of government agencies to identify, formulate and manage such projects, examine suitable options for private participation or partnership arrangements with the public sector and negotiate with the private sector for project implementation. Knowledge

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<sup>9</sup> The Government of Malaysia took over the two light rail transit projects in Kuala Lumpur (STAR and PUTRA) and arranged refinancing measures for them. In the case of Bangkok's elevated BTS rail transit, the Bangkok Metropolitan Administration has come forward to finance two vital extensions of the system at a total cost of 1,500 million baht in order to boost ridership and make the whole system financially viable. While initially the BTS project was financed by the private sector in full (the land for the depot, however, was provided by the Government), it is interesting to note here that in the case of the city's first underground rail mass transit project, which is now under construction, the private sector is only investing in the equipment (trains, signalling, communications, electric supply, etc.), representing about 20 per cent of the total project cost.

<sup>10</sup> IFC, 2001. *Bangkok Mass Transit (Skytrain) Externalities Study*, final report, prepared by Policy Appraisal Services Pty. Ltd. and Economic and Policy Services Pty. Ltd., Australia.

of public-private partnerships and the necessary skills in the management and financing of PSP/PPP projects is often lacking in the public sector. In most countries, the laws governing each sector, together with the regulatory agencies, oversee the participation of the private sector. As a solution to this problem, some Governments in the region have created dedicated PPP units to consolidate skills and bring forward portfolios of projects crossing all sectors. Although the number of such units in Europe is growing and they are structuring more and more successful projects, the number of such units in the Asian and Pacific region to date is not many. It is only in a few countries, namely, Bangladesh, India (at the provincial level), the Philippines and the Republic of Korea, that such units are known to exist.<sup>11</sup> However, this may not be surprising given that private sector participation has been concentrated only in a few countries. In this section, a discussion on PPP facilitation units in these countries follows.<sup>12</sup>

### **1. Bangladesh**

The Government of Bangladesh attaches great importance to private sector participation in infrastructure development and has taken a number of policy initiatives in this regard. Legislative and regulatory frameworks for private investments have been established in many fronts. For example, the Bangladesh Telecommunication Regulatory Commission was established in January 2002 and the Energy Regulatory Commission is in the process of being set up. Bangladesh now has a declared policy of involving the private sector in infrastructure development and to this end a private sector first policy is in the process of being institutionalized.

In order to further expedite the involvement of the private sector in infrastructure development, Bangladesh has established a number of entities directly under the Economic Relations Division of the Ministry

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<sup>11</sup> Sri Lanka does not have a special PPP unit like these countries but has established a special section called the Bureau of Infrastructure Investment (BII) within the Board of Investment (BOI). The Bureau operates under the umbrella of the country's BOI law. Its functions are similar to special units in other countries. BII follows a project approval process and has established procedures for both solicited and unsolicited projects.

<sup>12</sup> Three articles in this volume provide further details about these facilitation units in Bangladesh, the Philippines and the Republic of Korea.

of Finance. Two such entities are the Infrastructure Investment Facilitation Centre (IIFC) and Infrastructure Development Company (IDCOL) established in 1999 and 1997 respectively.

IIFC is a 100 per cent government-owned entity established with assistance from the International Development Agency (IDA), the Canadian International Development Agency and the Department for International Development of the United Kingdom. The services provided by IIFC include project development, policy development and capacity-building. Services in these three areas are provided through agreements with government departments and agencies.

IIFC assists government ministries and agencies and other public sector bodies in infrastructure sectors in project identification for the private sector. In the areas of project development and implementation, IIFC's activities include project structuring, bid preparation, evaluation, drafting contract agreements, contract enforcement and project monitoring. The Centre also assists the Government in capacity-building of public sector officials for negotiations as well as for identifying and packaging viable BOT projects. The Planning Commission of the Government has an agreement with IIFC to provide technical services for introducing private sector infrastructure projects in the annual development programme. IIFC also provides assistance in policy development to create an enabling environment for private participation in the infrastructure sector. It has developed a "private sector first policy" for infrastructure with the aim of prioritizing private sector opportunities in the national planning and implementation process. Recently, the Centre has prepared a number of transport projects for private participation.

The second entity, IDCOL, was also established with assistance from IDA. It operates as a non-banking financial institution and its share capital is fully subscribed by the Government. One of the main functions of IDCOL is to participate in the financing of private infrastructure projects by providing structured finance in the form of senior and subordinated loans. It also provides refinancing of small projects implemented by NGOs and other private entities. So far, IDCOL's activities have been limited to the energy sector.

## 2. India

In India, like most other countries in the region, the laws governing each sector together with the regulatory agencies oversee the participation of the private sector in infrastructure projects. Although this is the case at the national level and also for most of the states in India, the State of Gujarat has made a difference by establishing special institutions for this purpose.

The Gujarat Infrastructure Development Act, 1999 (the BOT law of Gujarat) was enacted to provide a framework for private sector participation in the financing, construction, maintenance and operation of infrastructure projects in the State of Gujarat in India.<sup>13</sup> This law is the first of its kind in India and was evolved after consultations with the industry, investors, developers and various other agencies. The law established procedures for private sector participation which are based upon clear-cut enunciation of the project cycle required for timely and effective completion of infrastructure projects.

The Gujarat Infrastructure Development Board (GIDB) was established under this BOT law. The Board is headed by the Chief Minister of the State. This was to ensure that the Board has the capacity to take policy-level decisions and can fulfil its wide-ranging mandates. Most of the ministers connected with infrastructure and industrial development and top officials of the concerned department are also represented on the Board. The Board has an Executive Committee, headed by the Minister of Industries, which acts as the first stage of screening for projects and also as a forum for extensive debate on the issues arising out of the projects which need to be taken up. The Board is supported by a technical secretariat.

GIDB removes policy-related or other bottlenecks, identifies and prepares projects, conducts feasibility studies, recommends risk-sharing mechanisms and monitors the progress of projects. Traditionally, private sector participation in infrastructure has been deterred by the fact that the projects are risky and have long gestation periods. To reduce the uncertainties due to long gestation periods and mitigate the high risks

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<sup>13</sup> Available at <<http://www.gidb.org/botchap-1.htm>>.



attached with infrastructure projects, the Board has worked out a project cycle for their implementation.

GIDB operates a revolving facility for carrying out prefeasibility studies. The state government supports this corpus through budgetary grants. If after a prefeasibility study a project is found bankable, it could be offered to the private sector for execution. These studies are conducted by reputed consultants. A successful public-private partnership entails distribution of project risks among the parties involved in its development. This is achieved through the mechanism of “concession agreements”, which detail the risk allocation. The state government has already come out with such agreements for various sectors such as power, gas and roads and felt that upfront allocation of risk helps the investors in judging the project better and facilitates their decision-making. The various types of concession agreements that the state government can enter into have also been specified in the state’s BOT law. The Board has a mandate for 22 infrastructure sectors, but among them it is currently focusing on the following 11 sectors: power, ports, roads, airports, railways, urban infrastructure, water supply, information structure, industrial parks, gas grid and tourism.

The Board has been successful in initiating quite a number of infrastructure projects, many of which have already been completed. In the port sector, six projects have been awarded to the private sector involving an investment of US\$ 2.14 billion. These projects include greenfield port sites at Maroli, Pipavav and Mundhra. The road sector has seen six projects being completed in the recent past. The amount of investment was around US\$ 250 million. Some of the major road projects include Ahmedabad-Vadodara Expressway, the Vadodara-Halol toll road and the Ahmedabad-Mehsana toll road. Apart from the projects already commissioned, a number of road projects which are under implementation through private participation are likely to be bid out soon. Gujarat has also attracted sizeable investment in the power sector. In this sector, 10 independent power producers have already commenced power generation. The capacity addition in these projects was around 3,000 MW, requiring an investment of around US\$ 2.85 billion. The power projects include the Essar project at Hazira, the GPEC power project at Paguthan and GSEG projects at Hazira.

### 3. Philippines

Private sector participation is a key strategy of the Government of the Philippines. The Built-Operate-Transfer (BOT) Law (Republic Act No. 6957 of 1991 as amended by Republic Act No. 7718 of 1994) spells out the policy and regulatory framework for private sector participation in infrastructure projects and other public services in the country. The BOT Centre<sup>14</sup>, a government agency attached to the Department of Trade and Industry (DTI), has the mandate to coordinate and monitor the implementation of the BOT Law. The Centre's main function is to find financial, technical, institutional and contractual solutions to help implementing agencies and local governments to make BOT projects work. Headed by an Executive Director, who reports directly to the Secretary of DTI, the Centre is organized in two groups: the project development group and the programme operations group. The project development group is composed of four sectoral divisions (transport, power and environment, information technology, social infrastructure and special concerns), and the programme operations group is composed of three divisions (programme monitoring and management information, marketing and resource mobilization, administration and finance).

The BOT Centre prepares and periodically reviews and updates the screening guidelines for projects applying for project funding under the project development facility, prepares the terms of reference for technical assistance to implementing agencies, reviews and moves to amend the Implementing Rules and Regulations for PSP and assists government agencies in expediting the implementation of private projects through facilitation and problem-solving interventions and monitoring of private activities/projects.<sup>15</sup>

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<sup>14</sup> The Coordinating Council of the Philippine Assistance Program (CCPAP), established in 1989 under an administrative order, was the first predecessor of BOT Centre. Later, in 1999, CCPAP was converted to the Coordinating Council for Private Sector Participation (CCPSP), which was again reorganized in 2002 as the present BOT Centre.

<sup>15</sup> <<http://www.geocities.com/ccpsp/about/histover.htm#Units%20&%20Functions>>.

The BOT Law of Philippines is quite comprehensive and includes provisions for both solicited and unsolicited projects. The original law, however, did not have provisions for unsolicited projects. A total of nine unsolicited projects from various sectors with an estimated investment commitment of about US\$ 2,872 million is now under implementation. The private sector is solely responsible for the equity and debt financing of such infrastructure projects. In case of unsolicited projects, the Government does not provide any loan guarantee or direct subsidy but may consider fiscal incentives and allows a longer concession period of 50 years.

The private sector has been very active in the development of major infrastructure projects in the Philippines under the BOT Law. The Law, considered as a model of public-private sector partnership in Asia, has brought in private capital of more than US\$ 16 billion in 42 completed/operational projects, including power plants, mass transit systems and expressways. Of these, there were three projects in the transport sector with an estimated cost of US\$ 1,205 million. Another six transport projects are under construction at an estimated cost of US\$ 2,287 million.<sup>16</sup>

#### **4. Republic of Korea**

The Republic of Korea enacted the Act on Private Participation in Infrastructure 1999 (as amended) to attract investors to fund infrastructure projects at both the central and provincial government levels.<sup>17</sup> The Act is commonly referred to as the PPI Act. The Act and its subsequent enforcement regulations are intended to promote, guide and facilitate private sector participation in infrastructure development for both solicited and unsolicited projects. Subsequently, regulations concerning the establishment, role and functions of a private investment project committee and a specialized institution to provide technical and administrative support to the committee, government agencies and the private sector have been formulated. The procedures and general

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<sup>16</sup> Information as at September 2002, provided by the BOT Centre, Philippines.

<sup>17</sup> An English version of the Act is available at <<http://www.moleg.go.kr/mlawinfo/english/htms/html/law06.html>>.

guidelines on PPI project preparation, submission, scrutiny and approval have also been formulated.

The Private Investment Project Committee under the leadership of the Minister of Planning and Finance is the main policy-level decision-making body. Its major functions include deliberation on matters relating to formulation of major policies concerning private sector investment in infrastructure projects, formulation of an annual plan containing a portfolio of projects for private sector participation, approval of project proposals which meet the prescribed criteria and designation of a concessionaire for the approved project.

An annual plan for private participation is an important instrument for implementation of the Act. As required by the Act, the Government formulates and announces an annual plan for private sector participation in infrastructure. The plan is prepared with due consideration of national investment priorities and mid- and long-term plans for infrastructure. The annual plan includes sectoral policies for infrastructure, a portfolio of projects, the investment, management and operational requirements of each project and available government support for projects.

Under the provisions of the PPI Act, the Ministry of Planning and Budget, established the Private Infrastructure Investment Center of Korea (PICKO) in 1999 with assistance from the World Bank.<sup>18</sup> PICKO was established at the Korea Research Institute for Human Settlements to support all the technical and administrative procedures in private sector participation in infrastructure investment from investment consulting services to project proposal review, negotiations and preparing concession agreements. Matters related to the organization and management of PICKO are determined by Presidential Decrees.

Sectoral agencies on infrastructure may request support from or commission PICKO in developing new projects, conducting feasibility studies, reviewing unsolicited project proposals, formulating instructions for project proposals, reviewing and evaluating project proposals and drafting concession agreements. PICKO also provides support in

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<sup>18</sup> <<http://picko.krihs.re.kr/eng/about/about1.htm>>.

formulating policies and plans related to private investment projects, the PPI annual plan and mid- to long-term plans for private investment projects, etc.

PICKO assesses proposals for infrastructure projects and also provides consultancy/advisory services to foreign enquirers. In order to meet foreign investors needs' and demands and to facilitate a better investment environment, PICKO provides English versions of documents related to private investment projects such as the PPI Act and its enforcement decrees, the PPI annual plan and instructions for proposals. It also conducts promotional activities such as PPI presentation meetings in the Republic of Korea and abroad and organizes capacity-building programmes for both public officials and related personnel from the private sector. PICKO not only handles the administrative and technical support in promoting private investment projects, but also acts as a one-stop service centre for private investment in infrastructure facilities in investment consulting, marketing, etc.

## **B. Special instruments**

### **1. Japan**

Public-private partnership (PPP) is a generic term for a range of initiatives that involve the private sector in providing public services. There are various forms of PPP. The private finance initiative (PFI) is a special form of PPP. The PFI model is a more recent innovation which has been used in Japan and some other countries to facilitate private activities in infrastructure projects. In this model, the private sector is involved in the design, finance, construction and operation of public facilities. The Government awards a long-term contract to the private sector to finance the construction of a new facility and provide management services for the facility. The Government may, however, provide substantive services in the new facility (for example, clinical services in a hospital). Thus, the Government spreads the cost of new construction and the responsibility for support services is transferred to private companies.

An important difference between PFI and conventional ways of providing public services is that the public sector does not own the

assets. In this form of PPP, private sector participation transforms the role of the public sector from being an owner of assets and direct provider of services into a purchaser of services through a long-term agreement. The public sector makes pre-defined payments to the private company, which provides the infrastructure and associated facilities management services. Payments are made for the service only if it meets specified performance standards. In the build-own-operate (BOO) type of arrangement (and its other variants), the private sector builds, owns and operates a facility and sells services to its users or beneficiaries, whereas in the PFI model, the private sector, as in the BOO model, builds, owns and operates a facility, and the public sector on behalf of the users or beneficiaries purchases services from the private sector through a long-term agreement and delivers them to the users.

It is argued that by aggregating design, construction and operation of infrastructure services into one contract, important benefits could be achieved through creation of synergies. As the same entity builds and operates the services, and is only paid for the successful supply of services at a pre-defined standard, it has no incentive to reduce the quality or quantity of services. Compared with the traditional public sector procurement model, where design, construction and operation aspects are usually separated, this form of contractual agreement reduces the risks of cost overruns during the design and construction phases or of choosing an inefficient technology, since the operator's future earnings depend on controlling costs. The public sector's main advantages lie in the relief from bearing the costs of design and construction, the transfer of certain risks to the private sector and the promise of better project design, construction and operation.

There are, however, additional costs of having recourse to the private sector – usually the cost of borrowing money is higher for the private sector than for the public sector and there are administrative costs for the management of PFI contractual regimes. Theoretically, a PFI scheme is favoured only when its generated benefits exceed these additional costs. To ensure this, government regulations guiding PFI schemes establish some value for money or public sector comparator criterion.<sup>19</sup> Following this criterion, the public sector entity awarding

<sup>19</sup> For example, in the United Kingdom the net present value of the project as a PFI scheme is compared with its value if implemented by the public sector.

a PFI contract is required to establish that by undertaking the project as a PFI scheme, government gets better value for money.

It may be mentioned here that the PFI scheme was first launched in the United Kingdom in 1992 and has become the dominant model of procurement of public facilities such as new hospitals, schools and prisons. The transport sector in the United Kingdom has also seen the implementation of a large number of PFI projects. By 2001 almost 400 PFI deals were signed with capital values of 17 billion pounds.<sup>20, 21</sup>

Styled after the PFI programme in the United Kingdom, the PFI scheme in Japan was launched in 1999 with the passage of the PFI Law in 1999 (Law No. 117 of 30 July 1999). Public facilities as defined in the PFI Law of Japan include transport infrastructure, public office buildings, public housing, educational and cultural facilities, waste treatment, hospitals, social and welfare facilities, IT facilities, energy supply facilities, tourist facilities, etc. Based on certain fundamental policies concerning various aspects of procurement as established by the Prime Minister and considering the clearly defined allocation of roles between various levels of the Government, the concerned public authority can enter into a contract with a private enterprise for the delivery of a public service after going through a prescribed procurement process.

The Prime Minister formulates the fundamental policies after consultation with the heads of relevant administrative organs of the Government, i.e., the concerned ministers, and after deliberation by the “PFI Promotion Committee” as established under this Law. The Committee is established within the Prime Minister’s Office and has nine members nominated by the Prime Minister. The committee investigates and deliberates on matters that fall under its jurisdiction,

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<sup>20</sup> To learn more about the PFI programme in the United Kingdom, readers are referred to a report prepared by David Rowland and Allyson Pollock, *Understanding the Private Finance Initiative*, London, UNISON, 2002. The report also provides an interesting critical analysis of some PFI projects and points out some dubious assumptions under which they were justified as PFI schemes. The report is available at <<http://www.unison.org.uk/acrobat/12174.pdf>> (28 February 2003).

<sup>21</sup> Debande (2002) provides an assessment of the United Kingdom’s experience in private financing of transport infrastructure.

helps to formulate policies related to fundamental principles and project implementation, oversees project evaluation and selection of contractors, and monitors project implementation.

By the end of 2002, the implementation of 79 projects with a total capital value of US\$ 1,845 million had been announced, many of which have been completed (Ueda 2002). Of these projects 76 per cent have a contract period of 15 to 20 years, 20 per cent 25 to 30 years and the rest less than 10 years. An analysis of these projects showed that the majority (62 per cent) were for selling their services to the public sector, 25 per cent were joint ventures between the public and private sectors and the remaining 13 per cent were financially free-standing. One of the biggest PFI projects in the transport sector was a US\$ 126 million container terminal at Hibikinami, Kitakyushu. Other projects in the transport sector included parking facilities in different cities.

## 2. Turkey

Turkey is one of the first few countries in the world to have introduced the BOT form of public infrastructure projects through the enactment of a BOT Law (BOT Law No. 3096) back in 1984. In accordance with this Law, a consortium bidding on a project is allowed to design a project and raise and secure financing to construct, manage, operate and maintain it. The Government guarantees to buy the products or services of the investment at a certain price over a certain period of time to cover debt service, operational expenses, repatriation of paid-in equity and return on equity. At the end of the contract period, the facilities are transferred to the Government in good operating condition, without any cost and free from any liabilities.

The projects opened to the private sector within the framework of the BOT Law include power plants, free trade zones, underground transport, ports, bridges, tunnels, communications, highways, railways and airports. A State economic enterprise, a public corporation or a concerned ministry authorized by the High Planning Council can assist and make an agreement with a qualified investor for the initiation and operation of a BOT project within the framework of the Law.



Despite being one of the pioneering countries of BOT projects, only a limited number of BOT projects have been implemented so far, most of which have been in the energy sector. This has been due primarily to legal problems in executing the Law. However, some transport and other infrastructure projects have been implemented. The most well-known projects in other sectors include Antalya and Istanbul-Ataturk airport terminal projects and the Izmit domestic and industrial water supply project.<sup>22</sup> The new airport terminal and multi-storey car park at Istanbul airport was completed in 2000 at a cost of US\$ 306 million.

An inadequate legal framework provided by the Law and certain provisions in the country's Constitution created serious problems related to the jurisdiction of authorities to exercise power vested in the Law as well as other legal uncertainty and administrative problems in executing BOT projects. As has been observed in an analysis, the BOT Law and regulations have created greater barriers to foreign investments than other factors like political uncertainty or instability of the local currency.

However, the Government has taken a number of important steps to address these problems, which include suitable amendments to the Constitution, amendment of the original BOT Law and enactment of a new law. A new law called the Build-Operate (BO) Law has been enacted to avoid the legal interpretation and associated jurisdiction problems of "concession" arrangements under the BOT Law. The legal framework in support of private sector participation has improved after these steps were taken and constitutional amendments recognizing international arbitration in public sector contracts were made. However, the execution of the BOT/BO Laws is still considered to be complex. A number of public sector agencies have expressed mixed opinions about BOT projects. While some agencies favour BOT projects, others contend that the costs of such projects are very high and completion of planned long-term public sector projects would make them redundant in the future.

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<sup>22</sup> <<http://www.dolph.com.tr/energy.htm>>.

#### **IV. SOME OBSERVATIONS ON THE ASIAN EXPERIENCE AND SUGGESTIONS**

##### ***The role of government and the policy environment***

The demand for transport infrastructure facilities will continue to increase owing to growth of production and domestic and external trading activities, incomes and ongoing urbanization. However, given the inadequate government budget allocations, the inefficiencies of public sector organizations and other constraints of the public sector, public provision alone would not be sufficient to meet the growing demands for transport infrastructure and services. If countries in the region are to remain competitive in an increasingly globalizing world, improve the quality of life of their populations and meet the Millennium Development Goals,<sup>23</sup> complementary investments by the private sector in physical infrastructure need to be placed high on the list of serious concerns to governments at all levels, national, provincial, urban/local. However, proliferation of private sector policies by Governments in the region suggests that the current debate is not so much related to whether Governments should promote private participation but to how they should involve the private sector and what institutional arrangements are required for that purpose.

In order to gainfully involve the private sector, there is a need for public policy makers to develop a better appreciation as well as be aware of the limitations of the role of the private sector while not overlooking the social and political obligations of the Government. Over the years, transport has acquired the perception of a public good, which is of special significance, particularly in developing countries. This perception of transport as a public good has made the tasks of policy makers more difficult as Governments have had to deal with efficiency and equity issues simultaneously.

However, it is important to realize that private participation does not mean that the public sector loses control over this seeming

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<sup>23</sup> The Millennium Development Goals (MDGs) are an agenda of the United Nations for reducing poverty and improving lives that world leaders agreed on at the Millennium Summit in 2000. Details on the MDGs can be found at <<http://www.undp.org/mdg/>>.

“public good” but rather it adopts a set of new rules whereby it assumes the role of facilitator and regulator, based on its comparative advantage and ability to apply its leverage to achieve the social objectives of government. Private participation in infrastructure development requires the Government to continue to play a key role in planning, policy formulation and regulatory matters. Further, in order to promote private participation, the Government needs to implement a series of economic, financial and legal reforms which only it can initiate. Getting the policy fundamentals right should see a revival of private activity. However, it is also true that policies evolve and all policies may need to be changed or refined from time to time to meet the changing situation in the internal and external environment. While certain basic policies are essential, it is neither feasible nor necessary to start with a near-perfect policy environment.

Effective private participation in infrastructure development requires the Government to create a conducive environment for PPPs. In this regard, liberalization of the market, removal of sector inefficiencies and participatory approaches to decision-making need to be promoted. Sector inefficiencies have been a major deterrent to private participation in transport infrastructure. The existence of barriers such as public monopoly and distortion in the pricing of competing transport modes is a serious problem for the motivation of the private sector in many countries. In many ways the pricing problem has been viewed as an issue of political economy and remains to be resolved. Transport is also a sector where technological change has been less pronounced and political barriers to reform can be strong.

### ***PSP/PPP model***

A wide range of private participation models has emerged. However, there is no single model that can satisfy all conditions concerning a project’s locational setting and its technical and financial features. The most suitable PSP/PPP option should be selected taking into account the country’s political, legal and sociocultural circumstances and the financial and technical features of the projects and sectors concerned.

Until now, the Asian focus has been more on new capital-intensive BOT projects but they are very complex to administer, particularly in view of the institutional weaknesses and capacity constraints of the public sector. Because of these constraints, the performance of many of these projects has been reported to be less than satisfactory. In many cases the legal and regulatory framework for contract enforcement was not in place. The experience of the financial crisis also suggests that greater attention needs to be placed on more rational forms of participation aiming at increasing efficiency of existing assets through improved operation and modernization. The hard lessons learned from the Asian financial crisis suggest that project financing will be more important than corporate financing. Growth of local currency financing as evidenced in China, Malaysia, Thailand, the Republic of Korea and India is an encouraging sign.<sup>24</sup> However, further innovations in project financing and financing structures are required.

Several case studies from around the region point to many caveats contained in public sector policy. Chief among them is financing of BOT projects where the developer is to recover its investment from toll revenues and bundling of projects. While toll collection is not a serious problem in relatively higher-income countries, it could be a problem in low-income countries. Often, bundling of financially viable projects with others for which there are no takers has made the whole project unviable. The privatization of the airline industry in India is a case in point. Because of the bundling of profitable routes with non-profitable ones, many private operators have gradually disappeared from the industry.<sup>25</sup> The commercial risk assessments of many projects also appeared to be problematic, and socio-political realities did not receive due consideration in some cases.

### ***The issue of pro-poor elements in PSP/PPP projects***

The issue of pro-poor elements in private projects has been much neglected in the past. A common concern has been raised that the poor

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<sup>24</sup> An article by Makoto Ojio in the forthcoming volume 73 of the *Bulletin* discusses this development in China.

<sup>25</sup> See an article by Arpita Mukherjee in the forthcoming volume 73 of the *Bulletin* for more details on this issue.

and other disadvantaged groups have not benefited much from private infrastructure projects providing public services. PPP experts attending a recent meeting held the view that in many countries, the general perception and understanding about PPPs, the role of the private and public sectors and imperfections in market structure were not favourable to the creation of a conducive environment for pro-poor PPPs.<sup>26</sup> They mentioned that there was also a general belief that involvement of the private sector resulted in higher prices and fewer jobs and that the profit motivation of the private sector was not compatible with the idea of pro-poor projects. Furthermore, the concept of partnership was not well understood by the bureaucracy. In many cases, the existing regulatory environment was conservative and too restrictive. Often, the lack of relevant market regulations leads to monopoly and sector inefficiencies which discourage private participation.

There should be a built-in mechanism in designing private projects to protect the interests of disadvantaged groups as well as increase the visibility and social acceptability of this approach. The experts at the above-mentioned meeting were also of the opinion that promotion, regulation and facilitation may be considered as the tactical means to create a conducive environment for pro-poor PPPs and suggested some measures in this regard. Education and training programmes for both the public and private sector need to be organized and demonstration projects should be implemented to create positive impressions of PPPs. Information dissemination through the media and other means should be enhanced. Subsidies that are transparent, targeted and non-distorting could be devised. Policies and regulations guaranteeing government support for pro-poor PPP projects should be implemented. It is important to follow certain core principles of good governance, namely, transparency and accountability, to promote pro-poor PPPs. Promotion of pro-poor PPP projects through incentives and technical assistance to the private sector can also be a government policy.

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<sup>26</sup> Consultative Meeting on Public-Private Partnership (PPP) Units for Delivery of Basic Services, organized by ESCAP at Bangkok on 27 and 28 March 2003.

### ***Special PPP unit in government***

A special PPP unit in government can be very effective in promoting PPPs. Countries like Bangladesh, India, the Philippines and the Republic of Korea in the region have recognized the need to establish special units. The experience of these countries has been very positive. These units have been quite successful in playing an important catalytic role in promoting and implementing private projects. Although China, Indonesia, Malaysia and Thailand do not have any special PPP facilitation units, they have also been successful in attracting private sector participation in infrastructure development. However, as pointed out in an ADB study, the case of China is quite special for many unique reasons,<sup>27</sup> while Indonesia, Malaysia and Thailand have been helped by some special conditions like an early start and prevailing more favourable general conditions for development that may not exist in most other countries. It may be mentioned here that PPP facilitation units also exist in many European countries such as Greece, Ireland, Italy, the Netherlands and the United Kingdom. The experience of these countries is also known to be very positive.<sup>28</sup>

At this stage it is not clear how the absence of such units affects private sector participation. It is important to mention here that in most countries specialized institutions exist for the promotion of investment in the manufacturing sector. However, this is not yet the case for infrastructure development despite the fact that infrastructure projects may require more capital, are liable to many different types of risks and require specialized skills for project structuring and implementation.

In reviewing the structures and functions of existing PPP units in Asia, it was apparent that despite similarities in their functions, their structures are quite different and they follow different approaches to achieve roughly similar objectives. The difference in structures of PPP units is more a reflection of different systems of government and overall administrative structures in those countries than of any functional or

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<sup>27</sup> Details can be found in ADB (2000), appendix 2, p. 3.

<sup>28</sup> A paper prepared by the ECE secretariat for the Working Party on International Legal and Commercial Practice, fiftieth session, 11-13 March 2002 (*TRADE/WP.5/2002/13*) provides a review of PPP for infrastructure development in Europe and selected four case studies of PPP units/task forces.

organizational matter. As the system of government and its overall administrative structure vary from one country to another, it is not possible to consider any common structure for such a unit that can be applicable to all countries. It should be country-specific.<sup>29</sup>

Experiences from both within and outside the region suggest that Governments need to pay special attention to institutional development and capacity-building in the public sector. Without institutional development and capacity-building of the public officials who are involved in the planning and management of private sector projects and management of the PPP/PSP contractual regime, it would be difficult to see much progress despite the fact that the growing demand requires additional investments by the private sector.

Finally, it is important to point out that existence of a PPP unit alone is not sufficient for the promotion of PPP. Other necessary conditions must also be fulfilled. Nevertheless, the establishment of such a unit in government can be very helpful for many purposes. In addition to addressing the common problem of public sector capacity in the management of private sector activity, a PPP unit in government can help sectoral coordination in overall planning, project development, evaluation, promotion and ensuring uniformity of policy standards and optimum resource allocation across the sectors. It can also help in the formulation and review of government policy for the infrastructure sector. Since adequate supply of essential infrastructure is a major challenge faced by most developing countries in the region, countries without a PPP unit can share the experiences of existing PPP units in Asia and elsewhere to learn how establishing similar units could benefit them.

## CONCLUDING REMARKS

Private sector participation in infrastructure projects has now spread to almost all developing countries in the region. In the transport

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<sup>29</sup> PPP experts at the above-mentioned meeting deliberated on issues related to the main elements of successful pro-poor PPPs, which included the functions and structures of PPP units. They prepared a set of recommendations about the functions and structures of PPP units that are contained in the report of the meeting, copies of which are available from the Transport and Tourism Division of ESCAP.

sector, however, it has remained concentrated only in few countries and the share of the sector is much lower compared with the energy and communications sectors. While technological innovations and sector reforms have favoured investments in some other areas of infrastructure, private participation in transport has been stifled for various reasons such as caveats in government policy, unresolved issues in political economy, sector inefficiencies, resistance to reform and lack of technological innovations.

The positive experiences of countries which have set up special PPP units in government need to be seriously considered by other countries. A special PPP unit in the Government can effectively address the capacity problem of the public sector and promote private participation in a planned and coordinated manner taking into consideration the overall sectoral needs and cross-cutting issues. Such a unit in government can also help to ensure social acceptability and transparency of private projects through institutionalization of project identification and approval processes.

The United Nations and its agencies and other international and regional bodies can play a key role in promoting private sector participation in infrastructure sectors as well as finding ways to address some of the social concerns of involving the private sector. They can provide support to countries in three main areas, namely, (a) creating a conducive environment in countries, (b) building the capacity of public sector officials to introduce regulatory regimes and make contractual arrangements that are fair to both the private and public sectors and sensitive to social and environmental concerns and (c) promoting the idea of setting up special PPP units in Governments and forming an alliance of these units to share experiences and good practices. Initiatives may be taken to establish a network of special PPP units in Governments in order to facilitate dissemination of information concerning the development of PPPs, public policies and good practices in the region and collaboration between such special units. Although some initiatives in these areas have already been taken by some agencies such as the United Nations Economic and Social Commission for Asia and the Pacific, much still needs to be considered in line with the countries' requirements.



## REFERENCES

Asian Development Bank, 2000. *Developing Best Practices for Promoting Private Sector Investment in Infrastructure* (Manila, ADB).

Debande, Oliver 2002. "Private financing of transport infrastructure: an assessment of the UK experience", *Journal of Transport Economics and Policy*, vol. 36, No. 3, pp. 355-387.

Izaguirre, A.K. and S. Rao, 2000. "Private infrastructure", Note Number 215 (Washington, World Bank).

Menckhoff, Gerhard and Christopher Zegras, 1999. "Experiences and issues in urban transport infrastructure concessions", (TWU-38), (Washington, World Bank).

Ueda, Kazuo, 2002. "Challenges and opportunities for PPPs in Asia: achieving pressing goals of efficient economic national development", paper presented at Project Finance World Asia 2002, organized by Terrapin at Hong Kong, China, on 20 and 21 November.

United Nations, 2000. *World Urbanization Prospects: The 1999 Revision*, (United Nations publication, sales no. E.01.XIII.11).

World Bank, 1998. "Concessions for infrastructure: a guide to their design and award", Technical Paper No. 399, (Washington, World Bank).

## LOCKING PRIVATE SECTOR PARTICIPATION INTO INFRASTRUCTURE DEVELOPMENT IN THE PHILIPPINES

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### ABSTRACT

*The Government of the Philippines continues to pursue its policy of encouraging the private sector to participate in the financing, construction, management and operation of infrastructure services and facilities in the country. Through the BOT Law, (Republic Act No. 7718), the Government has put together a portfolio of approximately US\$ 25 billion in infrastructure projects involving private sector investments. A number of these are big- ticket transport projects which could not be funded solely from government coffers in view of the magnitude of the capital investments required. To ensure the steady promotion of infrastructure projects that are ready for private sector investments, the Government established the Build-Operate-Transfer Center (BOT Center), whose mandate is to find technical, legal, financial, economic and institutional solutions to help government implementing agencies to make BOT projects work. This paper focuses on the role of the BOT Center in promoting private sector projects and also discusses BOT as a contractual arrangement under the BOT Law and considerations that the private sector makes in undertaking a BOT project.*

### INTRODUCTION

It is a fact that infrastructure projects are capital-intensive propositions. In many countries, the difficulty of financing both the construction and the operation and maintenance of infrastructure services

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and facilities directly from government coffers is more of a rule than an exception. While official development assistance (ODA) funds provide great relief and augment the budget pie, ODA donors nevertheless require counterpart funds from the Government. Moreover, the absorptive capacity of government agencies and the national Government itself becomes the crux of the matter. In the Philippine context, regardless of whether the funding for a project emanates from an ODA source or locally generated funds, the capital requirements for that project should be covered within the budget ceiling of the implementing department. This has often been the limiting factor in ODA projects.

In the early 1990s, the Government of the Philippines found itself facing a predicament of declining financial resources and absorptive capacity vis-à-vis the rising demand for more and more infrastructure services and facilities. Twelve-hour power outages were crippling the economy as government was unable to finance the necessary power plants to meet basic growth in demand. And true to the dictum *that* “necessity is the father of invention”, it was because of rising needs that the Government ventured into an innovative approach of tapping private sector resources in bridging the infrastructure gap in the country.

On 10 July 1987, President Corazon Aquino issued an Executive Order (EO 215) allowing independent power producers (IPPs) to put up power generation plants in the Philippines on a “take-or-pay”<sup>1</sup> basis in order to avert the power crisis that threatened the country’s economic and political stability. Under EO 215, the IPPs quickly infused a total investment of about US\$ 6 billion to build an aggregate installed capacity of 4,800 megawatts. Availability of money and speed of implementation were the two elements that allowed the private sector to do what the Government wanted delivered. Subsequently in 1991, Republic Act No. 6957, otherwise known as the Build-Operate-Transfer (BOT) Law, was enacted.

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<sup>1</sup> “Take or pay” refers to an arrangement in which the Government assumes market risk by assuring the BOT proponent that whatever is produced will be bought by government even in conditions where there is a shortfall in the demand for the services/goods being provided by the proponent.

## I. THE BOT LAW AND CONTRACTUAL ARRANGEMENTS

### A. The BOT Law

The BOT Law was designed to encourage further investments in other infrastructure sectors mainly by offering a clearer framework and fiscal incentives to private investors in public infrastructure.

Three years after it was passed, Congress introduced amendments to the BOT Law through Republic Act No. 7718 (the Amended BOT Law). Among the amendments was the introduction of the “unsolicited proposal” route, which allowed government agencies to accept project proposals initiated by prospective BOT investors.

The Amended BOT Law set the general policy environment for the pursuance of BOT projects and its variants:

*“It is the declared policy of the State to recognize the indispensable role of the private sector as the main engine for national growth and development...for the purpose of financing the construction, operation and maintenance of infrastructure and development projects normally financed and undertaken by the Government.”*

The BOT framework allowed government departments to implement crucial projects and circumvent the concern about departmental budget ceilings. The cost of financing the capital investment was passed on to the private sector. The framework also allowed the introduction of the basic principle of “user pay”. The Government’s role would be more as a regulator rather than as a financier/operator.

The law, however, allowed the Government to subsidize, contribute equity or guarantee performance to ensure that the project was viable. However, this was only applicable if the project was competitively and publicly bid. In this case, the implementing department would only be concerned about budget cover if the BOT project was structured in such a way that the Government had to directly participate in the project, e.g., by providing a direct subsidy, equity or guarantee. For instance, in the planned Ninoy Aquino International

Airport (NAIA) Expressway Project (a four-lane elevated expressway to provide uninterrupted access to the NAIA complex), the Department of Public Works and Highways (DPWH) as implementing agency first conceived the project as a purely ODA undertaking. However, upon realizing that its budget ceiling in the coming years would not allow it to absorb the capital requirements of the project, it changed the implementation scheme to mixed public-private BOT financing. The shift in scheme required DPWH to cover under its budget only the amount required for DPWH to directly participate in the project, approximately 50 per cent. The financial analysis in the feasibility study showed that DPWH would have to build a portion of the expressway (as a subsidy to the project) for the remaining portion to be attractive for private sector participation.

## **B. The BOT as a contractual arrangement**

### **1. Role of the private sector**

Under the BOT Law, the relationship of the Government and the private proponent is defined by way of a BOT contract. Ideally, the BOT contract allows the private sector to pursue its goal of realizing a profit while at the same time guarding the interest of the general public as users of the infrastructure facility. The partnership between government and the private sector is therefore governed by the principle of mutualism.

The BOT Law itself provides for the various contractual arrangements or schemes that the Government and the private sector can enter into in implementing an infrastructure project. Under a BOT scheme, for example, the private sector finances, constructs and, in certain cases, operates the infrastructure facility for a given period of time (usually referred to as the concession or cooperation period). To recover its investments with a reasonable return, the private sector is allowed by government to collect fees from the users of the facility. After the concession period, the private sector/proponent transfers or turns over the ownership of the facility to the Government.

## **2. Role of government**

The Government also has obligations under a BOT contract. On a case-by-case basis, the Government provides various forms of credit enhancements. Moreover, usually it undertakes to assist the private sector in securing government permits/documents as may necessary. In cases where the private sector has been allowed to operate the facility, the Government takes the role of a regulator in order to ensure that the public is not unduly burdened by the fees imposed. Government regulation comes in two forms. The first is technical regulation, wherein the Government regulates the BOT project by way of technical and performance standards set for the whole industry, mostly to ensure safety and conformity with international standards. Second, the Government performs economic regulation, wherein initial tariff levels and subsequent adjustments are the prime concerns.

In certain sectors, the Government has existing regulatory agencies/bodies performing the role of a regulator. However, in areas where there is no regulatory agency in place, technical and economic regulation is provided in the BOT contract itself (a case of “regulation by contract”). Technical regulation is done by way of a pre-agreed set of technical and operational standards (consistent with existing laws) and forms part of the BOT contract. With regard to the tariffs, the BOT contract would usually contain a predetermined parametric formula, which defines the parameters that will govern the adjustments to the existing tariff levels in the future.

## **3. Variant schemes**

In view of the fact that BOT projects are envisaged as tailor-fit solutions and could vary in form depending on the existing conditions, the BOT Law authorizes several BOT variants: (a) Build-Operate-Transfer (BOT); (b) Build-Own-Operate (BOO), which requires the approval of the President of the Philippines; (c) Contract-Add-Operate (CAO); (d) Develop-Operate-Transfer (DOT); (e) Rehabilitate-Own-Transfer (ROT); (f) Rehabilitate-Own-Operate (ROO); (g) Build and Transfer (BT); (h) Build-Lease-Transfer (BLT); (i) Build-Transfer-Operate (BTO); and (j) other variations as may be approved by the President of the Philippines.

The variants embodied in the BOT Law give flexibility to both the Government and the private sector in approaching a BOT project. For instance, if there is already an existing facility which only needs to be rehabilitated, instead of building a totally new facility under a BOT scheme, the parties can opt for a Rehabilitate, Operate and Transfer or ROT scheme. Also in cases where there are certain difficulties in having the private sector directly operate the facility (especially in projects involving public utilities), the parties can choose to approach the project through a Build-Transfer (BT) or Build, Lease and Transfer (BLT) scheme.

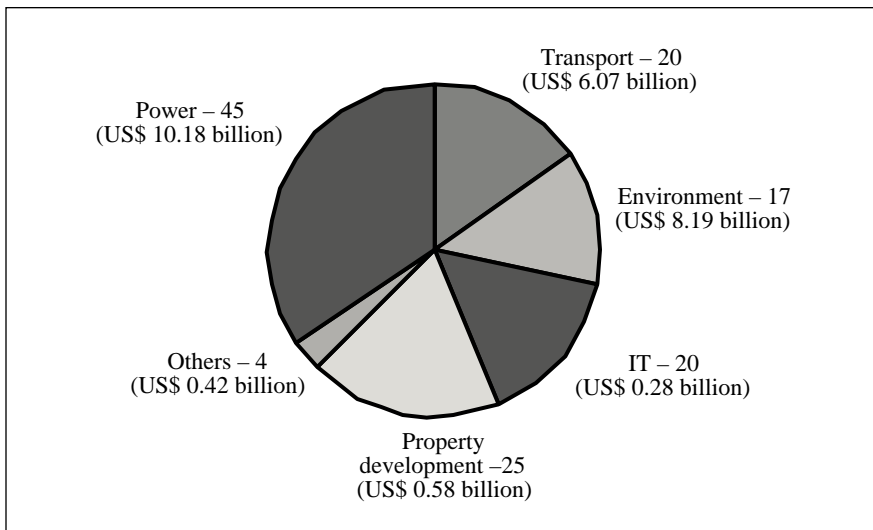
To further improve the flexibility in approaching BOT projects, the Government continues to study other schemes/modalities. There are several other schemes that have been identified in the course of working with the private sector over the years. These modalities, like concession agreements, management contracts and lease agreements, are being studied for possible inclusion as additional variants under the Law. It may be noted that the BOT Law actually provides for a tenth or “other” variants, but these require the approval of the President of the Philippines. An interim measure being envisioned by the BOT Center is to have an Executive Order from the President of the Philippines that will pre-identify and approve these additional variants/modalities. However, a more stable, albeit long-term solution would be to amend the BOT Law.

## **II. IMPACT OF THE BOT LAW ON THE ECONOMY**

From the macroeconomic standpoint, the BOT Law has made a significant impact on the economy. To date, the aggregate project cost of all private sector-participated projects (at various stages) in the Philippines since EO 215 was issued in 1987 amounts to about US\$ 25 billion. Of this, about US\$ 16 billion represents completed and operational BOT projects (inclusive of the US\$ 6 billion investments of IPPs in power generation under EO 215). This represents the “additionality” to the Philippine economy, which would have been difficult to achieve without the BOT Law.

The figure gives a breakdown of all the BOT projects by sector. There are at present 45 power-related projects at various stages of

development with an aggregate amount of about US\$ 10 billion. In the transport sector, there are 20 projects at various stages of development with an aggregate amount of US\$ 6 billion. Also, there are 17 environment-related BOT projects at various stages of development with an aggregate amount of about US\$ 8 billion. The remaining 49 projects are property development, information technology and other projects.



Source: Database of the Project Monitoring and Facilitation Group of the BOT Center.

### Breakdown of BOT projects

It is also apt to mention the multiplier effects of the US\$ 16 billion worth of projects already in place and currently operating in the country. In the transport sector, for instance, the MRT 3 project, a light rail transit system that plies the EDSA (Metro Manila’s busiest thoroughfare) has greatly improved the lives of its daily commuters. The economic impact of the savings in time and vehicle operating costs brought about by the project must be staggering, not to mention the multiplier effect on the economic productivity of each and every one who benefits from the use of the commuter rail system. With a project cost of about US\$ 655 million, it would have not been possible for the Government to build the facility by itself. In the same vein, the economic impact of savings in time and vehicle operating costs from



using the Manila-Cavite Toll Expressway (MCTE) is also significant considering the actual traffic generated by the toll facility everyday. The MCTE benefits thousands of denizens of Cavite who need to travel to their places of work in Metro Manila everyday. Annex I shows the completed and ongoing BOT projects in the transport sector. A list of transport projects that are in the process of approval is provided in annex II.

### **III. ROLE OF THE BOT CENTER**

Behind the BOT projects that are now completed and operational, and those that are at earlier stages of development, is the BOT Center, a government agency tasked to coordinate and monitor the implementation of the provisions of the BOT Law. The BOT Center's mandate is to find financial, technical, institutional and contractual solutions to help implementing agencies and local government units (LGUs) to make BOT projects work.

The BOT Center is spearheaded by an Executive Director, who reports directly to the Secretary of the Department of Trade and Industry (DTI). Below the Executive Director are two Deputy Executive Directors; one heads the Project Development Group and the other heads the Program Operations Group. The Project Development Group is composed of sectoral divisions (Transport, Power and Environment, Information Technology, Social Infrastructure and Special Concerns), who deal directly with client agencies in the development of BOT projects. Meanwhile, the Program Operations Group is composed of the Program Monitoring and Management Information Division, which monitors the overall BOT Program and prepares accomplishment reports for submission to Congress and the President of the Philippines; the Marketing and Resource Mobilization Group, which is in-charge of media-related activities and activities pertaining to securing funds for activities (e.g., feasibility studies) relating to BOT projects; and the Administration and Finance Group.

The BOT Center has the Coordinating Council of the Philippine Assistance Program (CCPAP) as its predecessor. CCPAP was created under Administrative Order (AO) No. 105 s. of 1989 to take the lead role in coordinating efforts to effectively mobilize international aid and

to ensure its successful implementation. CCPAP was converted into the Coordinating Council for Private Sector Participation (CCPSP) under AO No. 67 s. in 1999 mainly to enhance private sector participation in infrastructure projects.

Recently, the President of the Philippines issued EO No. 144 s. 2002, which mandated the reorganization and conversion of CCPSP and its technical secretariat to the BOT Center, transferring its attachment from the Office of the President to DTI.

### **A. Helping government agencies and LGUs to implement BOT projects**

The BOT Center performs a unique role in the Philippine bureaucracy. First and foremost, as the agency tasked to market BOT as an investment scheme, the BOT Center stands behind the implementing agencies and LGUs in developing solicited BOT projects and likewise in assessing unsolicited BOT proposals. With regard to solicited projects, the BOT Center liaises with sectoral agencies even at the early stages of project identification. In the planning activities of agencies, the BOT Center is usually invited to present BOT as an implementation option. The BOT Center identifies projects and activities that can be bundled (or unbundled, as the case may be) in order to package a BOT that is attractive to private investors. These activities are those that exhibit sufficient revenue streams.

A portfolio of projects that are ready for BOT is maintained at the BOT Center (annex II). These projects are usually included in the BOT kits and marketing documents that are distributed to prospective investors. The list is consolidated by the Program Operations Group from the inputs gathered from the agencies through the sectoral teams under the Project Development Group. The portfolio of projects serves as the shopping list for BOT investors, who later are also invited to the bid conferences held for each project. The projects in the shopping list, however, are at various stages of the government approval process. A project, after its identification by the concerned line agency, is endorsed to the National Economic and Development Authority (NEDA) for Investment Coordination Committee (ICC) approval. ICC has two levels, the Technical Board and the Cabinet Committee, and a project

has to go through twice (the first pass is project approval and the second pass is BOT contract approval) on both levels, after which the project is approved by the NEDA Board itself, which is chaired by the President of the Philippines. Optimistically, a project goes through the whole NEDA-ICC process within five months, assuming that all information has been made available to NEDA by the agency. After the NEDA-ICC process, the project is ready for bidding by the proponent agency.

The BOT Center has the skills set that enables the Government to look at a prospective BOT project closely to see if it will hold water as a BOT undertaking. Those that exhibit potential for private sector participation, i.e., those technically viable for operation under private hands and capable of generating a steady revenue stream to justify a reasonable level of profit, get a big push from the BOT Center. By contrast, those that exhibit little potential owing to technical and/or financial considerations are nipped in the bud.

The BOT Center conducts financial analysis not only from the project point of view (which is the approach used by the NEDA-ICC secretariat for assessing ODA projects) but more importantly from the investor's point of view. It is important to assess a BOT project's viability in the eyes of those who will invest in it. For instance, in the financial modelling for the planned NAIA Expressway Project, it was realized that the impact of real property taxes and value-added taxes significantly affects the financial viability of the project from the equity investor's standpoint.

Institutional memory is also important in making BOT projects work. The ability to replicate good lessons and discard bad lessons adds to the BOT Center's foresight in packaging BOT projects and managing uncertainties. For example, unclear provisions on taxes and step-in rights of lenders in past BOT contracts paved the way to murky interpretations. Learning from the past, the BOT Center now ensures that these provisions in new BOT contracts are made explicit and clear.

Having worked with the private sector in many BOT projects in the past, the BOT Center has also enhanced its contract negotiations skills. As a result, the government is now able to negotiate better deals with the private sector than in the past. While the private proponents

bring highly skilled negotiators to the table when they structure a deal for a BOT project with the implementing agency, the BOT Center's technical expertise props up the ability of the implementing agency to cut a fair deal.

Unique also to the BOT Center is its ability to “hold the hand” of the private sector and guide it through the processes required in doing BOT projects in the Philippines. For example, as part of its “marketing” role, the BOT Center helps the private sector to understand the requirements imposed by the BOT Law. For instance, the Center prepares an indicative timeline to show the conservative and/or optimistic time frames required to move a project from development stage to implementation stage. This helps the private sector to manage uncertainties from its side.

### **B. The project development facility**

The BOT Center also maintains a monitoring database for all BOT projects. From this database, the Government is able to track the overall impact of the BOT Law. Apart from the project database, the BOT Center maintains a database of eligible consultants for the conduct of feasibility studies and preparation of tender documents under the Project Development Facility (PDF). PDF is a revolving fund managed by the BOT Center and at present has a kitty of about US\$ 3.75 million. PDF can be tapped by implementing agencies and LGUs for the preparation of project studies and tender documents. The cost of the preparation of these documents becomes part of the project cost and will be reimbursed by the winning bidder once the project is successfully tendered. In the case of the NAIA Expressway Project, DPWH secured a PDF loan amounting to US\$ 150,000 for the preparation of the feasibility study and bid documents. If successfully tendered at the end of the day, the winning bidder will reimburse the full cost to PDF. DPWH therefore ends up not paying a single centavo for the preparation of the project. The advantage of tapping PDF for a solicited project is that the Government is able to tap the services of a credible consultant to help in verifying project assumptions. For the operational aspects of the NAIA Expressway Project, the BOT Center and the consultant went through the rigours of simulating traffic movements per direction only

to ascertain that the project will be operationally tenable especially from the user's point of view.

Finally, the BOT Center is also a full member of ICC, at both the Technical Board and Cabinet levels. ICC is an inter-agency body that provides policy guidance on both ODA and BOT investments in the country. As a member of ICC, the BOT Center is able to do policy advocacy to help to improve the implementation of BOT projects.

#### **IV. CONSIDERATIONS OF THE PRIVATE SECTOR**

The willingness of the private sector to venture into doing BOT projects in the Philippines is governed by many considerations. Each project is a business venture and therefore there has to be a balance between risks and potential for profit.

From the point of view of prospective lenders to a BOT proponent, or the proponent itself, a project should have a good indication that the investors will generate a reasonable rate of return. The bottomline concern of the private sector is always the bankability of the BOT project. If a project can be reasonably financed by leveraging debt and allow the private proponent to come out with a reasonable return on equity, then the project is potentially a good one to participate in. However, while a project exhibits financial viability, the private sector would want some level of comfort with regard to some factors that usually bring about uncertainties. Considering that there currently exists very limited domestic long-term financing and therefore there is heavy reliance on foreign financing (which entails the payment of interest to cover certain risks associated with the economic stability of the country) for big-ticket infrastructure projects in the Philippines, the private sector would be very wary about their investments unless the Government is able to mitigate some, if not all, of the uncertainties.

##### ***Strong government institutional support***

A BOT project should enjoy the full support of the government agencies concerned. The private sector will not be interested in participating in a project that meets with clear opposition from certain

sectors in government. The Government should be able to show its strong institutional support by securing the right-of-way and other permits/documentation required so that a project can be implemented seamlessly as soon as the private sector is ready to start construction.

In the case of the Manila North Tollways Project, the Government allocated about P 500 million and secured all the rights of way required by the project in June 2002, the right-of-way acquisition being a condition of the proponent's lenders prior to first drawdown.

### ***Credit enhancements***

The private sector may also require government support in the form of credit enhancements that would allow the private sector to tap financing sources at reasonably low interest rates. This support may be in the form of project subsidies that the project may require in order to make it a worthwhile undertaking for the private sector. It may also come by way of government guarantees (sovereign guarantee in the form of a performance undertaking or PU) that would allow lenders to take comfort in the fact that the obligations of the implementing agency in the BOT contract enjoy the full faith and credit of the Government of the Philippines.

### ***Cut-and-dried regulatory processes***

The regulatory aspects should be clear-cut in order that the uncertainties faced by the private sector are minimized. Regulatory concerns would usually be the setting of tariffs and the parametric formula by which a proponent may adjust its tariff rates. In the transport sector, for instance, each subsector has a regulatory agency in place. In toll roads, the Toll Regulatory Board (TRB) performs both technical and economic regulation. In the water transport sector, the Philippine Ports Authority is the regulatory agency except for ports under the Cebu Ports Authority. In the civil aviation sector, the Civil Aeronautics Board performs economic regulation while the Air Transportation Office performs technical regulation. However for airports under the control of the Manila International Airport Authority (MIAA) and other airport authorities, the respective authorities perform the regulatory functions. For rail projects, the DOTC and/or LRTA perform regulation.

In the case of the NAIA Expressway Project, the BOT Center, together with DPWH, has coordinated the preparation of a Memorandum of Understanding (MOU) between DPWH and TRB stipulating that TRB will actively participate in the ICC review process wherein it will voice all its concerns so that there will be no need to conduct a separate TRB review. This innovative approach allows the private sector to gain comfort in the fact that the TRB review as a factor of possible uncertainty is effectively managed early on.

### ***Management of other uncertainties***

For the planned NAIA Expressway Project, the BOT Center facilitated the resolution of the issue relating to the “exclusivity of franchise” of the operator of the Metro Manila Skyway (a joint venture project between CITRA and the Philippine National Construction Corporation, a government-controlled corporation). The issue pertains to the claim of CITRA/PNCC that their franchise actually covers all toll roads connecting to the present Skyway and, therefore, awarding the franchise for the NAIA Expressway Project to another operator will violate CITRA/PNCC’s rights. Through a series of consultations, CITRA eventually agreed to support the Project’s implementation.

The operational integration/interface issue of the planned NAIA Expressway with the Metro Manila Skyway issue is also being addressed by the BOT Center. Through a series of consultations, the concerned parties agreed that the operational integration arrangement will be covered by a Memorandum of Agreement between DPWH and CITRA/PNCC to lock in commitments from both sides.

Consultations were also conducted with UEM-MARA, the owner/operator of the Manila-Cavite Tollways Project. The issue is the impact of the NAIA Expressway Project on the demand for a parallel toll road project (the C-5 Link) that UEM-MARA will build in the future as part of its existing toll road.

## **V. A BIAS FOR SOLICITED PROJECTS**

The BOT Law actually allows two tracks for the development and implementation of BOT projects. One is the unsolicited track,

wherein the private sector is allowed to submit BOT project proposals to the implementing agencies, and the other is the solicited track, wherein the implementing agency prepares the feasibility study and other appurtenant documents and solicits bids from prospective proponents. In the case of the former, the resulting project is usually not eligible for direct government guarantees, subsidies or equities. For solicited projects, the Government is able to provide support that may be required simply because of the fact that such support has actually been established by government itself.

In the case of the NAIA Expressway Project, the required participation of government in building Phase 1 and the required cash subsidy for BTO/Phase 2 have been established through the feasibility study prepared by DPWH through the assistance of a project consultant procured through PDF. Since it is a solicited project, the Government is allowed under the BOT Law to provide the following support:

### ***Phase 1 contribution***

Even at the early stages, the Government recognized that the project will only be viable for private sector participation if the Government participates directly in constructing Phase 1 of the project. The simultaneous mobilization of ODA and private finance was therefore explored. The initial assumption was that the ODA financing could be fast-tracked so that the completion of the whole project would coincide with the opening of NAIA International Passenger Terminal 3 (IPT3) by the end of 2002 or early 2003. However, in November 2001, a JBIC fact-finding mission indicated that the Project would have to follow the normal JBIC procurement process, which would see the Project completed in June 2006 at the earliest. Finding the completion date of the ODA component unacceptable, the Task Force decided that the DPWH component should be financed through local funds.

### ***Advances for initial activities***

Moreover, given the constraints in government resources, possible internal funding sources for the initial/preparatory work were explored particularly from those agencies that would benefit from the Project. The Cabinet Task Force for the NAIA Expressway secured



commitments from various government corporations that have a stake in the project (MIAA and the Bases Conversion Development Authority) to provide cash advances to implement preparatory activities.

### ***Cash subsidy***

Finally, the results of the financial model developed by the DPWH consultant for the NAIA Expressway Project showed that the project would not be viable if implemented solely through private resources. A subsidy must be extended to the Project to make it attractive to potential investors. Recognizing the importance of the project to the Arroyo administration, the Government decided to beef up its share in the capital cost for the NAIA Expressway by way of a direct/cash subsidy that will be made available to the BOT proponent after Phase 2 is awarded. The magnitude of the cash subsidy will be the bid parameter for bidding of Phase 2. The bidder asking for the lowest level of subsidy will be awarded the BOT contract.

## **CONCLUSION**

It has long been the national policy of the Government to regard the private sector as the main engine of growth and development. Private sector participation (PSP) is firmly embodied in the country's development policies and strategies. In her 2001 State of the Nation Address, Her Excellency President Gloria Macapagal-Arroyo declared that private sector resources shall be harnessed for the implementation of infrastructure projects.

The BOT Law, as the framework for pursuing BOT projects in the Philippines, provides not only the legal basis for that but also provides a transparent and competitive procurement process for BOT. With the BOT Law and the BOT Center in place, the prospect of keeping a steady flow of BOT projects to continually meet the growing demand for infrastructure services and facilities in the country is bright.

**Annex I**  
**List of completed/operational and awarded transport BOT projects**  
**(as at 31 December 2002)**

Project Name	Sector	Agency	Proponent	Scheme	Estimated project cost (US\$ million)
<b>I. Completed/operational</b>					
1. Light Rail Transit Line No. 3 (MRT 3)	Transport	DOTC	MRTC (Phil.)	BLT	655.00
2. Metro Manila Skyway (Stage 1)	Transport	PNCC/TRB	P. T. Citra/PNCC (Indonesia/Phil.)	JV	419.00
3. Manila-Cavite Toll Expressway	Transport	PEA-TRB	Renong Bhd./PEA (Malaysia/Phil.)	JV	131.00
<b>II. Publicly bid projects</b>					
<b>A. Awarded (under or for construction)</b>					
4. Southern Tagalog Arterial Rd. (STAR)	Transport	DPWH	Stradec (Phil.)	BTO	73.00
5. Manila North Luzon Tollway	Transport	DPWH/TRB	Manila North Luzon Tollways Corp.	JV	370.00
<b>III. Unsolicited projects</b>					
<b>A. Awarded (under or for construction)</b>					
6. Redevelopment of the Port of Irene	Transport	CEZA	Asia Pacific International Inc. (Phil.)	BOT	84.00
7. South Luzon Tollway Extension	Transport	DPWH/PNCC	Hopewell Crown Infrastructure (HCI)	JV	478.00
8. NAIJA International Passenger Terminal 3	Transport	DOTC/MIAA	PIATCO (Phil./Germany/Japan)	BOT	440.00
<i>Total unsolicited projects</i>					<i>1, 002.00</i>
<b>Grand total</b>					<b>3, 652.00</b>

Source: DTI – BOT Center.

**Annex II**  
**Transport projects in the approval process for investment (as at December 2002)**

PROJECT NAME	DESCRIPTION	PRIVATE SECTOR SCHEME	ESTIMATED COST (US\$ million)	STATUS
1. NAlA Expressway Project (BOT component)	Elevated road access to Manila airport facilities from Fort Bonifacio to NAlA Terminal 3 and from NAlA Terminal 3 to MIA Road ending at Roxas Blvd. GOP implementing Phase 1 with P.3.2 billion investment to form part of toll road project	Build-Operate-Transfer (BOT)	131.30	NEDA-ICC 1 <sup>st</sup> pass approval secured in Aug. 2001. Draft contract for submission to NEDA-ICC for the 2 <sup>nd</sup> pass approval.
2. Manila North Harbour Modernization	Modernization of the Manila North Harbour to bring about efficiency and competitiveness in the port's numerous services and activities.	Build-Operate-Transfer (BOT)	60.00	Consultant competitively selected under CCP&P's PDF (ProConsult) to start preparing the F/S and Bid Documents in January 2003.
3. Expanded Motor Vehicle Inspection System	Development of a systematic and comprehensive vehicle testing system to address pollution, accidents and fuel consumption efficiency	Build-Own-Operate (BOO)	60.00	Review of the draft concession agreement by ICC-TWG to be completed in January 2003. BID submission expected in January 2003.
4. LRT Line 1 Extension (Baclaran to Bacoor)	An extension of LRT Line 1 connecting the existing Baclaran station to Bacoor, Cavite initially and up to Dasmariñas, Cavite in the future.		842.49	The project will be submitted as an unsolicited proposal under the BOT Law and will be subjected to a comparative proposal process ("Swiss challenge").
5. MRT 3 Extension (Phase 2)	An extension of the MRT system that will run along EDSA corridor from North Ave. in Q.C. to Monumento	Build-Transfer (BT)	207.10	Negotiations between DOTC and MRTC ongoing regarding ICC conditions for approval.
6. Light Rail Transit Line No. 4 (MRT 4)	A 22.6 km mostly elevated double-track carriageway running from Old Bilibid to Batasan (15.1 km), to Quirino Highway in Lagro (7.5 km)	Build-and-Transfer (BT) and Build-Own-Operate (BOO)	1,000.00	MRTC has reconstituted the PBAC for MRT 4. DOTC to endorse revised proposal to NEDA-ICC.
7. Metro Manila Expressway R 4 & R 5 (PASEX)	Construction of an Expressway link from EDSA to Ortigas Avenue Extension/Marcos Highway.	Build-Operate-Transfer (BOT)	730.00	Revised proposal to be submitted to DPWH.

**Annex II** (continued)

PROJECT NAME	DESCRIPTION	PRIVATE SECTOR SCHEME	ESTIMATED COST (US\$ million)	STATUS
8. North Luzon Expressway Extension Tarlac to Rosario La Union	Continuation of the Clark-Tarlac Expressway. The 84.5 km alignment is a high speed, controlled-access expressway seamlessly interconnected to strengthen the various local, regional and national road development plans and is envisioned to strengthen the north-south backbone of the strategic road network serving the western flank of the Luzon mainland.	Build-Operate-Transfer (BOT)	243.00	DPWH is currently repackaging the project for a public-private partnership scheme.
9. North Luzon Expressway East Quezon City to San Jose City, Nueva Ecija	A 126-km section proposed to start from the Circumferential Roads 5/6 in Quezon City/Bulacan. This will serve the heavily travelled PPH corridor and lead to the non-agricultural areas of San Jose City.	Build-Operate-Transfer (BOT)	351.00	FS/TD under preparation. Awaiting compliance by DPWH of necessary documentation to process for PDF assistance.
10. JPDC-San Fernando Airport Runway Lighting	Installation of airport runway lighting system for night time operations at the San Fernando Airport, La Union.	Build-Transfer (BT)	0.40	JPDC will be reviewing the draft F/S for subsequent submission to the NEDA-ICC.
11. Mindanao Grains Bulk Handling Facility	The project is designed to reduce the transport cost from Mindanao to Luzon.	Build-Operate-Transfer (BOT)	To be determined	Draft paper for an integrated bulk handling facility project and financial analysis for the port terminal project are under review.

Source: DTI – BOT Center.

## PRIVATE PARTICIPATION IN THE INFRASTRUCTURE PROGRAMME OF THE REPUBLIC OF KOREA

Junglim Hahm\*

### ABSTRACT

*The Private Participation in Infrastructure (PPI) programme of the Republic of Korea was formally launched in 1994. The limited success of the initial efforts and budgetary constraints after the Asian financial crisis of 1997 prompted the Government to take new initiatives in this area. A new PPI law was adopted in 1998, establishing the Private Infrastructure Investment Center of Korea in 1999. The Center acts as a special arm of the Government for the promotion of private sector participation in infrastructure sectors. These initiatives, along with other major reforms in the economy, have helped the renewed PPI programme to make tremendous progress. By March 2003, 130 projects were being implemented. Contracts involving \$ 13 billion of domestic and foreign capital have been awarded. Against this background, this paper provides an overview of the Republic of Korea's PPI programme, its history, successes and failures, and unique features.*

### INTRODUCTION

For the last few decades and especially during the 1970s and 1980s, the Republic of Korea achieved outstanding economic development. Provision of adequate infrastructure facilities was one of the main policies of the Government to help the economy to grow and the results were impressive. In 1994, the Government launched a new Private Participation in Infrastructure (PPI) programme to promote private sector participation in infrastructure development. The PPI

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programme aimed at delivering infrastructure facilities by the private sector in order to reduce the burden on the public budget as well as to exploit the efficiency and creativity of the private sector.

The PPI programme of 1994, however, was not particularly successful in attracting private participation in infrastructure sectors for various reasons. The financial crisis of the late 1990s compounded the problem by imposing severe constraints on the Government in making budgetary allocations to the infrastructure sectors. Faced with this situation, the Government took new initiatives to promote private participation. In 1999, a new PPI programme was launched through the enactment of a PPI Act, which, inter alia, established a special unit, the Private Infrastructure Investment Center of Korea (PICKO), charged with promoting private participation. Under the new law, various incentive packages are offered to the private sector and rules and procedures for project selection, evaluation and approval have been simplified.

These new initiatives along with other major reforms in the economy have helped the new PPI programme to make tremendous progress. Troubled and delayed infrastructure projects under the previous PPI regime were cancelled and efforts were redirected towards facilitating the implementation of more promising projects. By March 2003, 130 projects were being implemented. Foreign investors have invested, or are expected to invest, about \$ 3.5 billion. Contracts involving \$ 13 billion of domestic and foreign capital have been awarded. Against this background, this paper provides an overview of the Republic of Korea's PPI programme, its history, successes and failures, and unique features. Finally, it makes some concluding remarks about the future of the PPI programme in the country.

## **I. POLICIES FOR INFRASTRUCTURE DEVELOPMENT IN THE REPUBLIC OF KOREA**

There have been many changes in infrastructure development policies over the past four decades in the Republic of Korea. In the early 1960s, investment in the transport sector was made mainly in railways with an emphasis on commercial lines. Between 1962 and 1966, investments in railway projects accounted for 64.2 per cent of the total investment in the transport sector. In addition to railways, large

industrial ports were also constructed to handle imported materials. However, the focus of investment in the transport sector shifted from railways to roads with the massive construction of expressways that began in the late 1960s. The two major road construction projects were the Gyeongin Expressway in 1968 and the Gyeongbu Expressway in 1970. Following these two major developments, many other expressways as well as urban railways and container ports were built throughout the 1970s.

The trend of transport infrastructure development in the 1970s continued in the 1980s. This was also a decade marked by massive development of expressways and urban railways. However, over the years the Government had changed its policies for infrastructure development and began to place greater emphasis on balanced regional development. This shift in emphasis led to lesser allocation of funds for transport infrastructure facilities, resulting in heavy congestion problems in the transport system, which in turn necessitated the mobilization of additional resources for capacity expansion.

However, in the 1990s, many national-level prestigious infrastructure projects were also launched, which included the construction of the Gyeongbu High Speed Railway, Incheon International Airport and Gadeok New Port. Although private participation in transport development began in the late 1960s, the introduction of a PPI policy in 1994 provided the first stimulus for its growth in subsequent years. It was also during this period that the importance of transport systems, including logistics and public transportation in major metropolitan areas, began to be widely recognized.

## **II. EVOLUTION OF PPI IN THE REPUBLIC OF KOREA**

Private investment in transport infrastructure development has been sought since 1968 to meet the growing need for capacity expansion and improvement for which sufficient budget allocations were not available. As shown in table 1, by August 1994, 93 projects costing US\$ 2.7 billion were implemented with private investment. As a comprehensive legal system supporting private investment in infrastructure had not been established at this time, each project was promoted under the laws governing each sector such as the Road Act,

Harbour Act, etc. These investments, however, were of limited size, did not cover all sectors, and operation and management of these facilities by the private party that invested in their construction were not permitted.

**Table 1. Private investment in infrastructure, 1968-1994**

Sector	Number of projects	Project cost (millions of dollars)
Roads	6	106
Railroads	12	660
Harbours	52	1,232
Cargo terminals	4	378
Airports	16	256
Power plants	3	71
Total	93	2,703

Source: Kyubang Lee and Byung-rok Song, *New Initiatives for Private Participation in Infrastructure*, (KRIHS, 1998), p. 27.

The PPI programme was launched in 1994 with the adoption of the Promotion of Private Capital in Social Overhead Capital Investment Act. The Act aimed at facilitating PPI through the formulation of consistent government policies across all sectors and the institutionalization of clearly defined procedures to be followed for the involvement of the private sector in infrastructure development and its operation and management. Under the provisions of this Act, the central Government and various local governments in the country announced the launching of a total of 100 private infrastructure projects, 45 by the central Government and the remaining 55 by various local governments.

However, success in the first four years was far less than what was expected. Out of the 45 projects of the central Government, concessionaires were designated for only 10 projects and construction started on just 5 projects. Very little progress could be made with the rest of the projects of the central Government. However, the progress of the projects announced by local governments was much better, as can be seen from table 2. An important feature of all of these projects was that only domestic capital was invested.



**Table 2. Private infrastructure investment, 1994-1998  
(number of projects)**

	<b>Projects under central Government</b>	<b>Projects under local governments</b>	<b>Total</b>
Construction complete	–	6	6
Under construction	5	31	36
In preparation for construction	5	9	14
No concessionaire designated	35	9	44
Total number of projects	45	55	100

*Source:* Kyubang Lee, "Introduction to PPI System and PICKO", paper presented at the Seminar in Commemoration of the Establishment of PICKO, (KRIHS, 1999), p. 30.

As indicated in table 2, the ambitious PPI programme did not result in successful completion of the majority of the projects. No concessionaire could be designated for 44 projects out of the total 100 projects. Insufficient incentive measures, lack of transparency, complicated procedures, non-conformity with global standards and unsatisfactory risk-sharing mechanisms were often cited as causes of dismal performance of the programme. The Asian financial crisis of 1997 worsened the situation further. In 1998, the GDP growth rate hit an unprecedented negative rate of 6.7 per cent, inflation rose to 7.5 per cent and the interest rate reached 15.1 per cent.

The limited success of this initial effort led the Government to introduce a new PPI law for the country, which could revive the programme and address the concerns of private investors. Accordingly, the Act on Private Participation in Infrastructure was enacted in December 1998. This measure was also taken in response to the financial crisis. As tax revenues dropped significantly less resources were available. Furthermore, most of the budget was allocated to industrial and financial restructuring and growing demands for infrastructure development were ignored in an effort to revive the economy.

A comparison of the main features of the old and new PPI regimes is provided in table 3. As can be seen from the table, the new

regime provides for systematic government support, transparent bidding requirements and more incentives for the private sector. These incentives include bonus evaluation points to the initial proposer of unsolicited bids, minimum revenue guarantees, foreign exchange risk guarantees, etc. The amended PPI law also defines clear and simplified procedures to be followed for both solicited and unsolicited projects. It may be mentioned here that the old PPI law did not have any provision for unsolicited projects.

**Table 3. Major changes in the new PPI law**

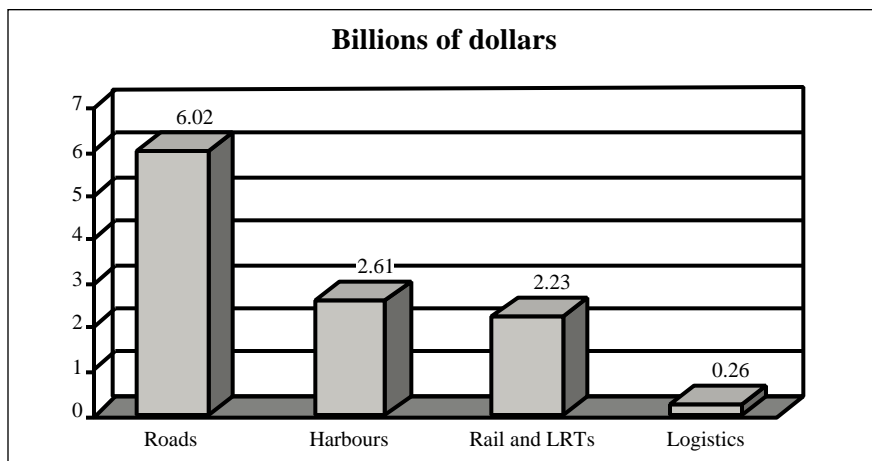
	Previous law	New PPI law
Concession types	BTO, BOO	Unsolicited projects: BTO, BOT, BOO Solicited projects: No limitation
Feasibility study	No requirement	Mandatory
Fiscal support	Fragmentary recognition	Systematic support system: <ul style="list-style-type: none"> <li>– Recognition criteria for unsolicited projects set out in the decree</li> <li>– Minimum revenue guarantee</li> <li>– Foreign exchange risk guarantee</li> <li>– Recognition of buyout rights</li> </ul>
Support agency	–	– Establishment of PICKO and the Infrastructure Investment Fund

*Source:* Jungkyu Lee, “Regulations of PPI Act”, paper presented at the Workshop on Private Participation in Infrastructure, (KRIHS, 2002).

About four years have passed since the new PPI programme was launched. It seems that the renewed efforts of the Government to promote PPI in the Republic of Korea have been successful. The results to date are quite impressive. So far, in the transport sector 37 projects

have been promoted by the central Government and another 92 projects by municipal governments. A significant amount of foreign investment has been attracted; contracts worth \$ 300 million have been signed, and contracts worth another \$ 3.2 billion are expected to be signed soon. Construction of most of the projects for which a concession agreement has been signed has already started.

Contracts of over \$ 13 billion with both domestic and foreign capital have been awarded. Of these, 15 transport projects of the central Government with investments of \$ 11.1 billion accounted for the lion’s share of the total investment. Local governments have signed concession agreements for 63 projects of worth \$ 2.1 billion. Figure 1 shows the subsectoral distribution of these projects in the transport sector.



Source: PICKO.

**Figure 1. Investment in contracts awarded projects by the central Government (as at November 2002)**

In addition to the new projects, measures have been taken to revive projects for which concessions were granted earlier under the old PPI regime. Concessionaires designated under the previous PPI law were given a chance to renegotiate their concession agreements based on the new PPI law in order to take advantage of more favourable conditions now available. Table 4 shows some examples. In all five

projects, either a new minimum revenue guarantee was provided or the level of the previous guarantee was increased from 80 to 90 per cent. The minimum revenue guarantee provision lowers the risk borne by the concessionaire through a government guarantee of projected revenue. Almost every project renegotiated under the new PPI law had a higher internal rate of return (IRR) and some projects benefited from additional government subsidies.

**Table 4. Comparison of conditions before and after renegotiation**

	IRR (real)		Revenue guarantee (percentage)		Government subsidy (millions of dollars)	
	Before	After	Before	After	Before	After
Road A	8.89	9.7	80	90	–	–
Road B	6.81	9.24	80	90	–	350
Port A	7.4	9.5	80	90	–	416
Tunnel A	7.17	9.71	–	90	–	–
Tunnel B	8.06	9.05	–	90	–	26.8

Source: PICKO.

### III. PRIVATE INFRASTRUCTURE INVESTMENT CENTER

PICKO is a public organization, established in April 1999 under the PPI Act. It is located within KRIHS, one of the most prestigious government research institutes, which plays a key role in territorial planning. The establishment of PICKO was designed to meet the need of both the Government and investors concerning PPI services. PICKO's efforts are directed at creating synergies between concerned government agencies and potential investors through the facilitation of PPI projects and by providing technical expertise to both the public and private sectors. Previously, government agencies suffered owing to lack of expertise and absence of standards to apply in the evaluation and negotiation of PPI projects. These deficiencies in public sector capacity caused confusion for investors, particularly foreign ones.

The main role of PICKO is to promote private investment in the Republic of Korea's infrastructure projects, evaluate the feasibility of these projects and provide training and expert services to the government

agencies and the private sector. In the case of unsolicited projects, it is the obligation of PICKO to review the initial proposal at the request of the concerned authority. This is required in order to maintain consistency in project promotion, as unsolicited projects often have a tendency to be implemented without proper study and review of their economic feasibility and desirability. Review of bidding documents, evaluation of proposals and negotiation of concession agreements are also PICKO responsibilities. Table 5 summarizes the nature of the services PICKO has provided and the number of times it has provided them.

**Table 5. Services provided and achievements of PICKO  
(number of services provided)**

Types of work	1999	2000	2001	2002	Total
Review of instructions for proposals	7	7	9	7	30
Review of unsolicited proposals	5	23	19	22	69
Evaluation of proposals	1	2	8	7	18
Negotiation for or review of concession agreements	3	32	23	25	83
Review of feasibility studies, project selection and others	4	8	10	0	22
Total	20	72	69	61	222

Source: PICKO, 2002 Annual Report, (KRIHS, 2003), p. 9.

Another important function of PICKO is to assist the Government in formulating policies related to PPI. This is carried out through various research activities, as well as advisory services to the Government. PICKO also serves as the gateway to the country's PPI market for foreign investors. Since its establishment in 1999, PICKO has regularly organized road shows in various financial centres of the world such as New York, Tokyo, Paris, Sydney and Hong Kong, China.

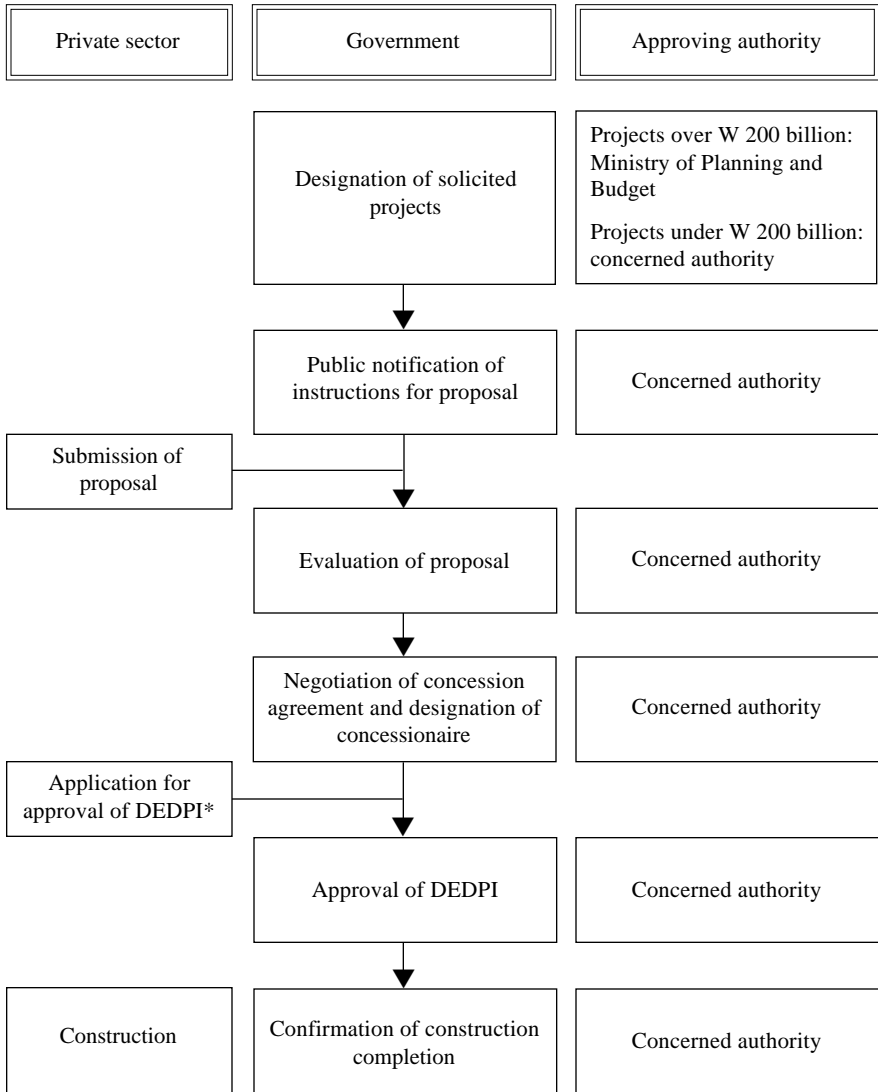
#### **IV. THE CURRENT PPI PROGRAMME**

Thirty-four types of projects are eligible under the PPI Act. These are grouped under 10 broad categories of roads, railways, harbours, culture and tourism, water resources, energy, environment, distribution, airports and communications. If a project falls into any of these 10 categories, it can be evaluated as a PPI project. The method of

implementation must then be decided. The procedure for processing a solicited project has been simplified as shown in figure 2. The process has been modified to encourage competitive bidding for projects that are financially attractive. It also allows for negotiation of the terms of the concession agreement.

The Ministry of Planning and Budget, the concerned authorities and PICKO are involved in the selection of investment projects, evaluation of proposals and negotiation of concession agreements. The concerned authority (for example, the Ministry of Construction and Transportation in the case of transport projects) undertakes the initial activities for project development. The concerned authority is also responsible for approval of the engineering plan and confirmation of project completion.

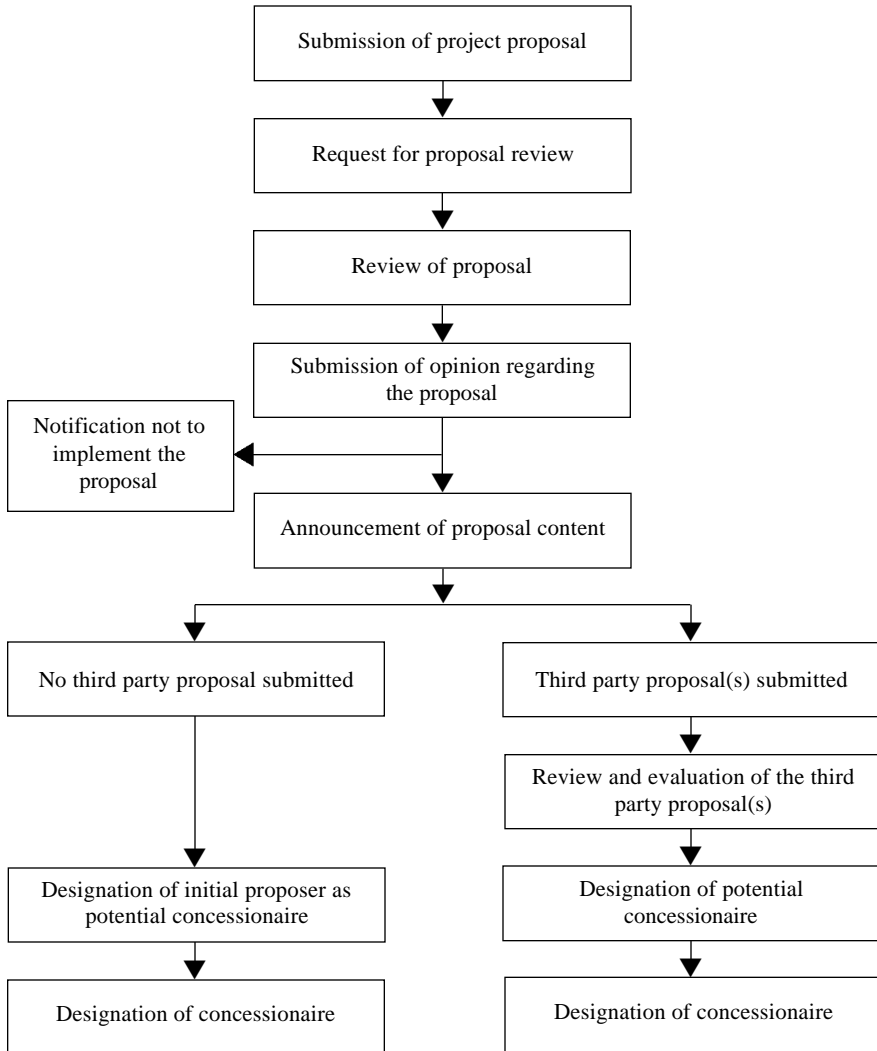
The process for unsolicited project implementation is shown in figure 3. The procedure is similar to that for solicited projects but it also allows proposals from third parties. The private sector sponsor of a project prepares the project proposal and requests PICKO to review it. The project proposal is then evaluated by PICKO. If approved, a public notification of the proposal and its content is made and alternative proposals for the project from third parties are invited. A minimum of 60 days is allowed for submission of proposals by third parties. The proposals from third parties along with the initial proposal are evaluated and a winning bidder is selected. The initial proposer is given a bonus in the evaluation up to a maximum of 10 per cent of the total evaluation score. The project structure is determined through negotiations with the winning bidder.



Source: PICKO, *PPI Program and Investment Projects in Korea*, (KRIHS, 2002).

\* Detailed engineering design and plan for implementation.

**Figure 2. Process for solicited project implementation**



Source: PICKO, *PPI Program and Investment Projects in Korea*, (KRIHS, 2002), p. 16.

**Figure 3. Process for unsolicited project implementation**



## V. INCENTIVES FOR PPI PROJECTS

The financial viability of PPI projects is of great concern to the Government. If a project is found not to be financially viable, then its economic evaluation is reviewed to determine whether the investment is justified in terms of its expected benefits to the economy as a whole. If a PPI project is not financially viable but found to be economically viable, various options are considered for improving the project's financial rate of return. The acceptable financial rate of return of a project is determined by taking into account three main factors:

- (a) The average cost of borrowing for infrastructure projects;
- (b) The risk premium associated with the type and scale of the project;
- (c) The rate of return for similar projects in other countries competing for investor funds.

The reference range for determining the rate of return for PPI projects is 11 to 14 per cent. The rate of return for a particular project is determined through negotiations taking into account the type of project and the level of risk.

Under the new PPI law, the Government can offer a wide range of incentives and take various other measures in order to reduce the risks and uncertainties that may be associated with a PPI project. The incentives are offered in a way that can significantly improve the financial viability of projects and reduce their implementation risks to make them attractive for the private sector. These incentive measures are discussed next.

### ***Land acquisition***

The acquisition of land could be a major source of risk to any investor in greenfield infrastructure projects, particularly road and rail projects. In order to reduce the problems of land acquisition, the Government has given priority to the use of public lands for infrastructure projects. If necessary, the Government on behalf of the investor acquires the private land required for a project. In situations where the investor is required to negotiate with the owners for the

purchase of land, the Government assists the investor through its use of the right of eminent domain.

### ***Revenue guarantee***

Although it is the intention of the Government to identify financially robust projects, it is possible that some of the projects could have a level of risk that is unacceptable to the private sector. Greenfield projects often fall into this category. For high-risk projects, the Government can provide revenue guarantees. Under the PPI Act, the Government can guarantee up to 90 per cent of the projected revenues for solicited projects and 80 per cent of the projected revenues for unsolicited projects. Where these guarantees are provided, the Government also limits the maximum amount of revenues that the project developer can retain. However, this amount would be a minimum of 110 per cent of the projected revenues for solicited projects and a minimum of 120 per cent of the projected revenues for unsolicited projects.

### ***Tax incentives***

PPI projects may also qualify for various tax incentives offered by the Government. These include:

- (a) Exemption from registration tax on the acquisition of real estate for all BOT projects;
- (b) Application from a 0 per cent value added tax for infrastructure facilities or construction of those facilities supplied to the State or local governments as BTO and BOT projects;
- (c) Reduction of or exemption from various appropriation charges;
- (d) Recognition of 8 per cent of the investment as a reserve to be treated as an expense for the purpose of computing corporate taxes.

In addition, the project company may issue infrastructure bonds with a tax rate on interest earned of only 15 per cent.

### ***Foreign exchange risk***

Since the economic crisis of the late 1990s in East Asia, one of the serious concerns in the minds of foreign investors in Asia relates to foreign exchange risk. The revenues generated from the services provided by infrastructure projects are primarily in won. Therefore, the Government has undertaken initiatives to limit the investor's risk from foreign exchange fluctuations. Where foreign exchange fluctuations exceed 20 per cent, up to 50 per cent of losses due to such fluctuations may be offset through modifications of tariff rates, government subsidies, adjustment of the concession period or other provisions.

### ***Force majeure***

The PPI law provides for government buyout of a project in cases of prolonged force majeure. Government buyouts may also apply in certain extraordinary circumstances as provided for in the concession agreement.

### ***Protection against reduction of tariffs or shortening of concession period***

Another incentive is protection from a reduction of tariffs or the concession period if the project developer is able to reduce construction costs below those estimated in the agreement. However, this implies that there would be no adjustment if construction costs exceed the original estimate.

## **VI. THE 10-YEAR PLAN FOR PPI**

In 2001, the Government of the Republic of Korea formulated the 10-year plan for PPI with the main objective of inducing greater private sector participation in infrastructure projects through maximization of the leverage effect of government incentives for PPI projects. The plan provides clear guidance to the private sector concerning the infrastructure investment policy of the Government and priority areas of investment. The PPI plan includes a list of 179 selected candidate projects for private investment over the plan period from 2002 to 2011 by considering their investment priority within each of the five

sectors of infrastructure namely, roads, railways, ports, the environment and other facilities. By providing preliminary information on candidate projects, the plan is intended to prevent interested parties from duplicating their efforts in initial project development activities. It would also help to ensure conformity of the PPI projects with the overall development plan for each of the sectors.

The following general principles were applied in the selection of candidate projects incorporated in the plan. First, economically feasible projects were selected by considering their social costs and benefits. Second, projects that were found profitable enough if promoted as private investment projects were selected after considering their individual feasibility. The estimated rate of return on investment, level of effective operation and level of subsidy required were the factors used in determining the profitability of candidate projects. Finally, factors such as the likely concentration of regional development in the future and growth of demand were to be considered. Within the framework of these general principles, the selection criteria for each sector were established in accordance with the characteristics of the individual sectors.

In the road sector, a total of 18 projects (total project cost: W 18.87 trillion) were selected, consisting of 10 expressways, 4 bypass roads and 4 local roads. In the railway sector, a total of 15 projects (total project cost: W 13.30 trillion) were selected. These consisted of 3 main line railways, 2 metropolitan railways, 3 urban railways and 15 light rail transit (LRT) projects. In the port sector, 29 projects (project cost: W 7.0018 trillion) consisting of 23 trading ports, 2 fishing ports, 3 waterfront facilities and 1 combined passenger terminal facility were selected. In the environmental sector, a total of 39 projects (project cost: W 3.9425 trillion) consisting of 51 sewage treatment plants, 11 incineration facilities, 17 sewage sludge treatment facilities, 8 landfill gas plants, 1 food waste recycling facility and 1 refuse-derived fuel facility were selected. In the category of other facilities, a total of 20 projects (project cost: W 20.537 trillion) were selected. These projects consisted of 2 logistics projects, 13 energy and 5 tourism sector projects.

The total cost of the 179 selected private investment projects is approximately W 63.2 trillion. The net private investment is estimated at W 46.7 trillion excluding government subsidies. Of these, the total project cost for transport facilities is about W 40 trillion and the net private investment is estimated to be W 26.1 trillion. The total project cost for environmental, tourism and energy projects is estimated at W 23.2 trillion with W 20.6 trillion as net private investment. When the energy projects are excluded, as the energy sector is expected to be privatized, the net private investment in environmental and tourism projects is estimated at W 6.2 trillion.

Additionally, a review of the plan for revisions and improvement is planned to be carried out every three years in order to respond promptly to changes in the environment and conditions of the PPI market. In order to accomplish the long-term goals of the plan, a comprehensive management system is needed to divide the roles of government-financed projects and private investment projects and ensure complementarity between the two types of projects.

By implementing the plan, adequate private investment is expected to flow into the Republic of Korea's infrastructure market. This would enable the Government to allocate more funds from its limited resources to expand infrastructure facilities in underdeveloped areas of the country. Implementation of PPI projects would increase the effectiveness of resource allocation by reinforcing the principle of "he who benefits, pays" as the PPI facility users are directly responsible for paying. Within a 10-year period, the Republic of Korea is expected to take the lead in the market of private investment infrastructure projects.

## **VII. RECENT TRENDS IN THE PPI MARKET**

The number of unsolicited projects has been growing since 1999. There were 5 projects in 1999, 23 in 2000, 19 in 2001 and 19 projects in 2002 (as at August). Over these four years, while the road sector has maintained its dominance, the number of environmental projects has soared. In the beginning, most of the unsolicited projects were small ones with a relatively low investment priority, but the trend has changed. The size of unsolicited projects is growing larger and now they rank

high in the Government's investment priorities. One example is the Seoul to Bundang railway project at a cost exceeding \$ 1.6 billion. This railway will link the capital city to Bundang, which is one of Seoul's largest satellite cities.

### **CONCLUDING REMARKS**

The economy of the Republic of Korea has recovered from the Asian crisis of the late 1990s with a wide range of government-initiated reforms, including more transparent and accountable corporate governance, the breakup of the old government-backed chaebol conglomerate system and a major clean-up of the financial and banking sectors. Growth of GDP was strong in the years immediately following the crisis, and growth for this year and the next are projected to be at or above the long-term projection of 6 per cent per annum. The rate of inflation has remained under control, interest rates are low and decreasing steadily and the currency exchange rate has been stable. With these sound economic indicators, no sudden downturn is expected in the economy in the foreseeable future. However, continuing volatility in global financial markets and uncertainties from the nuclear situation in the Democratic People's Republic of Korea may cause instability in domestic markets and harm the investment environment.

A growing economy creates massive demand for infrastructure facilities. The Republic of Korea continues to place high priority on stable and sustainable development of the country, for which the provision of high-quality and adequate infrastructure facilities is essential. It is estimated that over the next 10 years more than \$ 150 billion of investment will be required to meet the growing needs for new and improved infrastructure facilities in the country. The PPI programme of the Republic of Korea is envisaged to meet a large part of this massive investment requirement and thereby to help lay a strong foundation for the country's bright future.

## REFERENCE

- Lee, Jungkyu, 2002. "Regulations of PPI Act", paper presented at the Workshop on Private Participation in Infrastructure, (KRIHS).
- Lee, Kyubang, 1999. "Introduction to PPI System and PICKO", paper presented at the Seminar in Commemoration of the Establishment of PICKO, (KRIHS).
- Lee, Kyubang and Byung-rok Song, 1998. *New Initiatives for Private Participation in Infrastructure*, (KRIHS).
- Lee, Kyubang and Ha-joong Yoon, 2002. *The Ten-Year Plan for Private Participation in Infrastructure*, (KRIHS).
- PICKO, 2002. *PPI Program and Investment Projects in Korea*, (KRIHS).
- PICKO, 2003. *2002 Annual Report*, ( KRIHS).
- Song, Byung-rok and Junglim Hahm, 2002. *Proposals for the Development of Korean PPI System*, (Ministry of Planning and Budget).

## **ROLE OF THE INFRASTRUCTURE INVESTMENT FACILITATION CENTRE IN THE DEVELOPMENT OF PRIVATE SECTOR INFRASTRUCTURE IN BANGLADESH**

Nazrul Islam\*

### **ABSTRACT**

*The Government of Bangladesh has established a special entity called the Infrastructure Investment Facilitation Centre to promote private sector participation in the infrastructure sector. IIFC provides professional services to ministries and government agencies concerning the development of infrastructure projects by the private sector. It also provides assistance to the Government in policy development and establishing regulatory frameworks for creating an enabling environment for private participation in the infrastructure sector. The paper highlights the need for an inside sponsor, draws attention to the significance of activities at the project development stage and focuses on the overall project development process conceptualized by IIFC. It discusses the different steps followed in the process and the role of IIFC at these stages. It also discusses the functions and characteristics of IIFC as an inside sponsor of private sector infrastructure projects and draws conclusions based on the experience of IIFC.*

### **INTRODUCTION**

The Government of Bangladesh has adopted the policy of implementing infrastructure projects through involvement of the private sector. However, with the exception of some success in the power, gas and telecom sectors, private infrastructure development has been quite slow in the country. The insufficient provision of infrastructure facilities

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\* Based on a paper presented by Mr. Nazrul Islam, Executive Director and CEO, Infrastructure Investment Facilitation Centre (IIFC), Dhaka, at the Consultative Meeting on Public-Private Partnerships for the Delivery of Basic Services organized by ESCAP at Bangkok on 27 and 28 March, 2003.



has seriously affected the growth and competitiveness of the economy. This has prompted the Government to take new initiatives to promote private sector participation in infrastructure development. As a part of this new initiative, the Government has undertaken a project called the Private Sector Infrastructure Development Project (PSIDP).

The PSIDP project has two components: project financing and transaction development. The financing component is being implemented through a \$ 225 million fund lent to the Infrastructure Development Company Ltd., which arranges financing of private infrastructure projects. Under the second component of transaction development, a special unit called the Infrastructure Investment Facilitation Centre (IIFC) was created with the long-term objective of establishing an efficient public-private interface as well as for the purpose of developing the front-end stages of private sector infrastructure investment projects.

In addition to project development, IIFC assists the Government in establishing the private sector policy and regulatory frameworks. IIFC does not encroach on the technical and contracting functions of the public sector infrastructure agencies but supports their efforts by providing high-quality professional expertise where required. It has also a plan to develop a knowledge bank to sustain the private infrastructure efforts of the Government.

The paper focuses on the project development process followed by IIFC. It discusses the different steps followed in the overall process of project development and the role of IIFC at these stages. It also discusses the functions and characteristics of IIFC as an inside sponsor of private sector infrastructure projects and provides a list of activities undertaken so far. Finally, it draws conclusions based on the experience of IIFC since its inception in 2000.

## **I. STRUCTURE AND FUNCTIONS OF IIFC**

### **A. Formation of IIFC and its objectives**

IIFC was incorporated as a company limited by guarantee under the Companies Act 1994 and became operational in January 2000. The

company was established with support of the donors under the terms of the following agreements:

- (a) A development credit agreement between the Government of Bangladesh and International Development Association (IDA);
- (b) An agreement between the Government of Bangladesh and the Department for International Development (DFID) of the Government of the United Kingdom of Great Britain and Northern Ireland;
- (c) A memorandum of understanding between the Government of Bangladesh and the Canadian International Development Agency (CIDA).

The above agreements were to provide financial support for a period of three years, after which IIFC was expected to operate on a commercial basis. However, a no-cost extension of one year is currently under review.

IIFC facilitates private sector participation in infrastructure development. Its mission is to be recognized globally as the country's centre of excellence in infrastructure investment and to foster the economic development of the country by promoting and facilitating private investments in infrastructure development.

The main objectives of IIFC are:

- (a) To introduce, promote and assist all forms of private sector participation in Bangladesh for the development and improvement of infrastructure sectors, namely, power, energy, telecommunication, water, waste-water, transportation, water management and municipal services;
- (b) To assist and advise ministries, government departments, agencies and other public sector bodies with the identification, prioritization, preparation, evaluation, award and implementation of infrastructure projects in which the private sector may participate;
- (c) To create an interest in the private sector in investing in infrastructure projects in Bangladesh by disseminating information within Bangladesh and abroad about the opportunities.

The following sections provide some details on IIFC's structure and the support provided by donors in its formation.

### **B. Organizational structure**

IIFC is managed by a seven-member Board of Directors, with three directors from the public sector, three directors from the private sector and the Chief Executive Officer of IIFC, who is an ex officio member. The Secretary of the Economic Relations Division of the Ministry of Finance is the chairman of the Board of Directors. It had a total planned strength of 17 staff members. However, because of a reduction in funding by IDA, due to a two-year delay in operationalization of IIFC, IIFC has always had to function under severe staffing constraints. Consequently, it has operated primarily through managing consultants provided by donors.

### **C. Major functions**

#### ***Development of projects for private sector participation***

IIFC has been involved principally with the development of a large variety of infrastructure projects for participation by the private sector. However, its activities are not limited to developing investment projects. It also undertakes non-investment projects. The broad types of projects where they have provided advisory and other services include:

- (a) Development of large investment projects for the private sector;
- (b) Restructuring and commercialization of existing public sector projects;
- (c) Capitalization of infrastructure projects;
- (d) Policy development projects;
- (e) Management contracts;
- (f) Development of small investment projects for the private sector.

### ***Non-investment projects***

IIFC is also involved in developing non-investment projects that do not require any substantial private investment in the near future. Private sector participation in these projects is envisaged mainly by providing management expertise and technical know-how. The Government attaches priority to pursuing its policy of commercializing existing public assets and introducing private sector participation in the form of outsourcing, management contracts etc. in order to improve the efficiency of the public sector enterprises. Private investment in assets is planned at a later stage after these enterprises are restructured. Pursuant to government policy, advising on restructuring and commercialization of public sector enterprises is a major area of activity of IIFC.

### ***Policy development work***

IIFC assists the Government in private sector policy development. It is involved in assisting the Government in creating an enabling policy and regulatory environment conducive to private sector participation in the infrastructure sectors. The policy development services, provided by IIFC through technical services agreements (TSAs), are examples of such activities.

## **D. Donor support**

Currently, donor support plays a vital role in carrying out the activities of IIFC. It is supported by two consortia of consultants for carrying out the development of investment and non-investment projects, business development work, promotional activities and capacity-building. DFID and CIDA have appointed two consulting firms to provide consultants to IIFC and give funding support for the consultants. IIFC has call-down arrangements with the consulting firms for rapid mobilization of consultants from the proposed date of engagement by a ministry or government agency. In addition to funding support from CIDA and DFID, IIFC also received financial resources from IDA to hire consultants and meet the establishment costs of IIFC. The Government has also committed itself to providing financial resources towards IIFC's establishment costs.

## **II. THE ROLE OF IIFC AS AN INSIDE SPONSOR FOR PRIVATE SECTOR INFRASTRUCTURE PROJECT DEVELOPMENT**

### **A. Development of public and private infrastructure projects**

An infrastructure project may be carried out through either conventional public financing (a “public infrastructure project”) or private financing (a “private infrastructure project”). Public infrastructure projects are typically financed, owned and operated by government agencies. A government agency is responsible for executing and operating a project after its commissioning. Since the Government owns the project, the implementing agency of the concerned ministry acts as the sponsor or developer as well as the operator of the project. The implementation of a public infrastructure project can be represented by the following phases:

(a) The development phase. This involves project identification and its structuring, choice of technology, preparing concept papers, conducting feasibility studies, seeking government and donor financing, and facility construction.

(b) The operational phase. This concerns operating the facility, collection of revenues and timely maintenance of the assets.

It is now widely accepted that a government agency in most countries is unable to efficiently operate an infrastructure facility in the operational phase. There could be many reasons for this inefficiency, including lack of business motivation, low revenue collection arising from high system losses or inability to collect payments from sister government agencies and deterioration of assets due to lack of timely maintenance. However, what is generally not easily perceived is that a government agency may also not be efficient in the role of a project developer during the development phase. Some of the reasons for government being a poor developer are provided below:

(a) Inappropriate project identification;

(b) Lack of experience and low in-house skills in project development;

- (c) Lack of commercial focus;
- (d) Change in project personnel;
- (e) Vested interests;
- (f) Undue donor influence;
- (g) Slow engagement of consultants.

The poor performance of an operator in the operational phase can be clearly evidenced by operating losses or an unsatisfactory level of service. However, much of the poor performance could be due to faults at the project development stage. Critical activities at the development stage such as estimation of demand, project structuring, choice of technology and financing arrangements could seriously affect the outcome of a project. Poor project development could manifest itself in time overruns (usually referred to as implementation delay) and cost overruns, higher operating cost and lower revenue earnings. The achievement of a project's objectives, therefore, depends greatly on the performance of project development activities.

A private infrastructure project is defined as one in which the development, engineering, financing, procurement, construction and commissioning are carried out through a private sector developer, investor or sponsor (herein called the "outside sponsor"). Such a project is usually project-financed, also called off-balance sheet financing. The project assets and cash flows from it are used for debt financing. This type of financing differs from corporate financing or sovereign financing, which is done on the basis of the borrowers' balance sheet. Project financing usually entails detailed contractual relationships and obligations. In this respect, the examination of the fundamentals of a project under project financing arrangements for a private infrastructure project is far superior when compared with a public sector project.

However, as government restrictions generally apply to entry into the infrastructure sectors, an outside sponsor cannot carry out all the required activities in the project development phase without the approval of the Government. For a public infrastructure project, the participation of an outside sponsor or the private sector requires the government agency to bid out the project. But in order to bid out

a project, it has to be developed first. The activities in the development phase relate to project identification and structuring, feasibility study, development of a contractual framework, allocation of risks and negotiation with the outside sponsor, which require specialist skills within the government agency. However, the required skills and capacity to undertake these activities may not always be available to government agencies dealing with infrastructure projects. Many Governments have established a special unit in government that can play the role of the inside sponsor to address the capacity problem of the public sector.

A non-infrastructure project, however, can be taken up by a private sector investor at any time, provided normal government approvals are obtained. There is no contractual link between the government and the private investors. A private investor can undertake a non-infrastructure project in accordance with the market demand and its assessment. As there is no bidding requirement for non-infrastructure projects, an investor can take up a non-infrastructure project, for example a cement factory, at any time.

However, private investors are not “free” to undertake an infrastructure project whenever they want or even when demand for such a facility exists. For example, despite an acute shortage of power in the country, private investors cannot build power plants until the Government requests bids or the market is unbundled. The Government has to bid out infrastructure projects (neglecting unsolicited proposals which are non-transparent). Without the bidding process, private investors cannot come forward. This is the central bottleneck to all private sector investment in infrastructure. Removing this bottleneck could achieve a much greater level of private participation in the infrastructure sector.

There is also a general lack of understanding about the procedural matters in the promotion, selection and approval of private infrastructure projects. In the absence of a special facilitation unit, the procedures followed by agencies are often different, which creates confusion in the minds of investors. Furthermore, planning and implementation of private sector infrastructure projects need to be integrated with the national planning process in order to ensure complementarity between private sector and public sector projects and optimum allocation of resources

across all sectors. The need for an inside sponsor or a private sector participation unit arises as a means to accomplish these objectives.

### **III. THE PROCESS OF PRIVATE INFRASTRUCTURE DEVELOPMENT**

IIFC has conceptualized a seven-stage process for the implementation of private sector infrastructure projects. Project identification in the overall process would be linked to the annual development programme of the Government, which is prepared by the concerned ministries. This section provides details on the seven stages of implementation from project identification to construction and the role of IIFC as an inside sponsor and the private sector at these stages.

#### **A. The seven stages of the project implementation process**

IIFC facilitates the implementation of solicited infrastructure projects by the private sector. It has conceptualized a seven-stage process for this purpose as illustrated in figure 1. The figure also lists the key activities at each of these seven stages. In this process, it is envisaged that IIFC, as the inside sponsor, would match the technical, financial, commercial, legal and negotiation skills of the private investors. The speed and flexibility of employing reliable consultants by IIFC to undertake project development activities should also be similar to that of the private sector.

In *Stage 0*, IIFC selects a potential infrastructure project after discussion with the concerned ministry or public agency. Social objectives of the Government and public service obligations that may need to be included should be considered at this stage. Project identification skills are extremely important for this stage. Otherwise, time and effort are wasted in the end. Government commitment to project development is important for IIFC. This is obtained by making a development services agreement (DSA) with the government agency (figure 2). The signing of a DSA may take between two months and one year, and in some cases longer than that.

In *Stage I*, project ideas are further developed and the feasibility study is undertaken. Major technical and transaction parameters are



also identified and agreed upon at this stage. IIFC engages its own staff and consultants, who may be expatriate or local, to carry out these tasks. It mobilizes experienced consultants very quickly. Rapid deployment of consultants (within a target period of one month) is achieved through arrangements with consulting firms appointed through donor support as mentioned earlier. Funds available from IDA may also be used for engaging consultants. However, use of such funds is limited as recruitment of IDA-funded consultants may require a much longer time to meet their procedural requirements.

*Stage II* is the most critical phase in the process. It relates to preparing the commercial framework of the project, obtaining agreement of government for pre-qualification documents, inviting expressions of interest from the private sector and making a shortlist of prospective developers, and developing a model contractual framework. In situations where precedence for private investments does not exist and the approval process is unclear, government decisions at various levels could be slow and sometimes unfavourable to private investment. Lack of knowledge and experience compounds the problem. The model concession agreement prepared at this stage also provides for risk allocation between the private and public sectors.

In *Stage III*, project promotion takes place. Bids are invited from the short-listed bidders. With assistance from IIFC, bids are evaluated and the Government approves the successful bidder. This stage ends with the selection of the private project developer.

In *Stage IV*, IIFC assists the concerned government agency in negotiating the project with the selected project developer. Assistance is provided in the negotiation process in matters related to technical, commercial, financial and legal aspects of the project. This stage ends with the signing of the concession agreement between the government agency and the private sector project developer or outside sponsor (figure 2). Stages III and IV represent the handover phases from IIFC to the project developer. It is evident from figures 1 and 2 that IIFC as the inside sponsor invests its time, money and skills in project development from Stages 0 to IV, while the private investor takes up the responsibility from Stage IV onwards.

	Stage 0	Stage I	Stage II	Stage III	Stage IV	Stage V	Stage VI
	<b>Business development</b>	<b>Feasibility</b>	<b>Commercial framework</b>	<b>Evaluation</b>	<b>Negotiation</b>	<b>Financing</b>	<b>Construction</b>
<b>Stage completion milestone</b>	<b>DSA signed</b>	<b>Feasibility study completed</b>	<b>Issue request for proposal (RFP)</b>	<b>Issue letter of Intent (LOI)</b>	<b>Sign agreement</b>	<b>Financial closure</b>	<b>Start of commercial operation</b>
<b>Processes and actions</b>	<ul style="list-style-type: none"> <li>• Select project meeting criteria:                             <ul style="list-style-type: none"> <li>– Government commitment</li> <li>– bankability</li> <li>– project size</li> <li>– other competing projects</li> </ul> </li> <li>• Prepare and submit DSA</li> <li>• Sign DSA between ministry/agency and IIFC</li> </ul>	<ul style="list-style-type: none"> <li>• IIFC engages consultants</li> <li>• Elicit project ideas</li> <li>• Define the need</li> <li>• Identify and agree major technical and transaction parameters</li> <li>• Complete feasibility study</li> </ul>	<ul style="list-style-type: none"> <li>• Develop action plan</li> <li>• Select project concepts</li> <li>• Prepare commercial framework</li> <li>• Obtain agreement of ministry on pre-qualification documents</li> <li>• Obtain expressions of interest and shortlist</li> <li>• Prepare model agreements</li> <li>• Prepare bidding documents</li> <li>• Issue RFP</li> </ul>	<ul style="list-style-type: none"> <li>• Hold bidders conference</li> <li>• Shortlist bidders and prepare bids</li> <li>• Government receives bids and prepares evaluation report</li> <li>• Government approval of successful bidder</li> <li>• Issue LOI to successful bidder</li> </ul>	<ul style="list-style-type: none"> <li>• Prepare for negotiations</li> <li>• Carry out negotiations between sponsor and Government entities</li> <li>• Signing of agreement between Government and successful bidder (outside sponsor)</li> </ul>	<ul style="list-style-type: none"> <li>• Outside Sponsor makes loan applications to commercial lenders</li> <li>• Commercial lenders perform due diligence</li> <li>• Government and outside sponsor renegotiations for lenders' requirements</li> <li>• Loan documents prepared</li> <li>• Financial closure</li> </ul>	<ul style="list-style-type: none"> <li>• Carry out contract administration functions</li> <li>• Oversee construction by lenders' engineer</li> <li>• Conduct satisfactory completion tests</li> <li>• Commercial operations date</li> </ul>

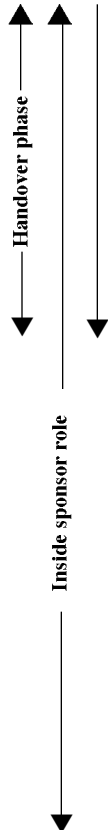
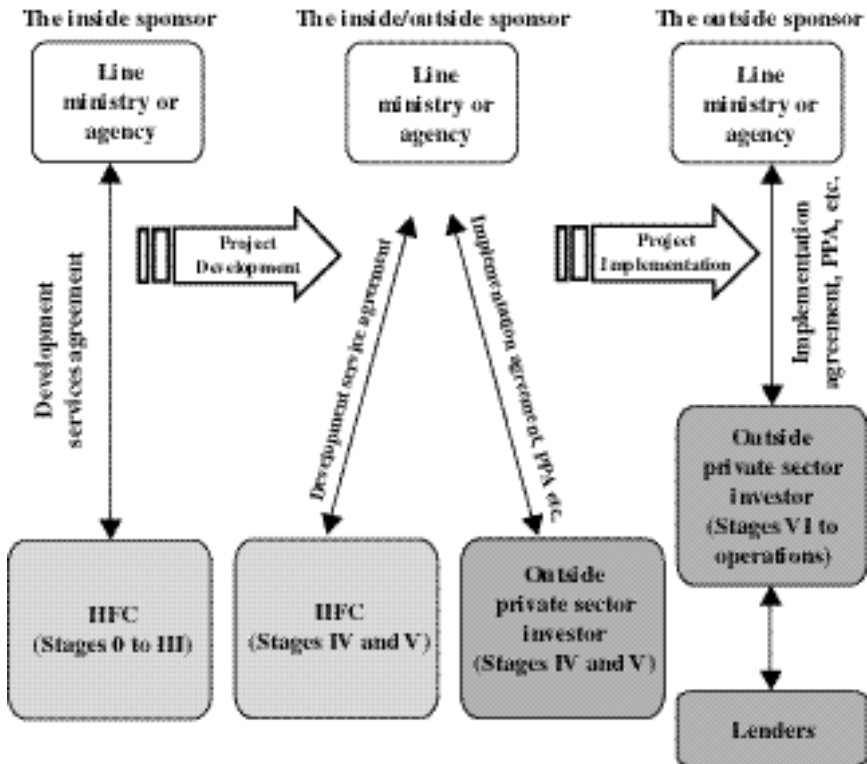


Figure 1. Key stages in project development



Note: PPA = power purchase agreement.

**Figure 2. Changeover from inside sponsor to outside sponsor**

In *Stage V*, the selected project developer seeks financing from different lenders and this stage ends with financial closure of the project.

In the final *Stage VI*, with equity and loan funds in place, the developer engages the construction contractor and physical construction starts. At the end of this stage, the facility goes into commercial operation.

**B. Change in project development from inside sponsor to outside sponsor**

As already explained in the previous section and shown in figure 2, IIFC plays the role of the inside sponsor primarily between

Stages 0 and IV and carries out project development activities in these stages. These activities are carried out through an agreement with the concerned ministry or government agency. Stages III and IV are the handover phases. From Stage V onwards, the outside sponsor or project developer takes over with the execution of a contract agreement between the developer and the Government.

### **C. The risk profile for IIFC as the inside sponsor**

IIFC invests its time, effort and venture capital at the front end of project development, primarily from Stages 0 to IV. This period of development is the most risky phase for a private sector infrastructure project. IIFC seeks to work on a success fee basis and recovers its development costs from the winning bidder after the completion of Stage IV, i.e., signing of an agreement between the bidder and the Government. The cost of project development is met out of venture capital provided to IIFC. However, for various reasons activities on many projects may have to be terminated at any phase before successful completion of Stage IV. In such cases, IIFC would lose its investment in project development. If the proportion of these unsuccessful projects becomes high, IIFC is exposed to large development risks.<sup>1</sup>

The risk faced by IIFC arises owing to various reasons, which include:

- (a) Project concepts very fluid;
- (b) Lack of commitment by the Government;
- (c) Lack of knowledge;
- (d) Deficiencies or lack of policies;

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<sup>1</sup> Risk is a perception of difficulties that IIFC may face during various stages of project development, which may cause termination of activities by IIFC at any point before successful completion of Stage IV of a project. Risks may arise owing to technical, financial, commercial, political and regulatory factors. As risk may be considered as the chance that a project successfully completes its Stage IV, the perceived risk of project development decreases as a project progresses over its development stages. However, when the risk of project termination is assessed separately for each individual stage of project development, the risk is highest in Stage II.

- (e) Vested interests;
- (f) Union pressure;
- (g) Uncertainty in project design;
- (h) Uncertainty in costs;
- (i) Uncertainty in viability;
- (j) Uncertainty in regulatory regime.

Figure 3 illustrates the risk levels faced by IIFC while it spends funds to develop a project. It also shows the progress in increase of project value and the typical cost profile of IIFC at each of the stage of project implementation. Risk (and cost) begins with Stage 0, when IIFC carries out its business development activities and eventually signs an agreement (DSA) with the concerned ministry or its agency. This is the most risky stage for IIFC as project structure and its viability, government commitment, investors' interest, etc., are all unknown. A DSA establishes government commitment to go forward with the project with private sector financing instead of public sector financing. The DSA reduces IIFC's risk arising from lack of government commitment.

After making a DSA with the Government, IIFC mobilizes consultants to carry out the feasibility study of the project. The consultants for activities in Stage I are easily found, but care is taken to ensure that at least half of them have experience in designated activities in Stages I to V; otherwise, further progress becomes difficult. A feasible project at the end of Stage I validates IIFC's selection of the project and thereby further reduces the risk faced by IIFC. By this time, many of the project details are known and this creates project value, which is typically in excess of the costs to IIFC.<sup>2</sup>

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<sup>2</sup> Project value at any point during project development is defined as the price that a developer would be willing to pay for making an entry into the project at that point. For example, a power purchase agreement (PPA) in India may sell for \$ 2-3 million. The project value may not be positive in the initial stages but should become positive over the successive stages of development.

**Figure 3. Risk level and cost of IIFC and project value at different stages of development**

In terms of risk involvement, Stage II is the most crucial one for IIFC. This stage also requires highly experienced IIFC staff and consultants to develop the commercial framework for the project. Successful marketing of an infrastructure project depends very heavily on this framework as it considers risk allocation between the Government and the private developer, fiscal and other incentives, form of private participation and its terms, regulatory mechanism, bidding parameters, etc. After developing the model contract agreement and obtaining the Government's approval of it, the next important activity of this stage is the issuance of a request for a proposal (RFP), which indicates the final commitment of the Government to proceed with the project as a private infrastructure project. The chances of a project stalling are highest at this stage. With the successful completion of this stage it is known that credible bidders are willing to invest in the project. As such, considerable reduction in IIFC's risk and increase in project value take place with the end of this stage.

Stage IV involves negotiations with the preferred bidder and ends with the signing of the concession agreement. The signing of the negotiated agreement reflects commitment by the investor and reduces IIFC's risk further. The signed agreement has a good value for the project developer since it gives the developer the right to implement a financially viable infrastructure project and also provides a basis for borrowing money from lenders. With the successful completion of this stage, IIFC's risks as well as role are reduced sharply, as the sponsorship of the project changes hands.

It is evident from the discussions above that IIFC as the inside sponsor enters into the project implementation process much earlier (Stage 0) than the outside sponsor (Stage IV) and the lenders (Stage VI). In terms of project development, IIFC is involved at times when risks are extremely high. Only successful management of the various sources of risks can allow a project to move through the various stages towards its financial closure and from there to construction and commercial operations.

## **IV. CHARACTERISTICS OF IIFC AS AN INSIDE SPONSOR**

### **A. Business strategies**

IIFC is expected to operate on a commercial basis after the initial phase of three years. In order to perform its functions on a commercial basis, IIFC has developed a set of key business strategies, which include:

(a) Advise, guide, promote and support private sector participation in the light of government policies, actions by ministries and their agencies and market demand. However, IIFC would not be a party to any agreement or transaction between the Government and the private sector developer;

(b) Be selective in choosing projects to secure the maximum impact from limited resources;

(c) Stress transparency in all activities of public interest;

(d) Operate in a commercial manner, securing cost recovery for services provided where possible;

(e) Operate through a small number of highly qualified professional staff and supported by swift deployment of consultants, usually within one month;

(f) Segregate and earmark the private sector projects through the annual development programme at the national level.<sup>3</sup>

### **B. Policy versus transaction focus**

IIFC has adopted a strategy of focusing mainly on specific transactions or projects and resolving the pertinent policy issues contractually on a case-by-case basis, rather than pursuing wider policy

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<sup>3</sup> IIFC is advocating the adoption of the "Private Sector First Policy" by the Government. Under the policy, a separate annual development programme (ADP) would be prepared for the private sector. The idea is that the private sector will have the first right to implement infrastructure projects included in this ADP in preference over the public sector. The policy is being discussed and is under active consideration by the Government.



and sectoral reforms at the beginning. It does not devote limited resources to prepare studies that are not directly linked to specific transactions. It is, however, recognized that in the long run, transactions or project-related activities could be constrained by lack of appropriate policies and deficiencies in the legal and regulatory environment. As such, IIFC also pursues policy and sector reforms in support of private sector participation in the infrastructure sector.

An example in this regard is the preparation of the “Private Sector First Policy”, a policy document for the Government that defines government policies and strategies in support of private sector participation.<sup>4</sup> It outlines the roles of the Government and IIFC in supporting the private sector. It also describes the mechanism through which prospective private sector projects could be identified and included in the Government’s annual development programme and their consistency with the existing plans and other projects ensured.

### **C. Operating policy and procedure**

Based on its experience of about three years of operation, IIFC has developed a set of operational policies and procedures. These are as follows:

(a) IIFC would respond to requests from government ministries and agencies for assistance. Where assistance can be given, IIFC would enter into an agreement with the concerned ministry or its agency. This would be in the form of a DSA for investment projects and TSA for non-investment projects;

(b) IIFC would work on a success fee basis and seek to recover costs at different stages of project development, primarily from transaction projects;

(c) As IIFC’s work would form the basis for negotiations with a private party, IIFC, its consultants and funding agencies would maintain full commercial confidentiality of the concerned project;

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<sup>4</sup> The draft “Private Sector First Policy” is available at <[http://www.iifc.net/psf\\_policy\\_revised\\_date\\_20jan03.pdf](http://www.iifc.net/psf_policy_revised_date_20jan03.pdf)> (2 June 2003).

(d) IIFC's impact could be greatest if it is involved in the commercialization stages of project development (i.e., from Stage II onwards), with some input into Stage I. IIFC's policy is thus to enter after the completion of feasibility studies. A number of government departments and agencies supported by bilateral and multilateral institutions carry out such studies at present, and IIFC's niche will be in the later stages of project development;

(e) IIFC would focus on stranded or underutilized assets of the Government. Value addition to such infrastructure assets is likely to produce considerable benefits to the economy;

(f) Restructuring and commercialization of State-owned enterprises is also an area to be pursued by IIFC. It would assist these enterprises in securing their long-term viability through private sector investment, management and operation.

Generally, the private sector infrastructure projects have low visibility in the national planning process. In order to make them prominent in the national plans, IIFC has proposed to segregate the public sector and private sector infrastructure projects in the next five year plan. It has also proposed through the "Private Sector First Policy" that the Government's annual development programme be formulated with two separate components, the public sector ADP and the private sector ADP.

#### **D. Rapid consultant support**

The consultants currently being used by IIFC are funded by donors. Two consortia of consultants provide support in the areas of project development activities for the investment and non-investment projects, business development work, promotional activities, institutional aspects and capacity-building of public sector officials. IIFC has arrangements with the consortia of consultants for rapid mobilization of consultants from the date of engagement by the Government through either a DSA or a TSA. Rapid deployment of consultants is one of the greatest strengths of IIFC, which has been much appreciated by the concerned ministries and agencies.

## **E. Trust and confidence of the Government**

One of the most critical needs of IIFC is to gain the trust and confidence of the Government. The execution of DSAs or TSAs between the Government and IIFC will become easier once this trust and confidence is built. In order to gain the trust and confidence of the Government, IIFC has adopted the following policies:

(a) As the inside sponsor, IIFC needs to have a genuine intention of assisting the ministries and their concerned agencies in promoting private sector participation;

(b) Rapid mobilization (in one month) of high-quality consultants, experienced in Stages II to V, would be one of the key operational strategies;

(c) There should be a good balance of in-house capacity and skills with those of the outside consultants;

(d) Charging the ministry or its agency for the services provided by IIFC should be avoided. The cost should be recovered by charging the ultimate private sector beneficiary of the services, i.e., the outside sponsor;

(e) IIFC should have in-house knowledge and experience of project development and fully understand the activities in Stages 0 to VI.

## **F. Provider versus procurer model**

The core function of IIFC is to provide advisory services to client ministry or its agencies. IIFC intends to act as the provider of services to them, rather than act as the procurer of consultant services. This approach is consistent with its mandate under its Memorandum of Association approved by the Government. The provider of services model is more proactive and has a commercial focus, which makes it sustainable. Following this approach implies that IIFC needs to have a keen interest in developing its own business in a proactive manner. This model also implies that it should use consultants, where needed, to perform specialist functions. IIFC also seeks to develop its own

in-house skills and capacity in order to deliver services to its clients and use resources more effectively.

### **G. Commercialization and development of in-house skills**

At present, IIFC is providing services to clients, mainly through donor-funded consultancy support. IIFC's own staff provide approximately 20 per cent of the advisory services, while the remaining 80 per cent is provided through hiring consultants. As a long-term development strategy for sustainable operations and part of its commercialization process, IIFC plans to increase and develop its in-house capacity and expertise to provide a larger percentage of the services in the future. IIFC sends its staff to various domestic and foreign training programmes on subjects related to project planning and development. It has been estimated that a transition period of about two years would be necessary to achieve a stage where IIFC could provide 60 per cent advisory services, while consultants could be hired to provide the remaining 40 per cent. IIFC also has a policy to fully commercialize its services as soon as possible. The services of IIFC would then become revenue-earning on a project development basis.

### **H. Transfer of technology**

Transfer of technology is one of the main strategies of IIFC for the development of its in-house expertise. Its policy is to build and develop its own human resources by taking the opportunities presented by the expatriate consultants through transfer of technology from them. In order to achieve long-term sustainability and commercialization, IIFC engages its own staff in each work package of all projects to work closely with the consultants. IIFC also encourages government ministries and their concerned agencies to deploy their own staff to work closely with the consultants.

## V. PROJECT DEVELOPMENT ACTIVITIES BY IIFC

As has been discussed above, IIFC provides its services to its clients by making agreements with them. Since the start of its operations in 2000, IIFC has signed a number of DSAs and TSAs with different ministries and agencies. The table provides a list of such service agreements, many of which have already been completed.

The signing of 17 DSAs and 8 TSAs in its first three years of operation indicates that IIFC has made good progress in providing services to the client ministries and other agencies. Recently, the Planning Division of the Ministry of Planning has signed a TSA for the introduction of private sector infrastructure projects in the national plans. This important policy initiative of the Government is expected to have far-reaching effects on the manner in which infrastructure projects are planned and implemented in Bangladesh.

### List of services provided by IIFC

DSAs	Client ministry/agency
1. Khanpur Inland Container Terminal Project	Bangladesh Inland Water Transport Authority
2. Restructuring and Commercialization Strategy for the Dredger Organization	Bangladesh Water Development Board
3. New River Terminal at Dhaka	Bangladesh Inland Water Transport Authority
4. New Mooring Container Terminal Project	Chittagong Port Authority
5. Public Switched Telephone Network in Selected Areas of Bangladesh.	Bangladesh Telecommunication Regulatory Commission
6. Spectrum Management System Contracting	Bangladesh Telecommunication Regulatory Commission
7. BOT Banglabandha Land Port	Bangladesh Land Port Authority
8. BOT Teknaf Port	Bangladesh Land Port Authority
9. Remote Area Power Supply Systems at Debhata – Assasuni Upazila	Ministry of Energy and Mineral Resources
10. Remote Area Power Supply Systems at Hatibandha – Patgram Upazila	Ministry of Energy and Mineral Resources
11. Remote Area Power Supply Systems at Kutubdia Upazila	Ministry of Energy and Mineral Resources
12. Remote Area Power Supply Systems at Sandwip Upazila	Ministry of Energy and Mineral Resources
13. Motijheel Bus Terminal	Bangladesh Road Transport Corporation

14. Expansion, Modernization and Beautification of the Sadarghat River Port Terminal	Bangladesh Inland Water Transport Authority
15. Restructuring and Commercialization of Biman Bangladesh Airlines	Biman Bangladesh Airlines
16. SSA Patenga-Pangaon Container Terminal	Ministry of Shipping
17. Restructuring and Commercialization of Bangladesh Shipping Corporation	Bangladesh Shipping Corporation
<b>TSA's</b>	<b>Ministry/agency</b>
1. PSP Policy Framework for Ports	Ministry of Shipping
2. Expert Service Assistance for Frequency Management	Ministry of Posts and Telecommunication
3. Evaluation and Revision of the Existing Telecommunications Policy	Ministry of Posts and Telecommunication
4. Telecommunication Market Study and Sector Evolution	Ministry of Posts and Telecommunication
5. Project Management and Monitoring System	Power Division, MEMR
6. Ten-year Business Plan for Mongla Port Authority	Ministry of Shipping/Mongla Port Authority
7. Review of Alternatives for the Introduction of Voice over Internet Protocol in Bangladesh	Bangladesh Telecommunication Regulatory Commission
8. Introduction of Private Sector Infrastructure Projects into the National Plans	Ministry of Planning

*Note:* Current activities of IIFC can be viewed at <<http://www.iifc.net/>>

## CONCLUSIONS

Successful project development and the design of a contract agreement fair to all parties are extremely important for the motivation of the private sector in infrastructure development. However, these tasks require special skills and expertise that may not always be available to public sector agencies. The procedural matters in the selection and approval of private infrastructure projects should also be clear to all parties. Furthermore, the planning and implementation of private sector infrastructure projects need to be integrated with the national planning process. There is a need for an inside sponsor or a special unit for the accomplishment of these objectives.

In its first three years of operation, IIFC has gained considerable experience as an inside sponsor for the promotion of private sector involvement in infrastructure development in Bangladesh. Based on its experience, the following observations may be made which could be of relevance to other countries:

(a) The concept of a special PSP/PPP unit as the inside sponsor of private sector infrastructure projects needs to be discussed and understood more thoroughly. The discussions should include the prospective private developers or outside sponsors;

(b) Project recognition skills are extremely important for an inside sponsor and this can be ensured through a commercial focus. Success would depend greatly on the ability to manage risks in Stages 0 to IV;

(c) The concept, with some revisions based on the lessons learned, may be of assistance to countries which are facing difficulties in increasing private sector participation in infrastructure development;

(d) Pro-poor infrastructure activities are possible in the power, transport and water sectors. Pro-poor private sector projects should be given special attention to gain wider social acceptability of private infrastructure projects;

(e) The inside sponsor should match the technical, financial, commercial, legal and negotiation skills of the outside sponsor.

# Transport and Communications Bulletin for Asia and the Pacific

## General guidelines for contributors

### 1. Manuscripts

One copy of the manuscript in English should be submitted together with a covering letter to the Editor indicating that the material has not been previously published or submitted for publication elsewhere. The author(s) should also submit a copy of the manuscript on computer diskette, labelled with the title of the article and the word-processing program used, or by e-mail as an attachment file. MS Word and WordPerfect are the preferred word-processing programs.

The length of the manuscript, including tables, figures and bibliographical references, should not exceed 7,500 words. Manuscripts should be typed on one side of A4 paper in double spacing and pages should be numbered. A list of references should be included. Manuscripts are subject to editorial revision.

The title page should contain (a) title; (b) name(s) of the author(s); (c) institutional affiliation(s); (d) complete mailing address, e-mail address and facsimile number of the author, or of the principal author in the case of joint authors; and (e) an abstract of approximately 150 words clearly stating the main conclusions of the article. Acknowledgements, if any, should appear at the end of the text.

Articles should include a final section containing the main conclusions, which should be broadly intelligible to a non-specialist reader.

### 2. Tables

All tables should be clearly headed and numbered consecutively in Arabic numerals. They should be self-explanatory. All tables should be referred to in the text. Full source notes should be given below each table, followed by general notes, if any. Authors are fully responsible for the accuracy of the data.

### 3. Figures

All figures should be provided as camera-ready copy and numbered consecutively in Arabic numerals. All figures should be referred to in the text. Full source notes should be given below each figure.

### 4. Footnotes

Footnotes, if any, should be brief and numbered consecutively in superscript Arabic numerals. Footnotes should not be used for citing references.

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There should be a complete reference for every citation in the text. References in the text should follow the author-date format, for example (Sadorsky 1994), or (Skeldon 1997: 243). Only those references actually cited in the text should be listed and these should appear in alphabetical order at the end of the manuscript. References should be in the following style:

[Book]

Skeldon, R., 1997. *Migration and Development: A Global Perspective* (London, Longman).

[Chapter in book]

Krueger, Alan, B. and Lawrence H. Summers, 1987. Reflections on the inter-industry wage structure, in K. Lang and J.S. Leonard, eds., *Unemployment and the Structure of Labour Markets* (London, Blackwell), pp. 40-49.

[Article in journal]

Wachs, M., 1990. Regulating traffic by controlling land use: the southern California experience, *Transportation*, vol. 16, No. 3, pp. 241-256.