

Public-Private Partnership in Indian Railways
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Executive Summary

Choosing a project was not an easy task considering the fact that none of the ones mentioned in the project list given to us caught my attention. I have always been fascinated by Railways-not only as a mode of transportation but also as a uniting factor in our country of such great diversities. Hence, I was keen on doing a project relating to Indian Railways. Also, currently, Public-Private Partnership occupies the page-3 status in the news about Indian Railways. Thus, 'PPP in Indian Railways' became the preferred topic.

The paper starts with an introduction on Indian Railways. It reveals certain startling facts about IR and, then, proceeds with an explanation on Public Private Partnership model. After giving an elaborate detail on the fundamental knowledge on IR and PPP, PPP in IR is introduced. There are a lot of non-critical activities which are either being run or being planned to be run through the PPP Model. This part of the report gives a detailed explanation of those and also reveals the weak appetite of the IR in inviting private sector participation in Indian Railways.

After this, the focus of the paper shifts towards a critical analysis of the Government's policy on PPP in IR. Here, the lackadaisical attitude of the IR in bringing in much needed improvement in efficiency of services rendered to its customers is critically analysed.

The last section of the paper presents a thumb rule for checking the feasibility of the project being implemented through the PPP Model.

Introduction

“Indian Railways is one of the most studied institutions on the planet. For almost every conceivable question that can be asked, there already exists a comprehensive and rigorous report that lays out the facts and indicates the answers. What is striking, however, is that there has been little action on the many reports IR has commissioned, both internal and external. The overwhelming sentiment of the Expert Group is that time has run out. Action is overdue. The imperative is to get started fast on a programme of restructuring and reform.”

-Expert Group on Indian Railways-2001¹

The fascinating fact about the IR has been the sudden historic turnaround it has witnessed in its finances in the last 2-3 years which has made the seriousness of the warning given in the above statement look like a prank.

The economy is in an auto-pilot mode (showing no signs of slowing down). We have been witnessing a consistent 8% growth in our GDP over the last few years and hence the need for infrastructure to sustain the same has been felt all across the board as the current level of infrastructure is insufficient to sustain such an increase in GDP growth rate.

The Indian Railways is considered the lifeblood of the nation and, hence, the onus of carrying the economy on its shoulder lies with the railways. The boom in the economy has resulted in a dire need of improvement and enhancement of rail infrastructure in the country. As part of the overall strategy of restructuring the railway infrastructure, a major thrust has been given to PPP.

The Indian Railways are prima facie encouraging Public-Private Partnership in the capacity enhancing and modernizing exercise. Projects through the PPP model have been started in a few sectors and envisaged in few other areas. This paper is an attempt to assess the degree to which PPP has penetrated the Indian Railways. Has the IR encouraged PPP as it should have been? Which key areas have been encouraged? Is

¹ Expert Group On Indian Railways set up in 2001 (Also called Rakesh Mohan Report on Indian Railways)

there any friction in bringing in private sector participation in the IR? If yes, where is the friction? Does the government also have some genuine concerns? This paper tries to answer these questions in addition to suggesting criteria to evaluate projects to be implemented through PPP.

Indian Railways

Facts in brief

The Indian Railways operates the world's second largest rail network under a single management. It has an established route length of 62,759 km divided into three gauges – broad, metre and narrow.

The functions of the Indian Railways can be divided into core and non-core activities. The core activities comprise transportation of freight and passengers (running of trains and owning of assets) and non-core activities comprises catering, running schools and colleges for the children of the railway staff, medical healthcare facilities for the railway staff, production units and workshops, protection force for the safety of railway assets, maintenance of an exclusive telecommunications network etc.

There has been a historic turnaround in the financial situation of the Railways. The IR was in the midst of an impending financial breakdown in 2001. The fund balances have grown to over Rs 12,000 crore in 2005-06 and internal generation, before dividend, has also reached a historic level of Rs 12,000 crore. This is the same Indian Railways which in 2001 had deferred dividend payment, whose fund balances had reduced to just Rs.149 crore (in 1990-2000) and which had been written off as a bankrupt department. Indian Railways is today the second largest profit making Public Sector Undertaking after ONGC. It achieved an operating ratio of 78.7% in 2006-07 which is comparable to that achieved by the North American Class I railroads.

The total planned investment for the eight-year time frame (2007-2015) is tentatively in the order of Rs.3,50,000 crore. This confidence is not only due to the phenomenal

improvement in the performance, but also due to the significant growth in the last two years.

IR is a department of the Government and the Ministry of Railways functions under the guidelines of the Railways Minister assisted by Minister of State for Railways. Indian Railways is administered by the Railway Board, which has six members and a chairman.

The Railways have been described as the 'lifeline of the nation', operating approximately 12,000 trains a day (of which 11,000 are passenger trains).

It carries about 17.7 million passengers and 1.49 million tonnes of freight every day.² In terms of contribution to the national gross product the railways account for 1 per cent of India's GNP. It is also the largest employer in the world and supports a work force of over 1.4 million constituting six percent of the 27 million people employed in the organised sector.

The 'Partnership'

There are certain misconceptions about the word partnership. It is not a "warm and fuzzy" relationship between public and private parties working towards a common objective. Public and Private partners have distinct objectives. The challenge for the public sector is to design sufficient incentives so that private profit seeking attains broader public interest objectives. The rewards are performance related, with mechanisms for continuous monitoring by the public agency over the life of the contract –not fire and forget proposition.

Public Private Partnerships (PPPs) are an innovative way of delivering modern, high quality public services and promoting the country's competitiveness.

Public Private Partnership

² Report on Investment Opportunities in Infrastructure in Indian Railways by Investment Promotion & Infrastructure Development Cell Secretariat for Industrial Assistance Department of Industrial Policy & Promotion Ministry of Commerce & Industry Government of India 2006.

PPP Project means a long term project based on a contract or concession agreement, between the Government or statutory entity on one side and a private sector company on the other side, for delivering an infrastructure service on payment of user charges.

Typically, a private sector consortium forms a special company called a special purpose vehicle (SPV) to build and maintain the asset. The consortium is usually made up of a building contractor, a maintenance company and a bank lender. It is the SPV that signs the contract with the government and with subcontractors to build the facility and then maintain it.

Risk sharing is one of the most important features of a PPP. The PPPs most likely to succeed incorporate a risk mitigation framework that apportions risk in terms of capacity to bear. The risk mitigation framework is addressed through a bankable concession agreement that clearly delineates project risks and responsibilities

e.g. **Private sector**—managing commercial risks and responsibilities:

Construction, operation and financing risks

State – political risk, land acquisition.

In India, **Noida Toll Bridge** was the first successful example of a Public Private Partnership in the transportation sector.

Public Private Partnership in Indian Railways

The major part of Private sector participation in IR is going to be through Public- Private Partnership (PPP) Model.

As per the Expert Group on Indian Railways 2001:

If IR is to survive as an ongoing transportation organisation it has to modernize and expand its capacity to serve the emerging needs of a growing economy³.

³ The Indian Railways Report 2001- Expert Group on Indian Railways Accessed on 31 May

Need for PPP

With the economy growing at a robust rate of growth in the last few years the current abysmal level of infrastructure has been under tremendous strain. The Prime Minister's Committee on Infrastructure has been specially formulated to give infrastructure- road, railways, port, air, electricity, irrigation etc a major boost.

The railways require substantial investments in order to keep pace with the 8% growth rate of the economy. Recognizing the need for substantial financial capital and techno-managerial expertise in infrastructure building and freeing up its precious resources, the Railways have started seeking and encouraging increased private sector participation in this massive exercise. Also, competition with the Road and Aviation is driving the railways to improve their infrastructure.

The Railway Act

The Indian Railways Act stipulates that no private sector participation can be invited in the operations of the trains. Hence the same is not open to the private sector.

Model Concession Agreement

The detailed modalities of the contract between the private player and the Government are specified in the document called Model Concession Agreement (MCA).

This document plays a pivotal role in the implementation of the project. It clearly delineates the risks to be shared by the private player and the government and spells out the formula of sharing of the revenue among other important details.

A badly prepared document can result in a huge amount of losses.

e.g. Turkey power sector PPPs resulted in an estimated loss to the country of US\$7 billion per year as a result of badly structured contracts.

(See Appendix 1)

Types of PPP

PPP Model can be adopted through various ways. Maintenance Management Contract, Turnkey, Operate and management, ROT and BOT are few ways in which PPP can be adopted. BOT is the most preferred model for PPP in IR.

(See Appendix 2)

Viability Gap Funding

Infrastructure projects involve externalities that are not adequately captured in direct financial returns to the project sponsor. Through the provision of a catalytic grant assistance of up to 20% of the capital costs, several projects may become bankable and help mobilize the much needed private capital and efficiencies. The money given by the government to the private player to make the project viable is called Viability Gap Funding. Support under this scheme would be available only for infrastructure projects where private sector sponsors are selected through a process of competitive bidding.⁴

By offering grant assistance of up to 20% of the project costs, the Government will be able to use its scarce budgetary resources to leverage a much larger pool of private capital.

The Government of India has decided to put into effect the following scheme for providing financial support to bridge the viability gap of infrastructure projects undertaken through Public Private Partnerships.

Firstly, where the Government of India recognizes that there is significant deficit in the availability of physical infrastructure across different sectors and that this is hindering economic development

Secondly, where the development of infrastructure requires large investments that cannot be undertaken out of public financing alone, and that in order to attract private capital as well as the techno-managerial efficiencies associated with it, the Government

⁴ Guidelines Financial Support to Public Private Partnerships in Infrastructure 2006 published by the Secretariat for the Committee on Infrastructure Planning Commission. Further information on the same can be accessed from this report.

is committed to promoting Public Private Partnerships (PPPs) in infrastructure development

Thirdly, where the Government of India recognizes that infrastructure projects may not always be financially viable because of long gestation periods and limited financial returns, and that financial viability of such projects can be improved through Government support.

Projects through the PPP Model

In the past Indian Railways had made several attempts to rope in private participation in areas such as catering, wagon ownership and leasing and joint ventures for rail infrastructure projects. These efforts were, however, limited in scale and scope. The current strategy is to leverage private capital through PPPs to the maximum extent in areas which are amenable to PPPs to improve efficiencies and control costs.

1. Operation of container trains and Construction of Private sidings, ICDs and rail side warehouses

IR has awarded licenses for container operations to 14 private sector companies, thus, ending the monopoly of Container Corporation of India (CCI) in this area.

Most of the current parties are likely to use the operations for their internal use but dedicated third-party container operation providers might also emerge later to compete directly with CCI. These companies are involved in every step of the container business, from booking of traffic to aggregating the goods to distributing them at the destination by arranging transport. These companies would also pump in 2,000 crore to overhaul the terminals and purchase wagons.

740 crore was taken from these 14 players in licence fees.

In addition, Ministry of Railways intends to partner with State Governments, private logistics operators and infrastructure providers to establish multi modal logistic parks equipped with rail sidings with sheds, large inland container depots, warehouses for storage, office buildings for logistics operators, highway connectivity, and smaller assembly units for processing imported raw materials for export. Such Parks could either

be built independently at strategic locations or could be built in a Special Economic Zones (SEZs).

2. Construction of Dedicated Freight Corridor (Delhi-Mumbai and Delhi-Howrah) with a large component of PPP

It has been planned to construct a new Dedicated Freight Corridor (DFC), initially covering about 2700 route kms equivalent to around 5000 track kilometers at an approximate cost of Rs.28000 crores (US\$6 billion) linking the ports of western India and the ports and mines of Eastern India to Delhi and Punjab.

It will ensure multi-modal logistic connectivity and will also significantly enhance railway freight capacity to handle the large volumes anticipated from the ports on the eastern and western coasts. The construction of this corridor will be implemented through an SPV being created for the purpose through a mix of Engineering Procurement and Construction (EPC) and PPP methods.

The proposed corporate entity would provide the rail infrastructure, but would not engage in freight business itself, thus providing nondiscriminatory track access on payment of haulage charges by train operators. This approach would herald large-scale private investment and competition in freight operations. This underlying separation of rail from wheels would also mark a paradigm shift in the functioning of Indian Railways.

Ministry of Railways is in the process of selecting a global consultant to advise on the concession agreement, principles of track access charges and other financing and bidding issues. The concessionaire could also tap additional ancillary revenue streams through commercial exploitation of land, construction of freight terminal/logistic park/ICDs etc. Further, after firming up wagon designs for DFC, private investment for its manufacture would be encouraged. Four more Dedicated Freight Corridors are being planned for which feasibility studies are being awarded.

3. High Speed Corridors

Plans are also afoot to study the feasibility of high speed passenger rail link between major metropolises to improve connectivity and slash travel time for distances of 600-1000 km to within 2 1/2 to 4 hours..

4. World Class Railway Stations, Passenger amenities and Commercial utilization of land

Metro City Railway Stations like Delhi, Mumbai need to be modernized to provide world – class passenger amenities and services to the large multitude of passengers using these stations. IR is planning to do so by attracting private investments in the area by allowing the areas around the stations and the air space above platform to be commercially developed while operational/passenger – handling areas are separated from such commercial areas as in case of airports. The concessionaire would be expected to construct and maintain the operational and passenger areas free of cost, share the revenue earned from the real-estate created and hand over the same after the concession period. The pilot project for New Delhi Station is on the anvil.

Altogether 19 stations have been identified at the first stage. These are CST Mumbai (Carnac Bunder), Pune, Howrah (Kolkata), Lucknow, New Delhi, Anand Vihar and Bijwasan at Delhi, Amritsar, Chandigarh, Varanasi, Chennai, Thiruvananthapuram, Secunderabad, Ahmedabad, Patna, Bhubaneshwar, Mathura Bangalore and Bhopal. Development of other stations green field passenger terminals would also be taken up in a similar manner.

Indian Railways has approximately 43,000 hectares of vacant land. These are mostly alongside track in longitudinal strips, around railway stations, and in railway colonies especially in metro and other important cities/ towns with potential of being used commercially to generate revenue as well as capital for modernization and capacity addition. An authority, namely, Rail Land Development Authority (RLDA) has been set up under the Railway (Amendment) Act 2005 to pursue, inter alia, the main objectives of generating revenue, up grading railway assets and providing world-class state-of-the-art passenger facilities/services at stations.

5. Pipavav Railway Corporation Limited

A Special Purpose Vehicle named PRCL (Pipavav Railway Corporation Limited) which was formed with equal equity participation from Ministry of Railways and GPPL (Gujarat Pipavav Port Limited) for construction, Operations and Maintenance of Surendranagar-Pipavav Broad Gauge line, has implemented

Surendranagar - Pipavav Gauge conversion/New Line project. The construction of this line has been completed and thrown open for Goods Traffic since March 2003. Earlier, connectivity of Mundra Port on the West Coast to the Broad Gauge network of Indian Railways was completed. Gandhidham – Palanpur gauge conversion is being implemented through involvement of Kandla and Mundra ports. Kutch railway Company, SPV formed with Kandla and Mundra ports, Government of Gujarat and RVNL are equity holders.

6. K-RIDE

A Joint Venture named K-RIDE (Rail Infrastructure Development (Karnataka) Limited) has been formed jointly with the State Government of Karnataka for early completion of four identified projects in the State of Karnataka.

K-RIDE will execute these projects through Project Specific SPVs. First such SPV named HMRDC (Hassan - Mangalore Rail Development Co.) has been formed with equity participation from Ministry of Railways, Government of Karnataka and K-RIDE. Strategic partners and other financial institutions will also take part in the equity contribution. Besides, Government of Karnataka has agreed for funding of three rail projects by contributing two-thirds of the cost.

7. The Wagon Investment Scheme (WIS) with provisions for freight rebate and supply of guaranteed number of rakes over periods ranging from 7-15 years for various categories of wagons has been well received. The scheme would be reviewed on the basis of feed back of the subscribers and continued further.

8. Setting up of SPV for manufacturing of locomotives/coaches/wagons

With sustained economic growth and the resultant demand for rail transport, the requirement of rolling stock has increased manifold. The requirement of coaches/Electrical Multiple Units is projected at 22689 vehicle unit for the XI Five Year

Plan. The gap between the requirement and the combined capacity of the two Production Units at Integral Coach Factory, Perambur and Rail Coach Factory, Kapurthala (around 2500 per annum) is planned to be bridged by augmenting the existing capacity of these Production Units and setting up a new manufacturing unit through a JV under PPP.

Similarly, the requirement of Electric and Diesel Locomotives has been projected at 1800 each during the XI Five Year Plan i.e. 360 locos per year. The existing in – house capacity for the manufacture of these locomotives is presently 150 per annum and can be augmented to 200 locos each per annum for Electric and for Diesel. The gap between the requirement and capacity is planned to be bridged by setting up two locomotive manufacturing units one each for diesel and electric locomotives through PPP. Possibility of PPP through long- term demand guarantee to prospective manufacturers of modern wagons is also being explored.

9. Parcel Services

Round-trip leasing of parcel vans in important mail/express trains is already being carried out on Indian Railways. 100 parcel vans have already been leased. A more comprehensive policy to run Express Parcel trains has been finalized. Two privately operated parcel trains are already in operation.

10. Catering Services, Budget Hotels and Food Plazas

Indian Railway Catering and Tourism Corporation (IRCTC) has already been mandated to develop catering services, budget hotels and food plazas at major stations through involvement of private entrepreneurs. IRCTC intends to take up around a hundred such budget hotel projects in the next five years with public Private partnership. 20 such concessions have already been awarded. The hotel will be set up under the name of Rail Ratna in five cities - Chandigarh, Sealdah (West Bengal), Madurai (Tamil Nadu), Vijayawada and Secunderabad (Andhra Pradesh) in the first phase. The IRCTC land will be leased out to the hospitality sector on behalf of the railways and finalize the bids for 30 years to construct, operate and maintain the hotel as per the terms and conditions specified in the bid document.

IRCTC is also commissioning new Food Plazas in Railway premises with private participation. The license period for food plazas is of nine years with a provision of extension of three years. Already 40 such Food Plazas have been commissioned. IR is also in the process of carrying out an examination of the scope of need- based 'base kitchens' and 'laundrettes' with public private partnership to strengthen the infrastructure for on-board services.

Call centres are also being planned under PPP by IRCTC to cater to the need for information dissemination to the railway customers.

Government Policy on PPP in Indian Railways

A comparison of the projects which are in the process of being implemented through PPP and the size of IR yields the conclusion that the PPP does not even form a drop in the ocean of its operations. On an optimistic note, it also shows that the scope of PPP in IR is immense.

India needs investment in infrastructure to the tune of \$456 billion at current prices (more than \$80 billion in Railways) during the Eleventh five year plan (2007-2012) to keep pace with the economic growth its experiencing.

It must be noted that in spite of such dire need of funds in IR and the limited nature of its surplus, the IR has followed an over-cautious approach in inviting private sector participation in Indian Railways.

The reasons for the same have been identified as follows:

1. There exists no clear roadmap for implementation of PPP in IR

On interaction with the senior railway officials it can be easily drawn that the IR are being forced to look outwards for finance and techno-managerial skills. What we have is a list of projects that have been selected on urgency basis but without any sound official articulation or planning.

2. Political Climate

It is evident that in our country politics dominate the decisions relating to economic policies. In the words of a senior railway official in-charge of PPP, "We live in a political economy and hence political sensitivities of the times will have a bearing on the economic policies of the time. We don't want to hit bigger roadblocks later on in future. We must not only be transparent but also be seen transparent. No blind privatization will take place and hence private sector participation will only be invited in areas which require immediate attention and that too where the private sector is capable of reducing costs and improving the quality of service."

3. Enforceability of the Contract

A PPP can only be successful if the government can ensure discipline on part of the private player to enforce the contract and thus result in achieving the desired objective. A senior railway official reveals the true reason, "We lack prior experience in dealing with such complex situations and hence are going very slow as we don't want any thing to go wrong."

It is clear that the IR does not possess the requisite managerial skills that the current complex business environment calls for.

4. Threat of Private monopolies

Another reason for the slow approach is the fear of emergence of private monopolies (in the place of state monopoly) in case right policies are not adopted. In the words of a senior railway official "The characteristics of the railways are such that private monopolies will mushroom in place of state monopoly in case the right policy is not adopted."

6. PSU Mindset

Another fact accepted by the railways is that a change in the mindset of the people from top to bottom (from the gang man to the customer) in the organization is required for mainstreaming of the PPP model. To achieve this, dedicated PPP cells have been established in every state to identify the projects that can be implemented through PPP.

The private sector participation is not a gift without a curse. It comes with its own set of problems. It has historically been proved that inviting of private sector participation in case of a government monopoly has not always led to the private sector efficiencies and modernization. On the contrary it has led to monopolization in the hands of the private sector. Therefore it is of pivotal interest that whenever private sector participation is being talked about it should always be assumed to be inviting competition as well.

Criteria to evaluate projects for PPP

There is a general perception that bringing in the private sector is an antidote to poor public services provided by the government. If the government fails to deliver, it can be for reasons not addressable by the private sector. Therefore, it is important to develop criteria to evaluate projects which are amenable to PPP model and not follow the wisdom stated above.

Here, a model is devised using two important criteria- revenue (protection) certainty and contract enforceability to determine the viability of the project being considered for implementation through the PPP Model.

Revenue Protection (certainty) is of immense significance because the private sector will be interested in investing in public projects only if a minimum amount of revenue is guaranteed and also if they are provided with appropriate safeguards against (insulation from) changes in political climate or policy or regulatory risk. It is because of the failure of the government to guarantee the same that no additional private investments have been forthcoming in the power sector. Attractive incentives should be provided to the private sector to invest in public utilities. The risk of the investment must also be confined to controllable factors.

Contract Enforceability is also very important for the successful implementation of the project through the PPP model. Weak enforcement of the contract can lead to tremendous amount of loss to the public enterprise. Hence, if any mission critical activity (system maintenance, rolling stock and tracks, signalling, tracks, telecommunication) is to be run through the PPP Model then the impact of its violation (if any) due to failure of

enforcement must be considered keeping the safety mechanism in mind. British Privatization experiment was a failure as it did not provide adequate safeguards against the failure of enforcement of mission critical activities. The attempt was rolled back.

The values of these two variables are determined through a thorough evaluation of the project on the basis of factors internal to the project and finally a value between 0 and 10 is awarded to each project for the two characteristics. The values of (on a scale of 0 and 10) these two characteristics of the project to be considered for PPP model are plotted on the x and y-axis of the graph. Any project that lies on the farther right side of the two-coordinate graph is generally viable for implementation through PPP model. Any project that is relatively closer to the origin on either of the two sides is not generally considered eligible for implementation through the PPP model.

Conclusion

Non-critical areas in the Indian Railways should be identified and private sector participation should be allowed in the same. The Indian Railways should focus on the core activities of running and operating the trains. The prospects remain bleak for any major policy change due to an extremely weak record of enforcement of contracts in the long run.

Corporatization of Indian Railways is the best way to take the restructuring of the Indian Railways forward. The IR should also adopt General Accepted Accounting Principles (GAAP), the role of the Indian Railways Regulatory Authority should be strengthened and it should be allowed to decide the fares to be charged from the passengers with a provision for adequate compensation from the Union Budget for keeping fares cheaper to fulfil its objective of social welfare. Manufacturing of locomotives and wagons should also be through the PPP Model.

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Appendix 1

Brief particulars of the Concession Agreement

A. Sponsoring Ministry:

C. Legal Consultant:

B. Name and location of the Project:

D. Financial Consultant:

S.No.	Item	Clause No.	Description
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1. General

1.1 Scope of the Project (Please state in about 200 words)

1.2 Nature of Concession to be granted

1.3 Period of Concession and justification for fixing the period

1.4 Estimated capital cost

1.5 Likely construction period

1.6 Conditions precedent, if any, for the concession to be effective

1.7 Status of land acquisition

2. Construction and O&M

2.1 Monitoring of construction; whether an independent agency/ engineer is stipulated

2.2 Minimum standards of Operation and Maintenance/ Performance standards

2.3 Penalties for violation of prescribed O&M standards/ Performance standards

2.4 Safety provisions relating to structures, users and construction works

2.5 Penalties for violation of safety related Provisions

2.6 Environment related provisions

3. Financial

- 3.1 Maximum period for achieving financial close
- 3.2 Nature and extent of capital grant/ subsidy stipulated
- 3.3 Bidding parameter (capital subsidy or other parameter)
- 3.4 Provisions for change of scope and the financial burden thereof
- 3.5 Concession fee, if any, payable by the Concessionaire
- 3.6 User charges/fee to be collected by the Concessionaire

S.No.	Item	Clause No.	Description
3.7	Indicate how the user fee has been determined; the legal provisions in support of user fee (attach the relevant rules/ notification); and the extent and nature of indexation for inflation		
3.8	Provisions, if any, for mitigating the risk of lower revenue collection		
3.9	Provisions relating to escrow account, if any		
3.10	Provisions relating to insurance		
3.11	Provisions relating to audit and certification of claims		
3.12	Provisions relating to assignment/ substitution rights relating to lenders		
3.13	Provisions relating to change in law		
3.14	Provisions, if any for compulsory buy-back of assets upon termination/ expiry		
3.15	Contingent liabilities of the government (a) Maximum Termination Payment for Government/ Authority Default		

(b) Maximum Termination Payment for
Concessionaire Default

(c) Specify any other penalty, compensation
or payment contemplated under the
agreement

4. Others

- 4.1 Provisions relating to competing facilities, if any
- 4.2 Specify the Dispute Resolution Mechanism
- 4.3 Specify the governing law and jurisdiction
- 4.4 Other remarks, if any

Appendix 2

Types of Public-Private Partnerships:

Build-Own-Operate (BOO)

Under a BOO transaction, the contractor constructs and operates a facility without transferring ownership to the public sector. Legal title to the facility remains in the private sector, and there is no obligation for the public sector to purchase the facility or take title.

Build/Operate/Transfer (BOT) or Build/Transfer/Operate (BTO)

Under the BOT option, the private partner builds a facility to the specifications agreed to by the public agency, operates the facility for a specified time period under a contract or franchise agreement with the agency, and then transfers the facility to the agency at the end of the specified period of time. In most cases, the private partner will also provide some, or all, of the financing for the facility, so the length of the contract or franchise must be sufficient to enable the private partner to realize a reasonable return on its investment through user charges. At the end of the franchise period, the public partner can assume operating responsibility for the facility, contract the operations to the original franchise holder, or award a new contract or franchise to a new private partner. The BTO model is similar to the BOT model except that the transfer to the public owner takes place at the time that construction is completed, rather than at the end of the franchise period.

Buy-Build Operate (BBO)

A BBO transaction is a form of asset sale that includes a rehabilitation or expansion of an existing facility. The government sells the asset to the private sector entity, which then makes the improvements necessary to operate the facility in a profitable manner.

Contract Services Operations and Maintenance

A public partner (central, state, or local government agency or authority) contracts with a private partner to provide and/or maintain a specific service. Under the private operation and maintenance option, the public partner retains ownership and overall management of the public facility or system.

Operations, Maintenance, and Management

A public partner (central, state, or local government agency or authority) contracts with a private partner to operate, maintain, and manage a facility or system providing a service.

Under this contract option, the public partner retains ownership of the public facility or system, but the private party may invest its own capital in the facility or system. Any private investment is carefully calculated in relation to its contributions to operational efficiencies and savings over the term of the contract. Generally, the longer the contract term, the greater the opportunity for increased private investment because there is more time available in which to recoup any investment and earn a reasonable return. Many local governments use this contractual partnership to provide wastewater treatment services.

Design-Build-Operate (DBO)

In a DBO project, a single contract is awarded for the design, construction, and operation of a capital improvement. Title to the facility remains with the public sector unless the project is a design/build/operate/transfer or design/build/own/operate project. The DBO method of contracting is contrary to the separated and sequential approach ordinarily used in the United States by both the public and private sectors. This method involves one contract for design with an architect or engineer, followed by a different contract with a builder for project construction, followed by the owner's taking over the project and operating it. A simple design-build approach creates a single point of responsibility for design and construction and can speed project completion by facilitating the overlap of the design and construction phases of the project. On a public project, the operations phase is normally handled by the public sector or awarded to the private sector under a separate operations and maintenance agreement. Combining all

three phases into a DBO approach maintains the continuity of private sector involvement and can facilitate private-sector financing of public projects supported by user fees generated during the operations phase.

Developer Financing

Under developer financing, the private party (usually a real estate developer) finances the construction or expansion of a public facility in exchange for the right to build residential housing, commercial stores, and/or industrial facilities at the site. The private developer contributes capital and may operate the facility under the oversight of the government. The developer gains the right to use the facility and may receive future income from user fees. While developers may in rare cases build a facility, more typically they are charged a fee or required to purchase capacity in an existing facility. This payment is used to expand or upgrade the facility. Developer financing arrangements are often called capacity credits, impact fees, or exactions. Developer financing may be voluntary or involuntary depending on the specific local circumstances.

Lease/Develop/Operate (LDO) or Build/Develop/Operate (BDO)

Under these partnership arrangements, the private party leases or buys an existing facility from a public agency; invests its own capital to renovate, modernize, and/or expand the facility; and then operates it under a contract with the public agency.

Lease/Purchase

A lease/purchase is an installment-purchase contract. Under this model, the private sector finances and builds a new facility, which it then leases to a public agency. The public agency makes scheduled lease payments to the private party. The public agency accrues equity in the facility with each payment. At the end of the lease term, the public

agency owns the facility or purchases it at the cost of any remaining unpaid balance in the lease. Under this arrangement, the facility may be operated by either the public agency or the private developer during the term of the lease.

Sale/Leaseback

A sale/leaseback is a financial arrangement in which the owner of a facility sells it to another entity, and subsequently leases it back from the new owner. Both public and private entities may enter into sale/leaseback arrangements for a variety of reasons. An innovative application of the sale/leaseback technique is the sale of a public facility to a public or private holding company for the purposes of limiting governmental liability under certain statutes. Under this arrangement, the government that sold the facility leases it back and continues to operate it.

Tax-Exempt Lease

Under a tax-exempt lease arrangement, a public partner finances capital assets or facilities by borrowing funds from a private investor or financial institution. The private partner generally acquires title to the asset, but then transfers it to the public partner either at the beginning or end of the lease term. The portion of the lease payment used to pay interest on the capital investment is tax exempt under state and federal laws. Tax-exempt leases have been used to finance a wide variety of capital assets, ranging from computers to telecommunication systems and municipal vehicle fleets.

Turnkey

Under a turnkey arrangement, a public agency contracts with a private investor/vendor to design and build a complete facility in accordance with specified performance standards and criteria agreed to between the agency and the vendor. The private developer commits to build the facility for a fixed price and absorbs the construction risk of meeting that price commitment. Generally, in a turnkey transaction, the private partners use fast-track construction techniques (such as design-build) and are not bound by traditional public sector procurement regulations. This combination often enables the private partner to complete the facility in significantly less time and for less cost than could be accomplished under traditional construction techniques. In a turnkey

transaction, financing and ownership of the facility can rest with either the public or private partner. For example, the public agency might provide the financing, with the attendant costs and risks. Alternatively, the private party might provide the financing capital, generally in exchange for a long-term contract to operate the facility.