



## Issues & Challenges in Private Sector Participation in India

### KEYWORDS

Private Sector Participation, Urban Transport, types of service contract, Gross Cost, Net Cost, BRTS, Potential Regulatory Capture.

### Vaishakhi Talati

Asst Proff, Civil Engineering Dept, Dr Jivraj Mehta Institute of Technology, Mogar, Anand.

### Ashish Talati

Head, Civil Engineering Dept, Dr Jivraj Mehta Institute of Technology, Mogar, Anand.

**ABSTRACT** In India, a large number of construction projects are being implemented under the five year plan programs and a huge capital investment is being made in these projects. The spiraling construction costs and ever increasing tightening of money have fostered a need for obtaining the full value of every rupee spent on these projects. This paper discusses value engineering as the technique normally employed for this purpose. Also, a purposeful attempt has been made to look at value in a more scientific and realistic manner.

### Introduction:

Reasons to Introduce Private Sector Participation in Urban Transport

- To bring efficiency and accuracy in to the system
- Many urban transport authorities lack the institutional capacity
- Cost effective option as the private player is selected through competitive bidding
- In house arrangement create direct and indirect liabilities on the Govt institutions which are generally turned out to be costlier
- Given the right set of incentives, private players usually respond effectively to the passenger demand and towards high system efficiency.
- The efficient transportation system would attract higher ridership.
- Subsequently the operations might generate surplus funds
- Assures sustainability of the urban transportation system

In general, a sustainable project with Private Sector Partnership allows the implementing agencies, especially Urban Local Bodies, to spare funds (budgetary allocations for capital and operational expenses), for other developmental works.

### TYPES OF SERVICE CONTRACT

#### 1) Gross Cost

##### Route Based & Area Based Kilo-meterage Cost

Operator states the unit costs of the service (cost per km, per hour or per vehicle day)

Ex. Helsinki (Finland), Goteborg (Sweden), AMTS, JANMARG, Delhi – DIMTS

##### Minimum Cost

Operator states the whole cost of operating the contract

Ex. London (before 1993)

##### Cost per Passenger

Operators are repaid based on the cost per passenger. Ex. Santiago (Chile)

#### 2) Net Cost

Route Based & Area Based

Min. Subsidy/Max. Premium

Operators states minimum subsidy required or maximum premium offered to the authority

Ex. London (after 1993), Surat, Rajkot, Indore, Vadodara, Jodhpur, Delhi-Blue Line, Delhi Metro Feeder

#### 1) Net Cost Contract (NCC)

NCC provides greater flexibility to the Implementing Agency as all the risks except procurement, are transferred to the Private bus operator. Sometimes Private players offers premium for bus operations.

In such situation Authority gets less interested in capacity building hence the monitoring and contract enforcement/management remains ineffective.

Urban transportation exists in abusive manner.

#### Advantages and Disadvantages of NCC

- Revenue/ traffic risk and operation risk are transferred to the Service Provider, Incentivizes the service provider to increase revenue by attracting ridership
- Limited financial commitment/ Steady income to the Authority, Required to provide fixed amount of VGF Or Receive Premium from Route Concession
- Limited Administration cost, As all bus operation functions are to be performed by the Operator
- Advantage to Operator as he has some flexibility to modify/ change/ close routes and frequency, For operation sustainability
- Dis-incentivizes the operator in the event of operational viability issues, Transferred risks may lead to lower number of bidders, Fare revision concerns
- Operator may be tempted to reduce costs through poor service quality / avoiding loss making routes
- Lack of contractual enforcement, As the revenue accrues directly to the service provider, fines and damages are difficult to collect in case of poor services and default in contractual terms
- Possibilities for consolidation/ carteling in case more than one operators are appointed, Creates informal cartel to operate buses to increase bargaining power.

#### Experience with Indian Cities and its Status

- Most of the cities had Single bidder hence competitive selection was not possible
- Cities like Ludhiana and Amritsar didn't receive any proposal in the first attempt. Ludhiana moved to GCC while Amritsar got only two proposals in second attempt after many relaxations in RFP.
- Many of the NCC projects are either closed or early

terminated

- The systems are not expanded since start of commercial operation

Possible Reasons

- Non viability of the operation due to low fares and in adequate fare revision
- Lack of effective monitoring therefore schedules and routes were not followed properly
- The unviable routes were surrendered hence urban transportation was not available in developing and peripheral areas
- Owing to low operational viability systems were not expanded nor buses were maintained led to poor passenger demand

## 2) Gross Cost Contract (GCC)

### Key Advantages and Disadvantages of GCC

- Operator's protected from revenue risk and fare revision (political) risk, Wider appeal for bidders, may attract larger number of bidders
- Authority's full control over selection of routes and bus frequency, Route optimization through balance between profitable routes and popular demand
- Authority collects the fare revenue
- Authority has greater control over performance, Incentives (bonus)/penalties for operator through service quality and performance
- Exposure to revenue risk will need high financial commitment from Authority to cover operational losses if any
- Stalled expansion of bus services in case of non-viability of the operations, the uncovered area of the city shall suffer from emergence of unorganized Para- transit.

In case of such area is provided bus services through another mechanism like Net Cost Contract, issues like integration, fare concession etc. shall surface

- Higher administration and monitoring cost arising from need to curb revenue leakages, preparing and monitoring operations schedule, monitoring of bus maintenance and operations

### Ahmedabad BRTS – GCC model

- Total Fleet of around 105 buses in operation. Contracting done under two different models for two lots of buses (70 buses and 35 buses) Model 1:70 specially designed diesel buses (+10% standby) under Gross Cost Contract for 7 years
- Bus designed for the BRTS and Specifications detailed in the bid.
- Buses owned and financed by the operator
- Bus provider paid on per km basis with minimum assured kilometres of 72000 km per year (200 km per day) per bus.
- Fare Collection done by Janmarg directly. No fare collection responsibility by operator
- Penalties for non-performance in terms of availability, punctuality, cleanliness of buses, and maintenance
- Per km Rate revision effected based on formula \*
- Payment @65% of Km rate for non-used km and @85% of Km rate for Km operated in excess of 200 km.
- Depots Provision and its maintenance part of the contract.
- Contract extended for another 50 AC buses to meet the need created by newly extended corridors

### Model 2: 35 CNG buses procured by AJL under JnNURM under Gross Cost Contract

- Operations and Maintenance Contract with Operator for 5 years
- Per km Rate revision effected based on same formula \*
- Operator to pay Janmarg capital cost of the bus per month divided over the contract period (Rs 29 lakh / 60 months)

- Buses transferred to Operator on completion of contract
- Rate Revision = Fuel Price Adjustment + Other Cost Adjustment
- Revision in Rate due to Fuel Price Adjustment

= Value of Fuel price component in the fare x % Change in Fuel Price (Revision applicable at the end of the month in which fuel price changes)

- Revision in Fare due to Other Cost Adjustment

= Value of Other Cost component x % change in WPI x 1.2 (Revision applicable annually)

### Penalties and Incentives

- AJL has provision for Penalties in terms of deductible kms. The incidences for penalties are well defined.
- The agreement also provides mechanism for incentives also

### Provision of infrastructure

Authority Provides Depot and Parking space to the Operator

### Ahmedabad City Bus Services through AMTS – GCC model First Version of GCC introduced in 2006:

- Total of 400 City Buses were contracted on procure, operate and maintain basis to private operator on GCC basis for a contract period of five years.
- On board Fare Collection done by AMTS deployed fare collection staff . No fare collection responsibility by operator.
- Payment of Fuel charges based on predetermined fuel efficiency (i.e mileage) during the tendering stage. (i.e.3.60 km/ kg for CNG and 3.40 kmpl for Diesel buses). Second and Third Version of GCC:The new system has been replaced with new system where in payment to be made based on per KM charges and rate revision based on formula specified.

### Key issues and Challenges of GCC in India

#### Financial Constrains of the Implementing Authority:

- Make timely payment to Bus Manufacturers and to the Bus Operator.
- The issue can be mitigated through
  1. Frequent and systematic fare revision
  2. Creation of Escrow Accounts
  3. Creation of Urban Transport fund at State Level and City Level
  4. Operational Viability Gap Funding through Land Value Capture

#### Service Tax

- Almost the full amount of Km charge would attract Service Tax, increasing the load.
- Fuel Supply by SPV may reduce the burden but institutional capability to deliver fuel will have to be developed

#### Infrastructure Support by the Authority

- Land at right place is important to reduce dead kms.

#### Supervision and Monitoring Capacity

- Poor contract management and monitoring from the Authority.
- Building capacity of the institution by recruiting professionals for supervision of various functions of the bus system.
- Introduction of Technology for better monitoring ;
- Effective contract management.
- Appoint Independent Agency for monitoring & penalty clause implementation

#### Establishing Right Size of Operations

- Authorities are grappling with the idea of having one or more operators and size of operations with each

**Potential Regulatory Capture**

- Running of Buses will need to be optimized with demand , avoiding running of empty buses.

**Cities who have enhanced non Fare Revenue for Urban Transport**

Sr. No.	City	Source of revenue
1	Ahmedabad and Surat	Urban Transport Fund Advertisement from BRTS components and City Bus Service components FSI Increase, Sale Proceeds to Go Into UTF
2	Ludhiana and Amritsar	Advertisement from City Bus Service components
3	Proposed Vadodara BRTS	Proposal for Land Value Capture through TOD

**REFERENCE**

➤ An Examination of some Road Based B.O.T Projects in India with Special Reference to Traffic Forecasting by Dr S. L.Dhingra, Institute Chair Professor & Emeritus Fellow, Transportation Systems EnggCivil Engineering Department, IIT Bombay | ➤ Issues & Challenges in Gross Cost Contracting In Indiaby Prof. ShivanandSwamy, Executive Director, Centre Of Excellence for Urban Transport – CEPT University | ➤ Tambe, S.R.;Bongirwar,P.L.andKanhere, D.K. " Critical Appraisal of Mumbai Flyover Project" Indian Congress Journal, Vol 60.2, Oct.2004 – Dicsussion paper No. 460 . |