



# Experiences with PPP in Rail Projects



Mukul Saran Mathur , ED/ Traffic/ PPP,  
Ministry of Railways, New Delhi, India



# Presentation Structure



- Key Drivers for Rail PPP
- Structures and Models
- Success factors
- Areas for Rail PPP
- Indian Experience of PPP



# Key Drivers for Rail PPPs



## Changing Environment

- Higher Economic Growth in Asia
- Population Growth
- Higher Urbanisation
- Environment issues

## Need for private capital

- Reducing Government Financial Support
- Need for growth in Infrastructure
- Interest of private investors/ strategic Investors

## Need for Efficiency and Costs

- Reducing costs of labour and O&M
- Better Asset Utilisation
- Safety and Reliability
- Reducing Time and Cost overrun

## Need for Quality and Innovation

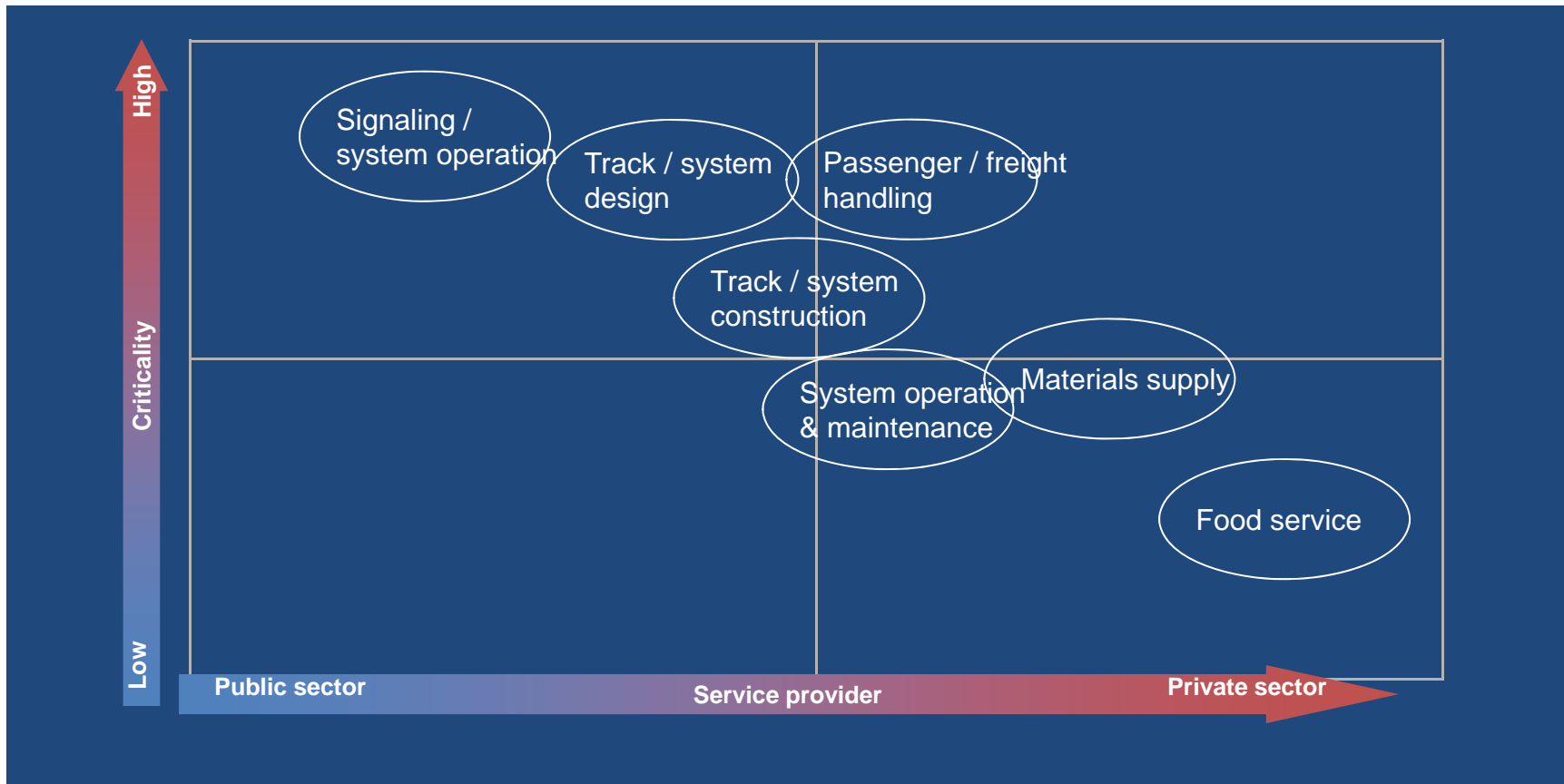
- Growing Customer Expectations
- New Technology and Modernisation
- Providing seamless logistic solutions



# PPP model via an analysis of application



- Critical services may take time to implement under the PPP model





# Risk Allocation in Railway projects



Risk	Allocation	Remarks
Planning	Public	Flexibility is required
Design & Construction Risk	Private	Railways should be responsible if the design parameters are changed
Operating and Technology Obsolescence	Private	Penalties for failure to meet service requirements. Technology obsolescence can be because of Railways insistence on particular technology
Demand	Private/ Public	Should be supported by penalties
Residual Value	Private	Fitness of purpose to be ensured
Financing	Private	
Legislative	Public	
Force majeure	Private/Public	Insurable risks to be transferred to private



# Success Factors



## Integration of Economic Interests

- Avoid business cases driven by each party

## Long Term Financial Engagement

- Arrangements for future asset maintenance and expansion
- Realistic revenue projections and Traffic guarantees
- Strong commitment of stakeholders

## Transparency

- Clear costing mechanism
- Facilitate competition
- Measurable performance indicators

## Appropriate Risk Allocation

- Allocate risks to party which has better control on risk
- Utilise key strengths and capabilities

## Project Preparation

- Streamlining licenses / permits; expedite land acquisition
- Clear definition of project scope and objectives
- Standardized documentation
- Flexibility in choosing PPP arrangements-Choose a structure which suits the project and desired level of control



# Areas for Rail PPP



## Infrastructure

- Freight Lines
- Metro Lines
- High Speed Lines
- Terminals
- Multi modal logistic Parks
- Production Units



## Operations

- Container Trains
- Passenger High end services
- Terminal Operations



## Services

- Hospitality & Tourism
- Catering
- Preservation of Heritage
- All on Board services

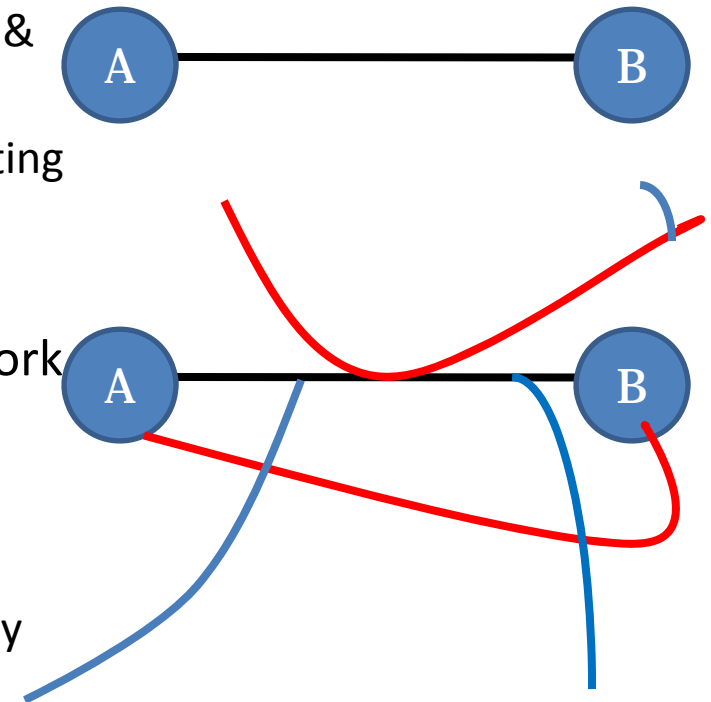




# Why PPP difficult in Rail Sector



- In other sectors PPP project:
  - implementation gives control to private concessionaire over design, construction, maintenance, operation & revenue collection.
  - Reasonable control over business with non-competing facilities.
  - Facilities are generally standalone.
- In Railways , rail connectivity is a part of the network with train operation being a network activity. By policy IR is the only train operator.
  - Private Operation on IR network not permissible.
  - Maintenance on passenger intensive lines generally not given to concessionaire on safety issues
  - Tariff freedom cannot be given
  - Competing facilities can enhance traffic risk.
  - Shortage of rolling stock or congestion on IR network will impact project viability







# PPP-Indian Experience



## Joint venture Route for Port Connectivity's

- 267 km Surendranagar-Pipavav GC
- 301 km Kutch Railway Company
- 189 km Hassan Manglore GC
- 301km Gandhidham-Palanpur GC
- 112km Krishnapatnam Port New line
- 82km Haridas Paradeep New Line
- 62km Bharuch Dahej GC
- Angul Sukinda NL in pipeline
- Likely Generation of non railway resources US\$ 800 million

## Non Government Private Lines

- Mundra Port Connectivity with payment of User Charges from IR
- Full financing , O&M by Private owner
- Access charge to IR

## Container Operations

15 Container operators granted permission for providing Container Services generating US \$ 500 million between 2006-2010

## Elevated Rail Corridor , Mumbai

- DBFOT Concession to private sector
- Utility shifting by IR
- Cost estimated as US \$ 4.5 billion
- Pre Bid on 16<sup>th</sup> November 2012



# PPP-Indian Experience



## Wagon Investment Schemes

- Own your wagon scheme between 1992-2005 generated US \$250 million
- Wagon Investment Scheme generated between 2005-2008 US \$ 300 million.

## World Class Stations

- 50 stations identified
- Separate company Indian railway Station Development Corporation formed

## Private Freight Terminals

- A new business opportunity to the investor who gets rail access to handle third party cargo.
- 33 Applications for PFT have been received

## Wagon Leasing Schemes

- M/s. GATX and M/s Touax-Textmaco have been registered under the scheme as Wagon leasing companies



# Port Connectivity Projects-JV Route



## Salient Features

- Partnership with Strategic Partners for Equity and formation of company
- Debt is raised on a pre determined debt-equity ratio
- Project execution with assured funding under a construction agreement with SPV
- Apportionment of revenue on pro- rata distance basis
- Expenses recovered from SPV on a fixed and variable cost basis
- Asset to get transferred to IR after shareholders get the mutually agreed return on investment
- 30 year concession

## Agreements

Shareholder Agreement, Concession Agreement ,Construction Agreement, O&M Agreement, Traffic Guarantee Agreement

## Government Role

- Initial Project Development , land acquisition and arrange Clearances
- Fixing Design parameters
- Part Equity payment (minor)
- O&M given under contract by JV
- Bear Cost of Passenger train operation
- Collect Revenue and than apportion

## Strategic Investor Role

- Equity Payments
- Traffic Guarantees



# Lessons learned



## Over -coming Obstacles

- Define clear objectives and measurable goals that need to be achieved through PPP
- Prepare and Plan for PPP implementation
- Transparency in Bids
- Strong PPP organisation
- Commitment from top
- Avoid Multiplicity of Roles of Government Agency ( Partner, Overseer ,Arbitrator)
- Balance the interests of investors and public
- Accurate cost allocation
- Clear policy on competing routes
- Transparent guidelines for revenue sharing- NTKM or trains or wagons ?
- Regulatory Mechanism to be in place

## Moving with Caution

- Capping of Returns for Investors
- Monopolistic Rights to Investors

## Forward Looking Approach

- Clear and Transparent Concession terms
- Give SPV freedom to operate and expand business
- Allow Construction, Maintenance and Operations to non government agencies for achieving true private sector efficiencies
- Give freedom to own assets and to provide services on SPV decided tariffs



# Thank You

[ms.mathur@gmail.com](mailto:ms.mathur@gmail.com)  
edtppp@rb.railnet.gov.in