Railway PPPs

Trends, PPP Relevant Issues
We are your “Partner” in Advisory Services

Our Clients
Multilateral Institutions, Donors, Port & Airport & Rail Operators, Project Developers

Our Services
Transaction Advisory, e.g. Project Finance Advisory, Strategic Advisory, Privatizations

Our Expertise
We focus on Transport / Infrastructure (Ports, Airports, Renewables, Rail, Health, Roads)

Infrastructure Advisory and International Development Advisory

Our team bundles its expertise, pragmatic approach and tailor-made solutions to respond to the needs of both public and private sector. We rely on a targeted partnering strategy. In an effort to provide sustainable advice to our clients, we work closely with our clients to structure complex projects, and transactions
Over the last 25 years, 27 PPPs have been awarded in the rail sector —16 are in Europe— Rail PPPs are controversial.

Some argue that they allowed to fund and build projects that otherwise would have been impossible to launch, or that they fostered innovative systems.

PPPs are costly to bypass budget constraints that cost more to the taxpayer at the end of the day.
PPPs have also been applied to infrastructure rehabilitation, maintenance and operation projects in heavy rail (Chile, Mozambique) and metro (London underground).

These PPPs rather involve limited investments and scope is smaller than the large PPPs listed to the left.
Overview of Rail PPPs

Source: PPPs in the rail sector - A review of 27 projects, Julien Dehornoy, SNCF French National Railways, April 2012

7 PPPs Airport Links
- Construction & Operation of Infrastructure and dedicated Trains
- Delhi ARL is the only one with new network

9 PPPs High Speed Lines
- Infrastructure PPPs to connect both ends with conventional networks with open access to operator - 8 are in Europe

4 PPPs Equipment & Rolling Stock
- Focus on optimizing life cycle costs for sub systems such as signalling (GSM-R), power supply and train control (Alb.Alicante) or rolling stock (Waratah)

7 PPPs Conventional Lines
- Less complex technically (Eurotunnel, Perp. Figuerres); Also applied to freight corridors (Adel.-Darwin, Liefkenshoek) or to get expertise in markets (Gautrain, Denver Eagle)
What are Rail PPPs?

The term PPP is not well-defined = confusion in the minds of practitioners:

- General cooperation between public and private sector
- Privatizations
- Sub-Contracting

Are often wrongly perceived as modes of partnerships:
A Common Definition of PPP

Level of Private Involvement

- Publicly Owned Enterprise
- Commercialization
- Service Contract
- Performance based Service Contract
- Management Contract
- BOT
- BROT
- DBFO
- PPP

Private Risk

- No PPP

Key Drivers

- Consistent political commitment
- Availability of affordable debt
- Macroeconomic condition
- Investment climate
- Institutional and legal framework
- Capacity and expertise to deal with complexity of PPPs in a country
- PPP investment must render VfM
- Affordability & Risk allocation
- Significant PPP pipeline
Key Features of a Rail PPP

✓ Contract is awarded or signed between a public entity (referred to as public authority) and a private company

✓ Design, construction, operation, maintenance of specific material assets (conventional rail system (including high-speed rail) or any sub-system (track, signaling, rolling stock, etc.) excluding light rail, metro, people movers

✓ Private sector finances the asset including debt and equity, but may receive initial subsidies or ongoing fees from the public authority over the asset’s lifetime

✓ Risk sharing although private sector bears risks of construction, financing, operation and maintenance costs, but may or may not bear risks related to commercial revenues.
Positive Externalities of Railways and Long payback periods and long lifetimes!
Typically 40-60 years

**Track Access Charges**

Contrary to the road sector, infrastructure user charges are **systematic in the rail sector**

May be differentiated by market segment, where the charge is topped up with markups “that the market can bear”

May include a scarcity / congestion charge

May be used for additional price signals (e.g. noise, ETCS)

**Regulation under EU law (2001/14/EC)**

Non-discriminatory

Related to wear-and-tear

Distance-based and tonnage-based

Base level is the “cost directly incurred” (~ short-run marginal cost)
Most rail PPPs are of the DBFM type, Design-Build-Finance Maintain

- Availability based payment; traffic risks borne by public sector; the Public sector receives revenue from the track access charges; remuneration based on making the capacity available, plus other selected quality goals

A minority are Build-Operate-Transfer (BOT-Types)
- Traffic risk borne by the private partner who obtains the revenue from track access charges plus (possibly) some quality goals, including availability

Experience: Tours-Bordeaux (HSL SEA) and Stockholm-Arlanda

For high-speed, quite often state co-funding around 40%-60% of investment costs
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

Source: www.db.de
PPP model via an Analysis of Application
Typical Rail PPP Drivers

Justified if more cost-effective and/or faster/better delivery at same cost

- **VfM**: Applied in many countries (PPP comparator, VfM analysis)
  - Not known with certainty (it is a counter-factual analysis)
    - Typically expected to be positive (if not very large)
    - May be outweighed by higher contracting and financing costs
    - Always a risk of fitting the analysis around the desired result
    - A rational 2nd best choice when under a tight fiscal constraint
## Allocation of the Risk

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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 & Costs
- Reducing costs of labour and O&M
- Better Asset utilization
- Safety and reliability
- Reducing time and cost overrun

Need for Quality & Innovation
- Growing customer expectations
- New technology and modernization
- Providing seamless logistic solutions
Two Schemes for Railways in France

- **DBFM (Contrat de Partenariat)**
  - Remuneration based on performance and availability (reliability, regularity, etc.)

- **BOT (Concession)**
  - Remuneration based on level traffic/revenue and on performance and availability (reliability, regularity, etc.)

**Train operating companies**
- Design, Build, Maintenance, Renewal
  - SPV
  - Concessionaire

**Infrastructure Tolls**
- Grant and availability payment
- Grant

**Operating**
Advantages

Respect of delays and costs: Project on time and on budget; lump sum contract

Bundling of asset construction and operation;

Life cycle cost (LCC) optimization

Risk allocation

Performance based

Brownfield risk: extension of existing network
Disadvantages

Financial costs (mainly after financial crisis) -
  club deal vs syndication
  liquidity issues: limited final take
  rising of commercial bank margins and
  fees (project finance debt from 70 bps
  to 250 bps and more)

Reduction in number of financial institutions active in the market

Shorter maturities of bank lending:
  from 35 years to 10-15 years, not
  covering entire project life (except public banks)

Transaction costs

Widening gap between the “private” WACC and the cost of public debt

Complexity of interfaces with the existing network (connections, systems)
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
Thank you for your Attention

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