Private investment in railfreight infrastructure - why and how?

6th July 2010
Agenda

• The need for private investment in rail(freight) infrastructure
• Suitability of railfreight infrastructure for private finance
• Sources of funds
• Necessary conditions for private investment
Why?
The need for private investment in rail (freight) infrastructure
Global infrastructure spending

- The Organisation for Economic Cooperation and Development (OECD) estimates that the required investment in rail, telecoms, electricity, road and water infrastructure globally will reach US$71 trillion by 2030, without even taking into account seaports, airports and social infrastructure. This represents approximately 3.5% of annual global GDP to 2030.

- On a macro level it is estimated that $9.4 trillion dollars needs to be invested in transport infrastructure between 2005 - 2030, with $7.8 trillion of this in the Rail & Road sectors. This will require a great deal of private investment.

*Source: Booz Allen Hamilton Lights! Water! Motion!*
Private investment in public funding

Global Infrastructure (non-Energy) Projects 2006-2008

- Road: $101.32 bn (31.5%)
- Rail: $32.79 bn (10.2%)
- Airports: $36.89 bn (11.4%)
- Other Transport: $43.67 bn (13.8%)
- Water and waste: $26.70 bn (8.3%)
- Others: $12.96 bn (4.0%)
- Education: $17.26 bn (5.4%)
- Defence: $10.59 bn (3.3%)
- Hospitals: $24.88 bn (7.7%)
- Telecoms: $14.74 bn (4.6%)

Total = $213.6 bn

Source: Dealogic ProjectWare
Infrastructure spending in Russia

Private Participation in Infrastructure Projects in Russia has been focused on energy and telecoms

Private Participation in Infrastructure Projects in Russia (1993 - 2008)

**Number of Projects**

- **Energy**: 5% (14 projects)
- **Telecom**: 6% (19 projects)
- **Transport**: 32% (98 projects)
- **Water and sewage**: 57% (178 projects)

**Total Investment in Projects (US$ m)**

- **Energy**: 37% (30,483 m)
- **Telecom**: 2% (1,856 m)
- **Transport**: 60% (48,775 m)
- **Water and sewage**: 1% (706 m)

Source: Private Participation in Infrastructure Database – The World Bank Group
Russia’s proposed new rail network

Source: Russian Railways website
Implementing Russia’s transport strategy will require significant funding and cannot be executed without a substantial amount of private sector investment.

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<tr>
<th>Required investment (roubles)</th>
<th>Minimum Strategy</th>
<th>Maximum Strategy</th>
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<tbody>
<tr>
<td>Stage 2 (2016 – 2030)</td>
<td>6,328bn</td>
<td>8,594bn</td>
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<tr>
<td>Total</td>
<td>11,448bn</td>
<td>13,812bn</td>
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Suitability of railfreight infrastructure for private finance
How does private finance work?

- Single purpose entity is established to implement project (to facilitate ring-fencing of project costs, revenues, risks and related funding)
- Private finance (equity and debt) used to build the initial infrastructure
- Debt sourced from banks or institutional investors (and sometimes multi-lateral lenders)
- Equity is from the service providers (builders and operators) and often from specialist PPP equity investment funds
- Debt principal, ongoing operating costs and finance costs are repaid through fees charged to public sector and/or users
- Assets handed back to state at end of agreement period for no cost

Cashflows for an Availability Payment based PPP

- Construction + Operating costs
- Annual PPP payments for service provision & capital repayment
- Privately funded PPP
- Public sector funded
Attracting private investment: key challenges

- Planning risk
- Demand risk/underwriting
- Regulatory risk / tariffs
- Size of project
- Integration with the network
- Complexity
- Sources of finance (sovereign credit risk)
Is rail infra suitable for private finance?

- Upgrades of existing infrastructure
- Large new rail lines
- Small new rail lines
- New rail stations and rolling stock

Less suitable √ More suitable
Risk allocation

...risks should be allocated to the party best able to manage them...

PUBLIC AUTHORITY
- Outline planning permission
- Discriminatory regulatory risk

SHARED
- Volume risk
- Inflation risk
- General regulatory risk
- Force majeure

PRIVATE SECTOR
- Detailed planning permission
- Design
- Construction
- Commissioning
- Operating performance
- Whole life cost
- Project finance
- Technology obsolescence
Different approaches to demand risk

Demand risk is the biggest challenge and depends on the project

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<tr>
<th>TYPE OF RISK</th>
<th>WHO SHOULD TAKE IT?</th>
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<tr>
<td>SINGLE COMMODITY EG MINERALS/OIL</td>
<td>CUSTOMER eg mining company</td>
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<tr>
<td>MULTI-USE NEW CORRIDOR AS ADDITION TO NATIONAL NETWORK</td>
<td>INFRASTRUCTURE MANAGER/Government?</td>
</tr>
<tr>
<td>MULTI-USE EXISTING CORRIDOR</td>
<td>SPONSOR may be able to take risk if demand is visible</td>
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</table>
Sources of finance
Potential sources of public sector investment

*Early PPPs are often financed by the public sector (so are they PPPs?)*

- Some of the requirements of public sector lenders are similar to those of the private sector and impose the same disciplines as private investors/lenders
- Public lenders can be a catalyst to develop the market
  - EIB
  - EBRD
  - IADB
  - ADB
  - IFC
  - Direct aid/ECAs
- New products have been devised to help private lenders deal with project risk, such as:
  - EIB Loan guarantee instrument for TEN-T projects (LGTT)
  - IFC Partial Credit Guarantee
Potential sources of private sector investment

There are a variety of sources for private investment in transport, but many emerging economies have so far struggled to attract large amount of this investment

- **Infrastructure Funds** - In 2009 Macquarie set up the Macquarie Renaissance Infrastructure Fund. This was the first major private fund dedicated to investing directly in infrastructure in the CIS. However, to date, the investors in this fund have not been private investors, but public entities such as VEB.

- **Private Equity** – Despite high returns over the last 10 years in emerging markets, the perceived risks of investing in many emerging markets have meant that they have always struggled to attract international private equity funds. So international contractors may be a more likely source.

- **Project Finance debt** – The PPP deals that have so far closed in many emerging markets have used government debt, government backed debt or funding from multilateral lenders. There has been a lack of interest from multinational project finance lenders. A fundamental problem is the limited availability of long term commercial project finance debt

- **Capital Markets** – In 2009, PIMCO the global Asset Management firm launched an Emerging Markets Bond Fund with fund assets of $2.8bn to try and tap into the entire emerging market fixed income opportunity set.

Many private investors will not invest in Greenfield projects so the secondary market is important
Necessary conditions for private investment in PPPs
Necessary conditions for private investment in PPPs

**PPPs can make a significant contribution if the right economic, legal and commercial issues are addressed**

The Government can play a key role in enhancing private sector interest in PPP infrastructure projects. A successful PPP programme will include the following:

- General economic stability (and financial stability of the national railway company)
- An explicit commitment from Government to invest in infrastructure and involve the private sector.
- A credible legal framework which includes legislation for property rights, intellectual property protection, bankruptcy, commercial banking, insurance and labour laws.
- A credible administrative framework empowering one government body with the legislative authority to originate, and implement PPP projects. The body’s role would include formulating government policy, proposing legislation and ensuring proper financial analysis of PPP projects.
- Creating a certain fiscal framework of incentives which encourage private sector participation in PPP projects. Such incentives may include capital allowances, subsidies for socially necessary services, or protection from lost revenue due to competing projects.
- International standard approaches to risk allocation
- A transparent and orderly procurement process which typically includes a feasibility study, a clear request for proposals, a well defined and transparent bid process and a commitment to a reasonable timeframe.

**Russia has introduced a new regulatory framework and set up a PPP Centre to support and develop PPP instruments.**

**Brazil introduced a PPP Guarantee fund to reassure lenders that contractually due payments will be made.**
Necessary conditions for private investment in PPPs

*There are examples of countries which are successfully attracting the private sector to invest in railfreight*

**Indonesia – Private Investment in freight lines to transport their own raw materials.**

- In the East Kalimantan Province construction has begun on a 130km private freight line by MEC Infrastructure. The line will be used to transport coal from MEC’s mine in Muara Wahau to the port in Bengalon. – The risk for the private sector in regard to demand and freight levels has been removed as MEC are using the line themselves and can therefore assure demand.

**India – Increasing the commercialisation of freight industry**

- In June 2010 the state run Indian Railways announced plans to increase the commercialisation of the freight industry, including privately funded tracks, independent rail trucks and inter modal terminals. In parallel to this the government is trying to reduce the volume risk on freight transport to encourage private sector investment by encouraging the transport of ‘non conventional’ traffic to rail by offering rebates to private carriers for certain cargoes and if they reduce the amount of cargo carried by road trucks.

- However the initial investment steps have been taken by the government and international organisations – 2 freight corridors are being built at a total cost of $10bn with four more corridors being planned. The funds are coming from the Japan International Cooperation Agency, World Bank, Asian Development Bank and the Indian Ministry of Railways.
Thank you!