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The Voice of European Railways

Public Private Partnerships

A Rail Sector Perspective

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Edward Christie

Senior Economic Adviser, CER

Strategic considerations

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Strategic imperatives:

Need to move away from oil and to decarbonise transport

Rail to capture higher modal shares, notably on longer distances

Public transport and electric road vehicles in cities

Strategic obstacles:

Constrained state budgets

Fiscal austerity threatens growth

Lock-in: no infrastructure = no shift to low-oil, low-carbon transport

Europe a sitting duck for the next oil shock

Europe needs to give a higher priority for infrastructure investments

For the short-run: infrastructure investments have higher multiplier effects as compared to public sector wages and transfers → get us back to growth

For the long-run: the energy and transport transition will not happen otherwise

User financing in rail is the rule, not the exception

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- Contrary to the road sector, infrastructure user charges are **systematic** in the rail sector: **track access charges**

- *Track access charges are regulated under EU law (2001/14/EC) so as to be:*

  - ❑ Non-discriminatory
  - ❑ Related to wear-and-tear → distance-based and tonnage-based
  - ❑ Base level is the "cost directly incurred" (~ short-run marginal cost)
  - ❑ May be differentiated by market segment, where the charge is topped up with mark-ups "that the market can bear"
  - ❑ May include a scarcity / congestion charge
  - ❑ May be used for additional price signals (e.g. noise, ETCS)
  - ❑ Recast of the 1RP → partial clarification of charging principles – implementation work with Commission & national experts important

New investments

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- Existing rail legislation (2001/14/EC, Art 8, par 2) allows for higher user charges:

  "For specific <u>**investment projects**</u> (...) the infrastructure manager may set (...) higher charges on the basis of the <u>long-term costs</u> of such projects *if they increase efficiency and/or cost-effectiveness and could not otherwise be or have been undertaken*."

  But user charges should also be low: competitiveness of rail services against road (especially where road user charging isn't in place), against aviation

- Most rail projects require a high percentage of direct funding from national and/or EU **grants** ("blending")

  → Justified by positive socio-economic benefits (**positive externalities**)

- Long payback periods and long life-times. Typically **40-60 years**

Private financing of public infrastructure – general arguments

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- **Justified if more cost-effective and/or faster/better delivery at same cost**
  - Applied in many countries (public-private comparator, VfM analysis)

- **The efficiency gain must be the scope for reduced public spending**
  - It is never known with certainty (it is a counter-factual analysis)
  - It is typically expected to be positive (if not very large)
  - It may be outweighed by higher contracting and financing costs

- **In practice: political pressure from the top is the first driver**
  - Those who can afford it do something else (e.g. Sweden)
  - Always a risk of fitting the analysis around the desired result
  - A rational 2nd best choice when under a tight fiscal constraint

Selected European rail PPPs
Source: Hansen (2010) (amended - needs update)

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Project	Design to completion time	Contract duration	Route length	CAPEX	Public co-funding (grants)	Type of PPP	Loan guarantees
Stockholm-Arlanda Airport	1993-1999	41	39	SEK 4.1 bn	SEK 2.4 bn	BOT	
HS1 Channel Tunnel rail link	1996-2003 (2007)	90	109	GBP 5.8 bn	GBP 2.01 bn	DBFM	
Oresund road-rail link	1991-2000	25-30	38	EUR 2.0 bn	NA	DBFM	Yes 100%
HSL-Zuid	2000-2007	25	100	EUR 6.0 bn	EUR 0.11 bn / year	DBFM	
Perpignan-Figueras HS	2005-2009	50	45	EUR 1.1 bn	EUR 0.6 bn	DBFM	
Diabolo rail link Brussels	2007-2012	35	3	EUR 0.54 bn	EUR 0.25 bn	DBF	
Liefkenshoek rail link Antwerp	2008-2013	38	16	EUR 0.84 bn	EUR 0.05 bn / year	DBFM	
Tours-Bordeaux HS (HSL SEA)	2010-2016	50	340	EUR 7.8 bn	EUR 4.0 bn	BOT	State and EIB/LGTT
GSM-R France	2009-2015	15	14000	EUR 1.5 bn	EUR 0.16 bn	DBFM	
Lisbon-Madrid HS	2009-2013	40	165	EUR 7.8 bn	NA	DBFM	
Nimes-Montpellier HS	2011-2016	25	80	EUR 1.8 bn	NA	DBFM	State, EIB, RFF
Bretagne-Pays de la Loire HS	2011-?	25	182	EUR 3.4 bn	NA	DBFM	

Main characteristics of European rail PPPs

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- Rail PPPs primarily for
  - *High-speed (incl extension/bypass projects, lower risk than fully new line)*
  - *Airport and sea-port links*
  - *Rail telecommunication projects (GSM-R in France)*
- For high-speed, *in favourable cases*, state co-funding around 40%-60% of investment costs
- Small wave of projects to be completed 2013-2016 – to watch closely
- **Most rail PPPs are of the DBFM type, Design-Build-Finance-Maintain**
  - This means usually an **availability payment** model. Traffic risk borne by the state; the IM obtains the 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) (“concession”)**
  - 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

Conclusions

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- Rail PPP still unfolding - less experience than e.g. motorways – but wave ending around 2015-2016 should hold useful lessons
- Speed and timeliness of project completion often favourable (perhaps the clearest concrete advantage of PPPs?)

- But PPPs not systematically cheaper than other forms of procurement – depends on fiscal and macroeconomic conditions in each country
  - E.g. Denmark: preference for state guarantee model
  - E.g. Sweden: preference for public debt financing (low-rate Riksbank loans)

- **Convergence between road and rail is the key**
  - Generalise distance-based charging for all main roads
  - Align charging principles and charging rules – SRMC and externalities
  - Set-up a "road infrastructure manager" – the trend in Germany?
  - PPPs – whether rail or road - where VFM analysis is favourable
  - PPPs free up resources for traditional procurement → most rail projects

Thank you for your attention!

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→ **Edward Christie**

Senior Policy Adviser, Economics

Tel: +32.491.16.21.70
Email: edward.christie@cer.be

→ For further information,
visit our website: www.cer.be