Competitive Access in a Volatile Environment



Dr. Malcolm Cairns
Director, Business Research

CTRF Conference, Victoria, British Columbia, May 24 - 27

CANADIAN PACIFIC Ingenuity.

- Background
- Competitive or Forced Access Defined
- General Implications of Forced Access
- Recent reports of developments
 - UK
 - Europe
 - Australia
- Recent reports in the US
- Volatility in the Current Economic Environment
- Conclusions

Background

- CP and CN like all other Class 1 freight railways in North America are:
 - Privately-owned
 - For profit
- Competitive Access in transportation refers to access over the private infrastructure of railways
- Access already exists as a commercial agreement between railways
 - Co-production between CP and CN
 - Rocky Mountaineer tourist train over CP between Calgary and Vancouver
- Access also exists as a partially-commercial arrangement:
 - VIA over CP and CN
 - Commuter rail services in Montreal, Toronto and Vancouver over CP
 - These arrangements do not require the tenant railways to pay the full costs of access to the freight infrastructure

Competitive or Forced Access Defined

- In the present context, Competitive or Forced Access may be defined as follows:
 - The right of one freight railway (the tenant) to operate trains over the rail lines of another freight railway (the landlord) for a fee
 - The tenant railway has the right to solicit traffic at stations on the landlord railway lines and to deliver traffic to such stations
 - The rights are non-commercial and established by legislation and/or regulation
 - The access fee is determined by the appropriate regulator (CTAgency)
- Such Forced Access does not currently exist in Canada (or the US)
 - The CTAgency declined to provide the right of traffic solicitation in a decision May 2001
 - The government of Canada rejected expanding the existing running rights provisions in its policy statement StraightAhead in 2003 – despite a recommendation from the CTA Review Panel in 2001
- "Given a lack of evidence of a systemic problem in the rail industry; the significant productivity gains achieved from a less interventionist approach; practical concerns about access fees; the substantial regulatory burden involving regulated running rights; the availability of a number of other regulatory remedies to address specific problems; and possible adverse impacts on system efficiency; the government believes the current running rights provisions should be retained"

General Implications of Forced Access

- Given the intent to create artificial rail competition, a regulator can be relied upon to determine low access fees – below the full costs of the landlord railway
- The subsequent loss of traffic for the landlord railway, combined with the less than full payment for the use of the landlord rail infrastructure, will have obvious consequences:
 - Short-term: A reduction in rail infrastructure investment by the landlord. Train operations will become fragmented resulting in cost inefficiency, a loss of productivity and innovation will suffer
 - Longer-term: Financial distress for the landlord and the need for government subsidy
- Partly as a result of historical development, and partly as a result of a fixation on the need for intra-rail competition – even in the face of modal competition from trucking – some overseas countries have turned to the vertical-separation of train operations from rail infrastructure
 - UK
 - Europe
 - Australia
- In all these foreign examples, the rail infrastructure receives less than the full costs from the train operators and receives government subsidies. Sometimes the train operators also receive subsidies
- Recent reports of these foreign regimes illustrate the problems associated with such an industry structure

UK Developments – A Regulators Dream

CANADIAN PACIFIC

- Network Rail (formerly Railtrack) owns and operates the rail infrastructure
- There are 7 freight train operators
- In practice, one route tends to be served by one operator – no direct competition
- In 2007, freight handled was 108 million tonnes, 45% coal for electricity, average haul 200 kilometers
- Track Access contracts between Network Rail and the freight operators cover
 - Access rights to the network
 - Terms and conditions
 - Charges
 - Compensation for not being able to exercise rights temporarily and the parties' liabilities
- These contracts and amendments must be approved by the Office of Rail Regulation (ORR)
- The main functions of the ORR are summarized in Exhibit 1
- The complexities mean there is lots of work for planners, regulators, negotiators, consultants, lawyers and accountants

EXHIBIT 1: OFFICE OF RAIL REGULATION - MAIN FUNCTIONS

Regulation of Network Rail's stewardship of Britain's rail infrastructure;

periodic access charges reviews in which the structure and level of the allowed revenues of Network Rail are set;

Granting, modifying, compliance monitoring and enforcement of licenses held by operators of railway assets.;

approval or direction of contracts for the use of track, stations, and light maintenance depots;

Acting as the appellate authority for certain classes of appeal of a regulatory or legal nature arising under the industry-wide network code;

Enforcement of railway competition law;

Independent health and safety regulation for the railway industry as parent body of HM Railway Inspectorate and for Personal Track Safety;

Conditions of Carriage.

ORR produces what is known as "the Blue Book", officially titled Railway Safety Principles and Guidance, to ensure those operating the rail network, or designing products related to it, comply with health and safety law.

UK Developments – Extensive Subsidies

CANADIAN PACIFIC

EXHIBIT 2												
Central Government Grants			PTE Grant	E Grant: Direct Rail Support Network			Freight Grants Track Freight			Other		
Year April to March	Net Francise Payments	Performance Receipts	Sub Total		Grant to Network Rail	Capital Grant (£ milli	Sub Total	Access Grants	Freight Facilities Grants	Sub Total		GRAND TOTAL
2003-04	£1,556	-£197	£1,359	£414	£1,448	£222	£1,670	£17	£15	£32	£179	£3,654
2004-05	£695	£183	£878	£389	£2,058	£312	£2,370	£24	£2	£26	£154	£3,817
2005-06	£1,038	-£158	£880	£332	£1,984	£1,382	£3,366	£23	£0	£23	£24	£4,625
2006-07	£1,403	£54	£1,457	£313	£3,398	£1,066	£4,464	£30	£0	£30	£76	£6,340

- Since the UK rail "stimulus" preceded the current volatile environment – it demonstrates you do not need one to mess up
- The range of government subsidies or "grants" in Exhibit 2 is extraordinary
- Rail Track is the biggest recipient £3.4 billion out of £6.3 billion total in 2007
- Note also that freight train operators get additional "grants" for track access and facilities
- Future estimates of "grants" in Exhibit 3 look like £4 billion annually or some C\$7 billion
- This should make any Canadian politician or bureaucrat think long and hard – even in the current volatile environment

EXHIBIT 3	Estimate April 04 to March 09	Net Revenue Requirement from Government April 09 to March 2014			
		Low Estimate (£ millions)	High Estimate		
Total Grant	£23,280	£18,420	£21,600		
Annual Average	£4,656	£3,684	£4,320		

"Periodic Review 2008: Advice to Ministers and Framework for setting Access Charges", Office of Rail Regulator, 2007

 European rail freight policy has aimed at the separation of infrastructure from operations, open access for freight services, and independent regulation for safety and interoperability in the network

EXHIBIT 4: Liberalization by 2006 in Europe	Degree of Competition			
	No Open Access	Open Access, Freight Competition		
Degree of Separation				
Vertically-integrated - with accounting separated	Greece, Ireland	Germany, Austria		
Separate public infrastructure manager	France, Finland, Spain	Sweden, Netherlands, Belgium, Denmark, Italy, Portugal		
Separate private sector infrastructure manager		UK		

- No obligation to strictly separate different countries, different configurations see Exhibit 4
- In addition, implementation of access is incomplete again see Exhibit 4
- Rail share of the freight market has declined from 20% in 1970 to 10% in 2005
- "The introduction of a new rail market regime has not run smoothly. It has taken almost two decades from the first discussions...many hurdles had to be overcome and various directives and packages were redirected to the recycle bin"
- "European Policy on the Rail Freight Market: Competition and Coordination", January 2009, Dr Larissa M van der Lugt, Erasmus University Rotterdam

Europe – Coordination Problems

CANADIAN PACIFIC

■ Rail intermodal transport in the Port of Rotterdam — a case study in coordination problems

- The incumbent railway has lost market share to new entrants
- There is more competition but the downside is increasing delays in service

Railway Company	Railway Company Number of Services Market Share					
SNCF	3	1%				
Railion (incumbent)	62	30%				
Rail4Chem	32	15%				
ERS railways	49	24%				
Veolia	21	10%				
ACTS	41	20%				
Total	208	100%				

- Studies conducted in 2007 provided the following insights:
 - The mix of freight and passenger trains causes freight delays
 - Precise slot allocation is important
 - Real time information available to all is important
 - Rail companies sometimes obstruct track and yards to the detriment of competitors
 - A mismatch occurs between shipping and rail operations
 - Rail companies lack an incentive to use infrastructure efficiently
 - Rail operations planning is complex and involves many parties
- "Difference in interests, distrust and fear of unfair division of benefits and costs are obstacles for the market players to come to efficient use of assets and infrastructure and to develop solutions jointly"
- In 2008, the Netherlands Scientific Council for Government Policy concluded in their report on the impacts of liberalization of network industries that system coordination has failed – new arrangements are needed, and work in underway

Australia – A Patchwork of Regimes

- Like Europe, Australia is a patchwork of rail regimes, by State rather than by Country
- While access is generally mandated, regimes differ whether and how they are vertically separated or not
- There are five broad rail freight markets in Australia:
 - Coal: In Queensland and New South Wales (NSW)
 - Iron Ore: Pilbara in Western Australia
 - Intermodal: E-W dominated by rail, N-S dominated by truck
 - Grain: Intra-State and seasonal
 - Industrial: Steel, other ore and miscellaneous products with small volumes
- Recent report "Introducing Competition into Natural Monopoly Industries: An Evaluation of Mandated Access to Australian Freight Railroads", October 2007, Mark Fagan, Regulatory Policy Program, J F Kennedy School, Harvard
- There is currently direct competition between rail freight companies only in the following three markets
 - E-W Intermodal over ARTC between PN, SCT Logistics and QR National
 - N-S (Brisbane Cairns) Intermodal over QR Ltd between PN and QR National
 - Coal in NSW over ARTC between PN and QR National

Australia – Assessment of Mandated Access

CANADIAN PACIFIC

EXHIBIT 7: POTENTIAL BENEFITS AND COSTS OF MANDATED ACCESS						
Potential Benefits	Evidence	Potential Costs	Evidence			
New entrants	Very few	Sub-optimal trade-offs	Yes, but only anecdotal			
New services	Very limited - new entrants typically handle less than 15% of the traffic	Cost of government regulatory infrastructure	Very Significant			
Better quality of service	Not attributable to access - but investment	Larger rail organizations	Yes - and coordination becomes difficult			
Improved efficiency	Not attributable to access - but modal competition from trucks and ships	Delays in decision making	Yes - 18 months to get PN Brisbane-Cairns			
Improved safety	Not clear	Increased litigation costs	Yes - more than \$10 million in Pilbara			
An increase in rail market share	Only a slight increase overall. Very dependent on specific market segments. Significant growth in coal and iron ore markets due to global competitiveness not rail competition					
Lower rail freight rates	Generally lower, but reasons unclear. Some evidence of lower coal rates due to increased competition or the threat of increased competition					
Increased investment	Not attributable to access - but government subsidy instead					

■ The report concludes that "many of the anticipated benefits have not materialized" and that any rate reductions "appear to be a wealth transfer from rail to shipper as no underlying efficiencies have been achieved"

- In June 2004, Northwestern University held a Conference: "Railroad Industry Structure, Competition and Investment"
- "When is Competition Not Good? The Case of Compelled Access and Maximum Rate Regulation for Railroad "Captive Shippers", Professors Gallamore and Panzar
- Paper concludes:
 - "The simple model of competitive equilibrium does not apply to the railroad industry"
 - "Railroads must charge prices greater than marginal costs if they are to cover their fixed costs"
 - "Various access proposals would result in prices that do not cover fixed costs"
 - In the short-run, the addition of competition to the market through new access would result in lower rates to shippers, but in the long-run, mandated access would result in increased operating expenses, decreased railroad revenues, reduction in capital stock, loss of traffic through diversion, and greater costs to society as a whole"
- "We conclude that while open access would help some specific shippers realize lower rail rates, it is difficult to see what this radical change in American transport and regulatory policy would accomplish for the public interest"

- In November 2008, Christensen and Associates published a report commissioned by the US Surface Transportation Board (STB) entitled "A Study of Competition in the US Freight Railroad Industry and Analysis of Proposals that might Enhance Competition"
- The comprehensive and significant report covered a wide range of issues, but did examine various open access proposals, in particular:
 - Reciprocal switching similar to Canadian interswitching
 - Bottleneck Rates somewhat similar to Canadian CLRs
 - Terminal agreements
 - Trackage Rights similar to expanded running rights for Canada
- All of these access arrangements are currently available to some degree, but the terms of access are commercially negotiated with STB oversight – what is now being evaluated is mandatory access

Recent Initiatives in the US (2)

EXHIBT 8	LIKELY ECONOMIC EFFECTS OF VARIOUS OPEN-ACCESS PROPOSAL				
	RECIPROCAL SWITCHING	BOTTLENECK RATES	TERMINAL AGREEMENTS	TRACKAGE RIGHTS	
Economies of Density	Potential gains	Gains unlikely	Potential gains	Potential gains	
Length of Haul Economics	Small loss	Potentially large loss	No gain to small loss	No gain to small loss	
Vertical Economies	Small loss	Potentially large loss	Small loss	Potentially large loss	
Investment Incentives	Small effect	Potentially large effect	Small effect	Potentially large effect	
Railroad Profitability	Small effect	Potentially large effect	Small effect	Potentially large effect	
Coordination Costs	Small to moderate	Small to moderate	Small to moderate	Potentially large	
Competitive Response	Most likely	Least likely	Most likely	Somewhat likely	
Shipper Gains	Most likely	Least likely	Most likely	Somewhat likely	

- Exhibit 8 summarizes the likely economic impacts of the various proposals
- Since Competitive Access in Canada is closest to US trackage rights, its implications are most relevant
- Overall, the report concludes "Our assessment that the railroad industry is pricing at levels generating earnings that maintain or slightly exceed those necessary to ensure financial viability implies that there is little room to provide significant "rate relief" to certain groups of shippers without requiring increases in rates for other shippers or threatening railroad financial viability"

Volatility in the Current Economic Environment

- Railroad business is a derived demand
- Traffic volume has declined 20% during the current economic recession
- As of April 23rd, CP had idled some 500 locomotives, stored some16,000 freight cars, laid-off or notified some 2,400 employees and taken a number of other measures to reduce costs
- Railways will not be earning their cost of capital under current circumstances absolutely no room for new mandated "rate relief"
- Existing shipper remedies have already provided "rate relief" this year
- Imposing mandatory access would be totally inappropriate at any time
- At a time of such economic uncertainty, imposing mandatory access would be the height of irresponsibility

- Competitive or Forced access has already been extensively reviewed and rejected in Canada
- Overseas countries that adopted it in one form or another:
 - Have done so due to an unnecessary fixation with intra-rail competition
 - Have found it necessary to provide extensive ongoing government subsidies
 - Have found it complex and very difficult to manage
 - Have found the complexities make it inefficient from a cost perspective
- Recent US reports assessing mandatory access:
 - Have indicated it would be inefficient
 - Have concluded it would not be in the public interest
- Overall, competitive access for Canada, in a volatile or any other economic environment, where rail does not earn in excess of its cost of capital over the business cycle, is completely inappropriate
- For shippers with continuing concerns, there are several other shipper remedies in Canada FOA, interswitching, CLRs and level of service complaints that make mandatory access entirely unnecessary