OLIVER WYMAN

This piece was published before the May 2007 rebranding of Mercer Management Consulting, Mercer Oliver Wyman, and Mercer Delta Consulting as Oliver Wyman.

Oliver Wyman

Oliver Wyman is building the leading global management consultancy, combining deep industry knowledge with specialized expertise in strategy, operations, risk management, organizational transformation, and leadership development. The firm works with clients across a range of industries to deliver sustained shareholder value growth. We help managers to anticipate changes in customer priorities and the competitive environment, and then design their businesses, improve their operations and risk profile, and accelerate their organizational performance to seize the most attractive opportunities.

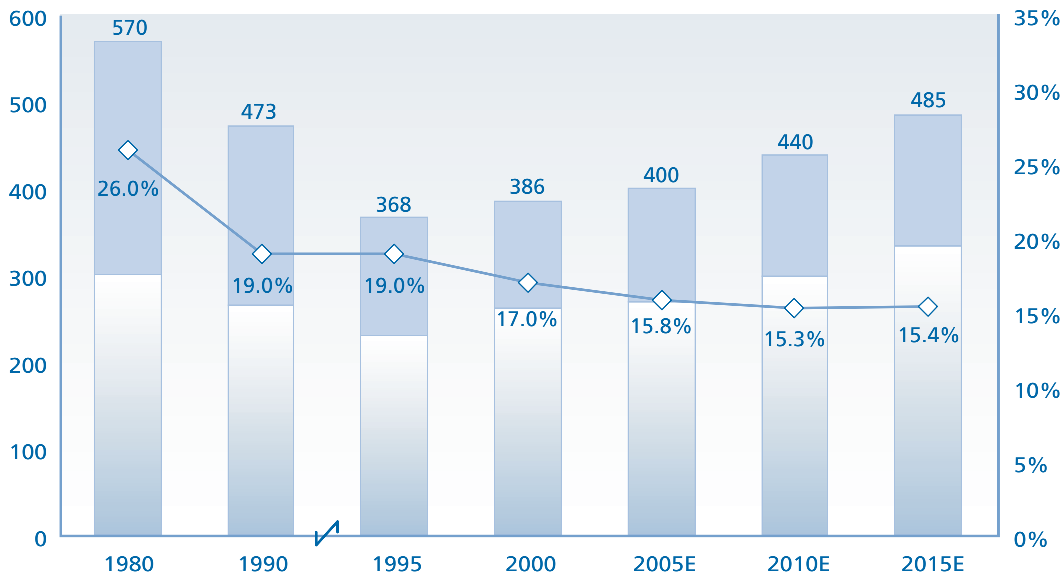
www.oliverwyman.com

Internationalizing for European Rail Freight Growth

By Joris D'Incà and Urs Mosimann

It is fairly well known that European freight railroads have had a tough time competing against other modes for many decades, with a resulting slow decline in freight modal share. The good news is that this decline seems to have been arrested: rail freight's overall modal share versus road and inland waterways is expected to remain around 16 percent over the near term, while the total rail freight market will grow by a slow but steady 2 percent per year through 2015 (Exhibit 1).

Exhibit 1 **Rail Freight Transport Growth in Europe, 1980-2015**
(billion metric ton-kilometers, rail share in %[1])



Percentage share of rail in total freight transport[1]
New EU countries (CAGR 2005-2015: +1.3%)
EU15+Norway & Switzerland (CAGR 2005-2015: +2.2%)

1 Rail share of road, rail, and inland shipping, excludes pipelines, air freight, and sea freight.
Source: 1980-1990 EU Directorate-General Energy and Transport, 1995-2015E: ProgTrans, Mercer analysis.

This stable market belies a competitive landscape that will change dramatically over the next 10 years, the result of increasing demand for "international," i.e., cross-border, rail freight service (particularly intermodal), the continuing entry of new operators, and shippers more willing and able to switch to the provider that offers the best service at the lowest price. In this environment, both incumbent railroads and new operators will be challenged to keep margins from eroding. As discussed herein, Mercer believes that strategies focused on maximizing productivity and internationalizing rail freight service as the ones most likely to prevail.

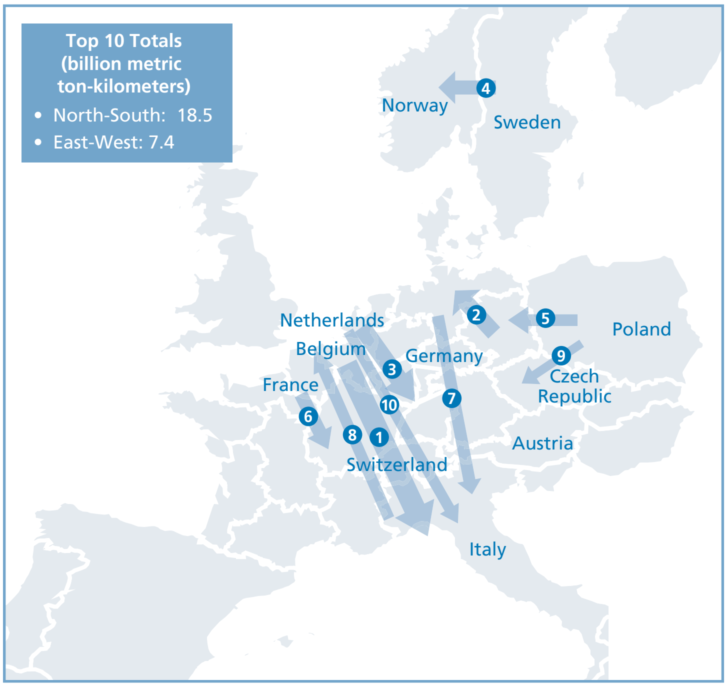
New Rail Freight Traffic Patterns

European railroads today move approximately 400 billion metric ton-kilometers of freight with a market value of €19 billion (US$24.4 billion). Where once rail freight was largely domestic (that is, within one country's borders), today

44 percent of traffic moves cross-border within continental Europe. Most of the anticipated growth in rail freight will be for traffic moving more than 500 kilometers (300 miles), thus driving up international market share. Intermodal represents the fastest growing form of this traffic, with an average annual growth rate of 6-7 percent, due to ongoing trade globalization and containerization trends. Thus growth in European rail freight will be driven to a large extent by demand for containerized finished and semi-finished goods.

At the same time, traditional short haul rail volumes likely will continue to decline. Only goods that play to the strengths of rail are likely to remain captive (e.g., bulk goods such as coal and grain, and hazardous freight). Concentration of traffic flows on a few major corridors is unlikely to change in the near term, with the main international transport flows moving along a north-south axis, particularly between the North Sea and Italy (Exhibit 2). Even though transport flows on the east-west axis are growing rapidly, they will represent only a fraction of total volumes moving north-south for the foreseeable future.

Exhibit 2 **Top 10 European Cross-Border Transport Flows**



Source: Eurostat, national statistics, Mercer analysis.

The Changing Competitive Landscape

Despite ongoing liberalization, the European freight rail market continues to be dominated by incumbent railroads. Some countries have issued rail freight operating licenses to new entrants, but only in a very few have market shares of traditional rail freight providers dropped below 90 percent (Exhibit 3).

But these incumbents are facing more pressure than ever before to improve their competitiveness. Shippers represent one source of pressure: they are dissatisfied with the slow progress of liberalization, and consequently the mediocre quality and high price levels of current rail freight services. A recent Mercer survey found that they are increasingly ready to switch providers if more reliable and faster service, and lower prices can be had elsewhere (Exhibit 4). Some large shippers have even created their own railroads to bring more competitiveness to the market. Rail4chem, for example, is operated as a joint venture by the German chemical company BASF, the car leasing company VTG, and the chemicals logistics companies Bertschi (Switzerland) and Hoyer (Germany).

Exhibit 3 **Incumbent Railroad Freight Share in Europe**

Country	Market Share of Largest Rail Freight Transport Provider
Finland, France, Greece, Ireland, Luxembourg, Norway, Portugal	100%
Austria, Czech Republic, Italy, Poland	~97-98%
Belgium, Denmark, Spain	~95-96%
Germany, Hungary	~85%
Sweden	~80-90%
Netherlands, Switzerland	~80%

Increasing competitiveness

Source: Erail Report (June 2004), Competition Report DB AG 2005, Rail Liberalization Index 2004, IBM/Prof. Kirchner, UIC, annual reports, interviews.

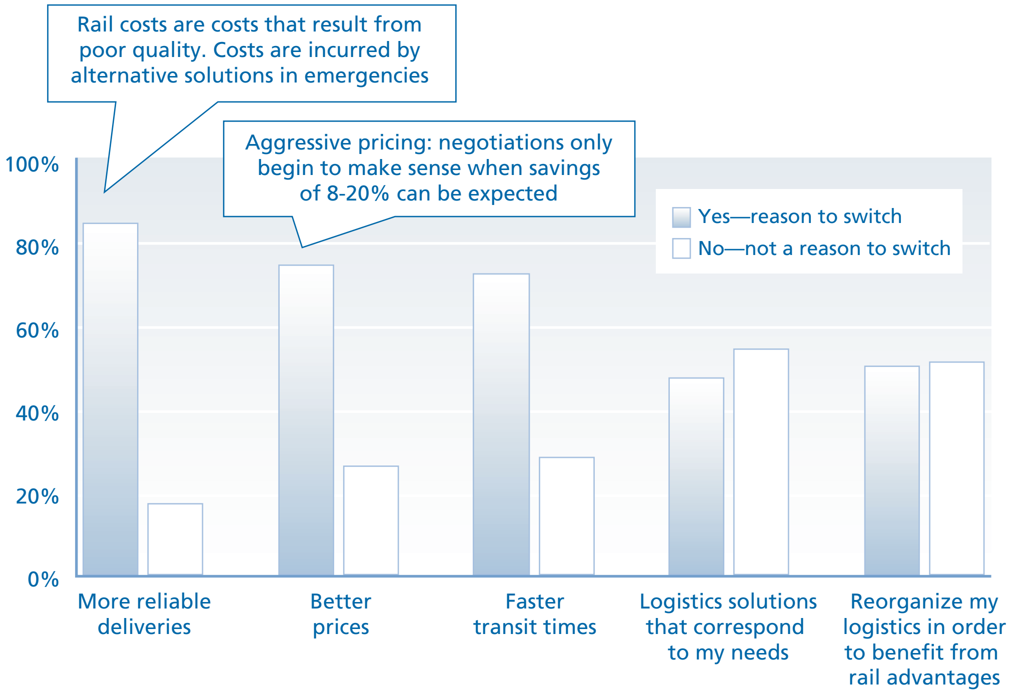
New entrants represent another major source of pressure. As could be expected, most new freight operators utilize a "cherry picking" strategy, targeting the most attractive long-distance traffic and regular block trains. As a consequence, prices for regular block train traffic (bulk and intermodal traffic) have come under stress and are expected to decline by an average 2 percent per year over the near term.

The stress on prices, combined with continuously increasing costs for infrastructure access, energy, and rolling stock (due to growing technological requirements, e.g., ETCS or multi-current-traction systems) is creating a situation in which, Mercer estimates, railroads must improve their productivity at an average rate of 3-4 percent every year to keep margins from eroding. US Class I railroads faced a similar experience in the two decades after deregulation in 1980, achieving stable margins in the face of a constant need to reduce rates only through continual productivity improvements, such as widespread rationalization of networks and assets.

A Drastically Different Future?

The incumbent European railroads are unlikely to achieve needed productivity gains on a sustainable, long-term basis using current responses—which mainly have been to selectively optimize only parts of the business—or to achieve significant growth based on generalist business designs that try to be all things to all customers. A new focus on ways to increase productivity will be

Exhibit 4 **Requirements for Switching Freight Rail Providers: The Customer's Perspective**



Source: Mercer Freight Forwarder Survey 2005.

imperative, such as unbundling and outsourcing parts of the value chain to third parties. Additionally, clear-cut business models that are in line with the increasingly international nature of European rail freight will be necessary to capitalize on the opportunities that expanding liberalization will provide.

Mercer recently developed an assessment of competitive scenarios for European rail freight in 2015. Our expectation is that within 10 years, the international European rail freight market will likely be focused around five business designs, as shown in Exhibit 5. A maximum of three large pan-European network providers will prevail, in competition with various specialist operators (such as low-cost providers on selected corridors, intermodal operators, and specialists offering rail logistics solutions for selected industries such as chemicals and automotive). These entities will shape the future competitive landscape and will cooperate with regional trainload feeder networks, local production/services providers, and rail supply firms providing rolling stock leasing and maintenance.

A Dual Strategy for Incumbents

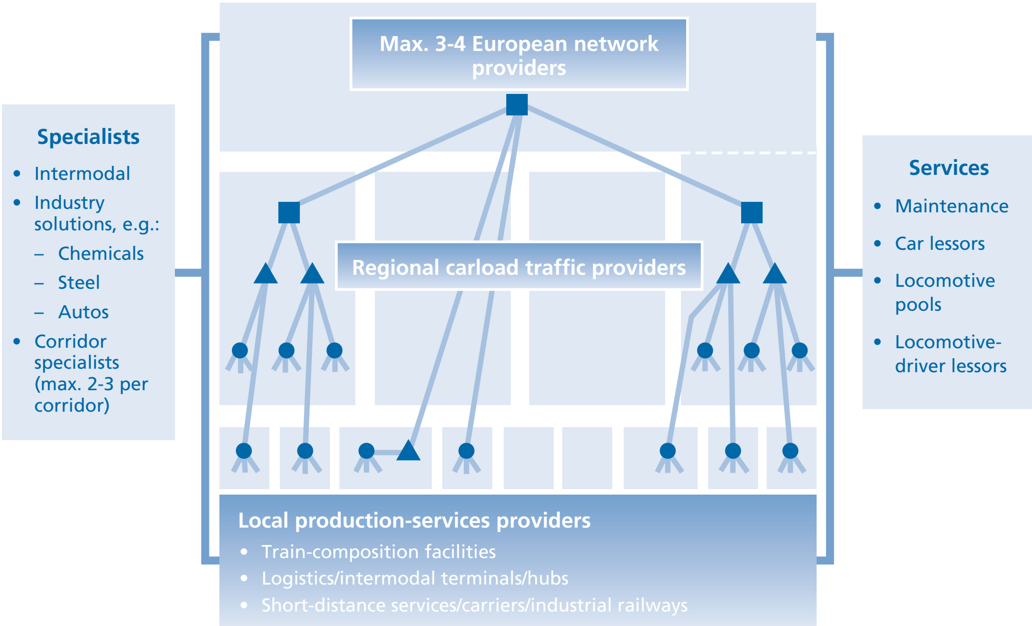
To survive in this new competitive landscape, incumbents will need to pursue a dual strategy: rightsizing capacity and restructuring the domestic core business on the one hand, and focusing on internationalization—the only real opportunity for growth—on the other.

Sustainable restructuring of the domestic core business will require a number of levers to be pulled, including:

- Developing a clear structure for the railroad's product offerings

- Realigning the production system to match these products and refocusing the production network (mainly the carload business)
- Downsizing overheads that have tended to expand over time
- Outsourcing support functions to improve the railroad's cost position
- Implementing active price management and professionalizing asset management

Exhibit 5 **Scenario for the European Rail Freight Market in 2015**



The challenges to this critical process are many and complex. Nevertheless, incumbents cannot ignore the need to develop cross-border strategies simultaneously. More flexible new entrants are starting to seize upon attractive traffic flows and corridors, and moves made by industry players in the next 3-5 years will likely determine the face of the new competitive landscape.

In terms of the best way to approach internationalization, incumbents should look toward focused strategies that will require lower investment levels and lessen risk (Exhibit 6). Each strategy has its own strengths and weaknesses, but customized approaches based on the needs of specific traffic flows and/or customer segments are likely to be more successful than a "one size fits all" generalist approach.

Network Provider Approaches

Mergers and acquisitions are probably the fastest way to build an operation as a pan-European network provider, but also will involve the greatest risks, since the M&A process is investment intensive, requires a great deal of management attention, and the only potential targets of relevant size would be other incumbents. These in most cases also have outdated business designs, are in need of restructuring, and have unionized staff—thus making post-merger integration extremely difficult, if not impossible.

Exhibit 6 **Potential Business Designs for Incumbents**

	Network Provider		Open Access		Forward Integration		
	Mergers & Acquisitions	**Alliances & Participation/ Joint Ventures**	**Corridor/ Block-Train Specialist**	**Regional Carload Traffic Provider**	**Railports/ Freight Center**	**Intermodal Transport Operator**	**Rail Freight Forwarding**
Features/ Business Focus	• Company takeovers – National railways – Private/ industrial railways	• Cooperation • Minority participation • Joint ventures	• Regular block-train volumes with major customers • Traction	• Regional expansion of carload traffic to new geographies	• Establishment of trans-shipment centers • Collection/ distribution by truck, longhaul by rail	• Intermodal transport as a spearhead for international-ization • Establish direct, block-train compatible connections	• Acquisition and arrangement of block trains • Sector focus (mineral oils, chemicals, automotive)
Investment Level	●	◑	◔	◑	◑	◔	◑
Examples	• Railion (DSB Goods, NS Cargo, RAB, B+M) • Trenitalia (TX Logistics) • Sale of ZSSK • Sale of MAV	• Railion (BLS Cargo, RTC) • BRC (Railion, RCA, Trenitalia) • Bilateral traction (e.g., SNCF/SNCB/CFL • Railion/PKP/ BC/RZD	• Eurotunnel • ShortLines BV • Connex Cargo Logistics • Hector Rail • DL Cargo • Rail4chem • SBB Cargo (Italy, Germany)	• RÖEE • GKB/LTE • HGK • FN Cargo	• Railion (Poland, Italy) • RCA (Italy)	• Kombiverkehr, TFGI, Metrans, Polzug (Railion) • Cemat (Trenitalia) • ICA/Ökombi (RCA) • CNC/Novatrans (SNCF) • Nordic Rail (NSB) • TRW (SCNB)	• BTT (Railion) • Transpetrol • Chemoil (SBB) • Schenker Automotive Railnet (Railion) • STVA/Ermefret (SNCF)

● High ⟷ ◔ Low

A less aggressive approach is to set up pan-European alliances and/or joint ventures. These alliances are less costly but can be fragile, as shown by past experience. Most incumbents currently are trying to follow a "co-opetition" model, balancing alliances with competitive products.

Open Access Approaches

A cost effective and rapid approach to internationalization is to become a specialist in specific corridors—utilizing the same business design adopted by most new entrants. Critical to the success of this design is to enter the market very fast and position oneself as the leader in the corridor.

Another option is to set up regional carload feeder networks, although this would be more time consuming and expensive. Most existing local networks, however, are likely to remain under the control of current incumbent railroads. Barriers to entry are high and unless governments decide to put them out for tender, these networks will remain monopoly businesses.

Forward Integration Approaches

Railports (freight logistics hubs) could be a less cost-intensive way to build up a local feeder function. Another advantage of this approach is the opportunity to integrate local partners such as freight forwarders into established customer relationships. (Railports can have structural disadvantages, however, compared to carload networks in very traffic-dense areas.)

Forward integration into intermodal operations also could be a promising approach for internationalization, although recent examples have shown that freight forwarders are reluctant to direct volumes toward incumbents if alternatives exist and lack of competition in traction could lead to higher costs and deterioration in service.

A final option is rail freight forwarding, although only for specific segments, such as the chemical or automotive industry. The challenge here would be to find attractive projects to build up cost efficient and therefore profitable production concepts.

Opportunities for New Entrants

The new competitive landscape will also create a wide range of opportunities for new players. Barriers to entry are relatively low and large shippers and freight forwarders are supportive of new entrants. Equally important, financial investors are ready to invest in attractive business models in this sector. The low-cost traction provider business model, focused on the most attractive international corridors and customers, is only one of the options already being pursued. With as few as 6-8 trains per day, new entrants have shown that such a business model can be operated profitably if scheduling ensures resources are highly utilized.

Other attractive business opportunities could include the leasing of railcars, locomotives, and trained personnel, and the operation of terminals and railports. Increased outsourcing of non-core services by incumbent railroads will also create opportunities for new business models. A typical example is maintenance services, but we might also see regional feeder services being contracted out.

Summary

Both incumbent European railroads and new entrants will find the new “international” European rail freight market challenging. Sector shakeout is inevitable as liberalization expands, competition heats up, and prices and margins fall.

Only by moving toward internationally focused business designs such as those described above will rail freight service providers likely achieve a sustainable position in the future European competitive landscape. A rail freight service provider could pursue several of these business models in parallel, but only a consistent, rigorous, and uncompromising implementation of each model ultimately will be successful.