



5

Railway Reform:

Toolkit for Improving Rail Sector
Performance

Chapter 5:

Creating the Industry Structure

5 Creating the Industry Structure

5.1 Introduction

This Chapter explores the main alternatives for railway industry structure, including the roles of the public and private sectors. Sections 5.1-5.5 discuss structuring core railway functions—the railway infrastructure network and passenger and freight transport services. Next, Section 5.6 addresses the many non core activities that have accrued to railways over time. Finally, Section 5.7 introduces case studies to illustrate examples and features of the structures discussed.

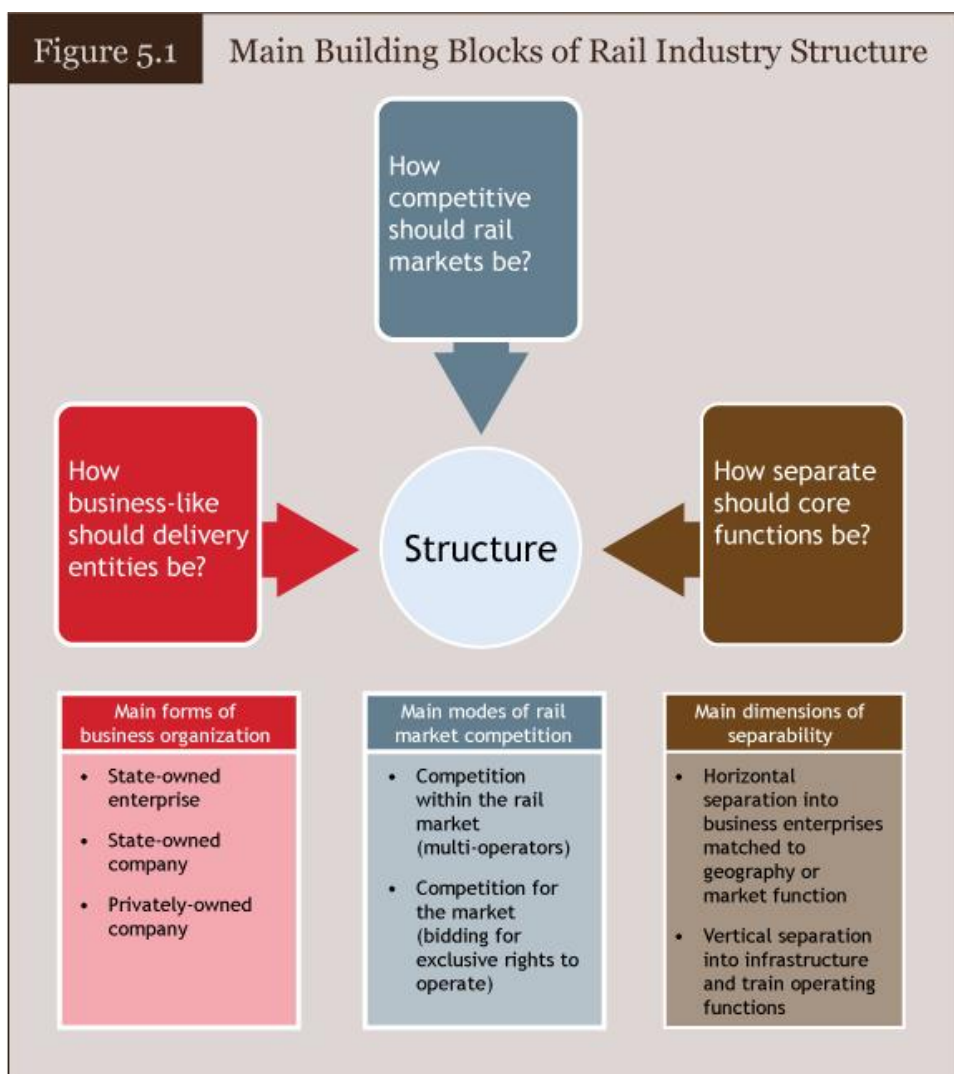
Chapter 5 begins with a generic industry model or railway archetype that includes all of the features and alternatives embodied by most of the world's national state-owned railways up to the 1970s: (i) it is under full public ownership; (ii) it operates as department of a ministry, or a public entity with an administrative reporting relationship to that ministry; (iii) it offers passenger and freight transport services; (iv) it is vertically integrated in managing railway infrastructure and train operations; and (v) it undertakes a range of non core railway activities.⁴⁹

Experience shows an alternative to the archetypal railway can be formed from three main policy building blocks:

- *Business organization*- the degree to which its delivery institutions are to be structured in a business-like or commercial manner including the option of private sector ownership or operation of core railway functions;
- *Market competition*- the degree to which the railway transport services it produces are to be competitive, as between different rail service providers;
- *Separability*- the degree to which its monolithic nature should be broken down and some of its sub-businesses be separated and decentralized.

Figure 5.1 summarizes these building blocks and the main options within each. Naturally, the three elements are interrelated and how they are combined differentiates industry structure. But for convenience, this Chapter will describe each building block separately and the options within it (Sections 5.2-5.4). Next, these elements will be combined to generate structural options that progressively increase the extent of private participation, the degree of railway service competition, and the extent of separability, compared to an archetypal railway.

⁴⁹ Some railways in the World Bank regions of operation still resemble this description, particularly in Eastern Europe and Central Asia (ECA) Region, in East Asia and Pacific Region (EAP) and in the Middle East and North Africa region (MNA). In Latin America and Caribbean (LAC), and sub-Saharan Africa (SSA) most railways are now run by the private sector under long-term concessions. However, the biggest sub-Saharan African railway, which is in South Africa, still broadly fits the archetype, although as a subsidiary of an even bigger state-owned multi-modal transport monolith.



5.2 The First Building Block: Business Organization

Most government authorities trying to operate in a commercial environment share the dilemma posed by government management incentive structures—a built-in bias for bureaucratic objectives, political goals, and public services rather than market advantage, resource efficiency and commercial gain.⁵⁰ Railways share this dilemma. If they are run as and by public departments and authorities they are ill-equipped to compete in a tough external business environment.

Archetypal railways have always been captive to bureaucratic pressures, which can undermine their commitment to serving customers. Multiple constraints include: (i) accountability measured-by-process ('box-ticking') rather than results; (ii) vulnerability to short-term national budgeting processes that destabilize longer-term business and investment planning; (iii) public service employment norms and procedures that impede commercial operations; (iv) political patronage or seniority as a basis for selecting board and senior management, rather than merit; and other

⁵⁰ Good bureaucracy is essential to government administration and accountability; and bureaucrats have an immediate responsibility to support the policies of political leadership.

constraints. Many examples of these influences exist among state-owned railways of both developed and developing countries.

Many governments suffer from fuzzy thinking about railway industries. Some view railways as a conduit for social values, but then invariably want state-owned railways to operate efficiently enough to compete successfully against other transport modes. Examples abound of political pressures that have undermined commercial outcomes when railways must comply with government directives to offer discount freight rates to strategic industries, maintain artificially cheap fares for passengers, continue to run trains on lines where passenger demand can hardly fill a single coach, reallocate investment to areas of greatest political visibility, and avoid any labor force reductions that might erupt into an industry-wide disruption.

By comparison, the road passenger and freight transport industries are intensely competitive and mainly privately-owned. Most political pressures are visible and transparent and road transport is not an implicit conduit for transmitting social benefits to the industrial sector or labor unions, or scoring political points for re-election.

There are three main corporate forms that can help improve the performance of the archetypal railway organization by reducing bureaucratic demands and political pressures: a state-owned enterprise operating under a specific railways law or state-owned enterprise law; a state-owned company under companies law; or a privately-owned company under companies law. There can of course be more than one entity in any industry structure (industry separability is addressed in section 5.4). In any particular country different legal challenges might be faced with the different structures regarding asset holding, accounting methods, taxation and transfer of staff to new entities. The choice of corporate form is therefore complex and what follows focuses on generic features.

5.2.1 State-owned enterprise

A state-owned enterprise (SOE) is constituted under structures established by a specific railway law or under a general SOE law designed to accommodate a range of government businesses. The law specifies enterprise commercial orientation, objects and freedoms, and channels for political influence.

Unfortunately, merely creating a new structural form is insufficient to improve performance. This building block needs shoring up with the following: (i) a professional and independent board of directors; (ii) merit-based management selection; (iii) management accountability based on short- and medium-term business planning targets; (iv) creating business management structures geared to markets and focusing on core functions; (v) greater pricing freedom; (vi) use of internationally recognized commercial accounting and auditing standards; (vii) and contractual agreements between enterprises and government for reimbursement of public service obligations imposed by governments.

Experience shows that SOE-type railways are an improvement on departmental structures, but far from a panacea. If a government is committed to pursuing political objectives through the channels laid out in the foundation law, and attentive to the complementary measures, SOEs can be a more business-like structure.

However, if none of the above conditions are fulfilled this structure can still be undermined and commercial performance is unlikely to be achieved.

5.2.2 *State-owned company*

A state-owned company (SOC) may be set up if a government wants an ‘arm's-length’ relationship, similar to but more rigorous than an SOE. This alternative utilizes the general framework of national corporate law, rather than railway law or state-owned enterprise law.

Governments can establish and register a company using a formal company constitution drawn up according to corporate law,⁵¹ using a corporate form that is tried and tested daily by the private sector. In a joint-stock company, the board of directors' role is to establish and monitor the company's direction and strategy to enhance profitability or otherwise ensure a return on shareholders' funds; some jurisdictions also consider the position of creditors and employees.

Shareholders select the board of directors. Arm's length distance from government can be achieved by vesting all or part of the shareholding in another ministry, such as Ministry of Public Enterprises or Ministry of Economy because they are interested in the company's commercial performance without line-ministry political accountability, therefore, they are less-likely to succumb to political pressure or avoid unpopular decisions. By contrast, the policy ministry, normally the Ministry of Transport, could be conflicted by the short-term political consequences of board commercial decisions. Arm's length independence requires that the majority of directors on the board are selected for their business skills and industry experience, plus independence from the policy ministry.

These actions require positive sector and corporate governance; company law is insufficient to prevent a determined government from exerting intrusive shareholder rights, stacking the Board with ministerial placeholders, embedding a compliant CEO through political patronage, or adopting minimum reporting standards. Ultimately, an SOC is only as effective as government allows, similar to an SOE.

Corporate law is rigorous, but it can also be rigid. For example, during periods of corporate financial difficulty, would the government allow the company to fail—to declare bankruptcy and carry out a business wind-up procedure? Insolvency laws are designed to benefit company creditors. Although most governments would not be unhappy if a railway administrator dissolved a failing board and dismissed management, bureaucratic equanimity might evaporate at deeply discounted liquidation of publicly-owned assets such as railway land, rights-of-way, or the passenger rolling stock necessary to run future services. A solution is to franchise or concession to use state assets. The state could vest all company assets in a bankruptcy-remote vehicle and the state-owned trading company, which can fail and be replaced, could have the franchise or concession.

Box 5.1 summarizes and compares state-owned enterprises and state-owned companies. Successful transformation from an archetypal railway depends less on the

⁵¹ Such as, in Common Law jurisdictions, the Memorandum and Articles of Association.

choice between an SOE or SOC, and more on whether governments build in the reinforcing mechanisms described earlier, whether they then respect the mechanisms they create, and whether they adopt a robust contractual system for any budgetary support.

Box 5.1 State-owned Enterprise vs. State-owned Company

Why choose a state-owned enterprise (SOE)?	Why choose a state-owned company (SOC)?
<ul style="list-style-type: none"> Because an SOE can be constituted with bespoke objectives, structures, and accountability Because SOEs have worked well in other sectors in the country 	<ul style="list-style-type: none"> Because an SOC is more rigorously constituted at ‘arm’s length’ from government with more commercial objectives, structures, and accountability Because an SOC relies on the provisions of the Companies Act and does not require custom design
What are the most favorable circumstances?	
<ul style="list-style-type: none"> National SOE legal framework and law are well-developed Government has strong capacity and willingness to meet its obligations and exert its rights <i>only</i> within the SOE framework The SOE has explicit contractual mechanisms for any government budgetary support 	<ul style="list-style-type: none"> A well-developed framework of company law has worked well when applied to government businesses Government has strong capacity and willingness to meet its obligations and exert its rights <i>only</i> within the framework of company law and according to the company constitution. The SOC has explicit contractual mechanisms for government budgetary support. When the company’s ability to fail is clear and a politically acceptable framework for the fate of public assets can be put in place.
What are the least favorable circumstances?	
<ul style="list-style-type: none"> National SOE legislation or experience is weak. The railway is highly politicized and public governance capacity weak so that an SOE structure cannot prevail against day-to-day intervention. Budgetary support is necessary but unstructured and unpredictable. 	<ul style="list-style-type: none"> National corporate legislation is weak. The railway is highly politicized and public governance capacity is weak so that a SOC structure cannot prevail against day-to-day intervention. Budgetary support is necessary but unstructured and unpredictable. Consequences of company failure are unclear.

5.2.3 Privately-owned company

A joint-stock company owned by private shareholders is the most commercial structure for delivery of rail transport services in competitive markets. Private companies have much stronger incentives to improve commercial performance than SOEs or SOC, and much stronger alignment between managers and shareholders on improving the bottom line.

Conversely, though private companies will deliver social benefits if they happen to coincide with their commercial goals, they have no inherent interest in using rail transport to achieve social outcomes, except as a public relations strategy. Therefore if governments wish to capitalize on the strengths of privatized railway entities *and* protect or pursue other public interests, they must adopt contractual and/or

regulatory mechanisms that specifically align company interests with targeted public interests.

Globally, public ownership (in various corporate forms) is the dominant model in national railways in terms of total traffic carried,⁵² though this result is influenced by the huge traffic flows of the three mega-public railways of China, India and Russia. About 63 percent of all rail freight ton-kms on national networks⁵³ and nearly 90 percent of passenger-kms are carried by state-owned entities, including public authorities, SOEs, and SOCs. Nevertheless, there are over 500 private rail-freight companies internationally, concentrated in North America, South America, sub-Saharan Africa, and Australia, but an increasing number are operating in Europe. Private inter-city passenger rail services are concentrated in Japan and the UK; privatized passenger concessions for urban and regional rail services are common throughout the EU, particularly in Germany, Sweden and the UK. Some freight rail concession operators in Latin America and Africa also run residual passenger services as a concession condition, sometimes with government financial compensation.

Almost all private operation of previously state-owned railway services has improved market and commercial performance, particularly freight railways. Private rail freight companies have been better able to compete in the arduous, low-margin business of moving goods. Success often depends upon cutting operating costs to the bone, and outmaneuvering a highly decentralized and entrepreneurial road haulage industry that faces relatively few constraints on entry, movement, management, or pricing.

Railway network privatization or concessions have proven more daunting and less attractive as a public policy choice in countries where national railways have a strong passenger base. In nearly all cases of freight privatization referred to above, rail infrastructure was taken under private management (after remaining under public ownership through long-term concession structures). But in Canada (Canadian National), Great Britain, New Zealand, and parts of Australia, some or all main-line railway infrastructure was transferred to full private ownership. Since then, Britain and New Zealand have essentially brought railway infrastructure back into public ownership, although train operations are still in the hands of private companies.

Public policy on railway network ownership and control has a critical influence on restructuring options. Many governments are as uncomfortable with the notion of full private ownership or free-market operation of railway networks as they are with full private ownership of other transport networks—roads, inland waterways, shipping lanes, or air traffic routes.

Governments cite several issues: (i) the inherent monopoly in railway infrastructure; (ii) the difficulty of full cost recovery for rail infrastructure from user charges; (iii) the ‘lumpy,’ long-term, immovable and therefore risky nature of transport in-

⁵² Paul Amos and Lou Thompson, *Railways in Development: Global Round-up 1996-2005*, *World Bank Transport Note TRN-36*, (World Bank, 2007).

⁵³ Excluding own-account mineral railways and industrial railways.

frastructure that can render it unattractive to private investors; and (iv) the concept that ‘common user’ transport infrastructure is inherently public patrimony that should be run for the public good rather than private profit.

A government policy position opposed to railway network private ownership or management through concession limits available structural choices, but does not rule out separability options, greater competition, and private participation in train operations.

Box 5.2 summarizes the merits of a private company as corporate form.

Box 5.2 Benefits of a Private Company
Why might a private company be preferred?
<ul style="list-style-type: none"> • Private shareholders provide the greatest incentives for business-like decision making. • Railway service meets private (i.e. market or commercial) as opposed to social needs. • Rail transport is no longer seen as a core government business. • Other forms of SOE or SOC have been unsuccessful.
What are the most favorable circumstances?
<ul style="list-style-type: none"> • The company is capable of profitable operation and government is willing to accept market forces to establish the balance of price and services offered, whatever that may be. • Government accepts the verdict of market forces but remains willing to exert influence through explicit compensation for meeting public service obligations, and through other transparent mechanisms such as contributions to capital upgrading. • Government specifies the services to be delivered and is willing to contract a private company, using a concession or franchise, to deliver services at market or regulated prices.
What are the least favorable circumstances?
<ul style="list-style-type: none"> • Political expectations and private company interests are seriously misaligned. • Government lacks sufficient administrative capacity to regulate or provide contractual support to achieve public interest goals.

5.3 The Second Building Block: Market Competition

The second building block of railway industry structure is the degree of competition among suppliers of railway services. Historically, freedom to compete in supplying rail services has been weak or absent from national rail industry structures in most countries, unlike other transport sub-sectors. Road haulage, long-distance coaches, coastal shipping, inland waterway barging, airline passenger and freight—all modes of transport that compete with national railways display higher levels of competition among service suppliers.

No systematic empirical worldwide review of the benefits of competition within the railway sector has been carried out. However, Canadian, American, and Mexican rail freight sectors have substantial parallel competition between railways, reinforced by negotiated and mandatory track access arrangements. These operating conditions are widely accepted among policymakers as factors that contribute to making these railways amongst the most technically efficient and innovative in the world. European countries such as Germany and the UK opened their rail freight markets to competition earliest and furthest and experienced the highest growth

in rail freight. In Australia, competition among rail freight providers yielded service and tariff benefits for bulk and intermodal freight shippers. Most countries that have competitively tendered contracts to operate urban or regional passenger rail services also claim significant improvement in value for money. In all cases it is difficult to separate the impacts of competition from the impacts of private participation. However, ample evidence from other service industries and all other modes of transport services suggests that competition, or even the threat of competition, creates incentives that result in higher efficiency and quality services than when there is a single, protected supplier.⁵⁴ Therefore, advocates of rail services monopolies must accept the burden of proof to demonstrate how this serves the public interest.

Worldwide, most railways would claim to operate in ‘competitive’ transport markets because their customers can opt for other transport modes, or alter supply chain sources or destinations to avoid relying on one rail route. Often, archetypal national railway managements raise this point to justify exclusive rights to provide railway service. However, the same argument from the road transport sector—that a national trucking monopoly is justified because it ‘competes’ with rail transport—would be considered absurd by national governments.

Nevertheless, there are countries and circumstances in which exclusive rights to operate rail services may be justified (see Section 5.3.2 below). Moreover, discouraging day-to-day competition does not preclude contestability through competitive bidding for exclusive rights. Two main forms of contestability in rail services are competition in the market, and competition for the market.

5.3.1 Competition in the rail market

Competition creates incentives for managers to meet market needs at the lowest cost and encourages service innovations to gain market advantage. The strongest case for competition in the market is for rail freight services. Even in some small railway markets in individual European countries and Australian states, competition in rail freight transport is significant and effective. Among the mega-railways of the USA, China, India, and Russia, rail freight markets are large enough to bear competition, and American freight railways do compete. The international road transport industry is a formidable competitor to railways partly because it is not structured as a state-owned monopoly and is intensely competitive between its participants.

It is sometimes argued that on-rail competition would threaten railway economies of scale but railway infrastructure economies are not materially affected by whether track traffic volume is carried by a single operator or several. In practice most so-called economies of scale ascribed to railways are actually ‘economies of density’, arising from declining average unit costs of additional traffic over a fixed railway infrastructure (until capacity is reached). See 3.2.1. Whoever provides the traffic, the more there is, the lower the unit infrastructure cost.

⁵⁴ Economic theories of market contestability suggest that the threat of competition can be effective in encouraging consumer-friendly price setting and service behavior of an incumbent supplier, even if the actual level of competition in the industry is relatively low.

On-rail freight services competition occurs in some thirty countries worldwide, under three main institutional frameworks:

- Competition among operators of vertically integrated railway routes together with negotiated rights-of-track access at specific locations under private agreements among railway entities (e.g. USA);
- Mandated but limited rights-of-access to competing operators defined under national laws; access rights confined to defined routes and/or circumstances exist in Canada, Brazil, Mexico, and the Russian Federation;
- General rights-of-access are mandated based on a policy of broadening access to public infrastructure networks such as in the European Union, and Australia.

These three models provide a range of effective tools for allowing independent private freight train operators to use national railway networks, and manage the operational interfaces of a multi-operator regime.

By contrast, competition among rail passenger service providers is rare and occurs mainly in EU member countries under three scenarios: (i) between a long-distance national operator and a regional service provider on selected routes (e.g., German Railways Inter-City Express (ICE) Service or regional route concessionaires); (ii) between two operators on parallel or overlapping routes (e.g., perhaps 10-20 percent of the UK market); and (iii) using third-party track access rights (a few UK services; a service planned between Cologne and Hamburg in competition with German National Railways). This toolkit acknowledges potential for direct competition for passenger services on some of the world's busier routes, but experience suggests that conditions favoring exclusivity are widespread (see 5.3.2) and that pursuing competition in rail freight markets is an easier place to start.

5.3.2 Competition for the rail market

Three circumstances militate against competition in rail transport services delivery.

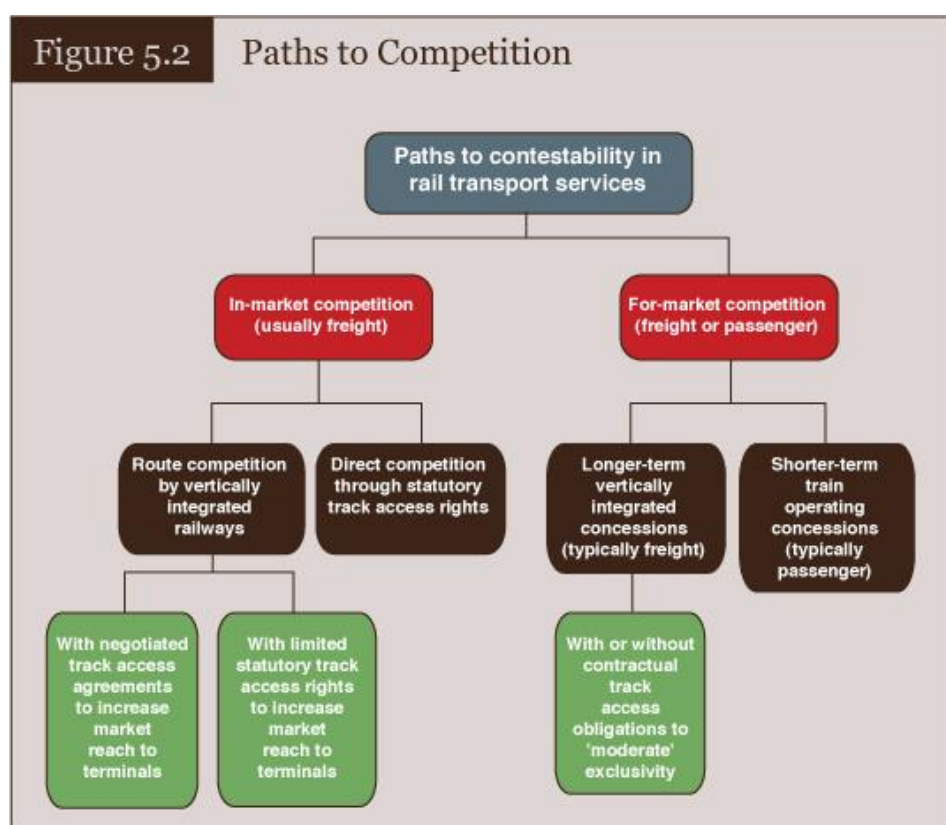
1. **Micro markets.** Railways are a niche transport mode and railways are most competitive where they can achieve high-level capital utilization—infrastructure that carries substantial flows of well-loaded trains and well-utilized locomotives, coaches, and/or wagons. But many railways in developing and transition countries have inherently low freight and passenger flows, which means that railway managers face the unenviable choice of running longer cost-efficient trains at an unappealingly low frequency, or offering more attractive service frequency for shorter, high-cost trains. Hence, it is often said that rail services that succeed in thin markets do so because they run on 'the smell of an oily rag'; introducing competition—a second operator—would mean running on the smell of *half* an oily rag.
2. **Subsidized passenger rail services.** Most rail passenger services in most countries are subsidized by taxpayers because fares are inadequate to cover operating costs. Introducing competition would reduce the fares, thereby undermining the operators and increasing the drain on the public purse.

3. **Long-term investment in public railway infrastructure.** Sometimes governments offer exclusive concessions as incentives for railway services providers to make long-term investments in infrastructure. African railway concessions, in particular, are based on this justification.

Exclusivity is not incompatible with contestability. In the three circumstances described above, governments can adopt a transparent and competitive bidding process for granting exclusive rights, and for any associated public funding.

5.3.3 Alternative paths to competition

The main policy alternatives are summarized in Figure 5.2 below. The assumption is that if governments favor greater competition in segments of core railway services, they will accept private sector delivery, therefore, competition in the market or for the market would include at least one private participant.



In some countries, two railways owned by the same government (or owned by a state and a local government) compete for traffic, but competition is nearly always at the margin of operations as a by-product of other policies, rarely the central policy intent. There are good reasons for this.

First, national governments may fear that two commonly-owned competitors will lapse into a comfortable duopoly with stable market shares, thereby neutering competition. However, the opposite scenario is equally undesirable—each state-owned competitor might attempt to pursue an aggressive price-cutting strategy at

the expense of the public purse (whether in the guise of lower shareholder value or higher budgetary support).⁵⁵

5.4 The Third Building Block: Separability

How the railway industry structure is divided, referred to as ‘separability’, comprises two primary dimensions, horizontal and vertical. Horizontal separations are sometimes justified by creating better-managed, decentralized, and market-focused units from a monolithic national company. Vertical separation into companies for operations and for infrastructure can help expand private sector participation and competition in train services.

5.4.1 Horizontal separability

The archetypal railway is managed at the national level; usually, larger countries also have regional administrative units of the national railway.

Horizontal separation works best when there are clearly separable business units with discrete geographic focus. For example, larger countries have multiple railway markets—heavy-haul freight in a mining region, major urban centers, and regional networks—each can be owned, managed and financed separately, compete over different routes, perhaps with access to tracks in other regions. Specialist businesses, such as a container rail company, may need to be vertically separated from infrastructure in order to be independently constituted.

Horizontal separation can sharpen market focus and management accountability, and allow for specialized operations to be devolved, divested, or compete with one another. All of these objectives can be met while maintaining the integrity of a coherent general-purpose national railway system providing long-distance services. Box 5.3 summarizes horizontal separability.

Box 5.3 Horizontal Separation

Why separate the railway horizontally?

- to create more manageable business units from a monolithic structure
- to improve transparency in financial performance
- to sharpen market focus with specialized business units
- to devolve responsibility to sub-national governments
- to divest selected units to the private sector by sale or concession
- to allow efficiency to be compared through benchmarking

What are the most favorable circumstances?

- large railways with separable regional freight and/or passenger markets
- generally separable regional freight operations
- separable and specialist freight businesses
- generally separable regional passenger networks
- suburban passenger networks

What are the least favorable circumstances?

- Horizontal fragmentation of small national railways because these lack offsetting benefits from devolution or divestment, although units can still be usefully run as individual profit centers.

⁵⁵ This is to be distinguished from the situation such as in the EU where state-owned railways of different countries compete for traffic on some routes.

5.4.2 Vertical separation

A railway can also be divided into one or more entities that own and manage railway infrastructure ('IMCs') and one or more entities that operate train operating companies offering transport services 'TOCs').⁵⁶ Or it can choose to allow vertically separated 'tenant' train operating companies to use the infrastructure of a vertically integrated dominant or host railway.

Typically, governments undertake full separation to maintain ownership and control of the railway network while trying to encourage more contestability and private sector participation in train services. However, this option creates complexity and adds transaction costs and regulatory burdens. The challenge is to clarify allocations of responsibility and accountability between railway infrastructure managers and train services operators at the interfaces of railway technology, operations, safety, and economic concerns. Amongst countries that have introduced it there have been positive and negative experiences (as is also the case with integrated railways). Some governments have considered separation but rejected it as too complex or as putting at risk some of the possible benefits of integration such as single point performance responsibility, keeping infrastructure managers 'closer' to final customers, co-ordination of interdependent infrastructure and rolling stock investment decisions; and a unitary command and control structure to meet emergency situations (such as severe winter conditions).

For now, full separation is confined to some EU countries, and some of Australia's interstate network. Nevertheless, many EU railways (including the largest, in Germany) are not institutionally separated; and in Australia, far more freight is carried on integrated railways than on vertically separated infrastructure.⁵⁷ Indeed, about 98 percent of global railway traffic is carried on vertically integrated railways, including railways that compete through access by statutory right or commercial contract on lines controlled by a vertically integrated company. In the USA, more rail freight is carried under track access agreements on tracks of vertically integrated railways, than in the rest of the world put together. And the US national passenger train operator Amtrak is the world's largest predominantly vertically separated passenger train operator.

In presenting restructuring frameworks below, it is assumed that governments would seek full vertical separation of infrastructure from rail operations only if they wanted to introduce private sector participation and competition into train operations. Independent research has so far failed to find any benefits to separating railway infrastructure from train operations without reforms in one or both.⁵⁸ Box 5.4 summarizes this option.

⁵⁶ Internal separation of an infrastructure division from train operating divisions within a railway company, or as companies within a holding structure, is not vertical separation but a means of managing vertical integration.

⁵⁷ Countries with a vertically separated railway infrastructure manager are Finland, France, Spain, Denmark, Netherlands, Portugal, Sweden and Great Britain.

⁵⁸ See for example G. Friebel, et al, *Railway Deregulation: A European Efficiency Comparison* (University of Toulouse, 2003).

Box 5.4 Vertical Separation

Why separate railways vertically?

- to promote competition in or for the rail transport market, and encourage private sector participation in rail transport operations while maintaining state ownership and control of the railway network
- to increase transparency in use of government subsidies (more apparent than real as track access charges may still transfer subsidies between IMCs and TOCs)

What are the most favorable circumstances?

- larger railways with multiple and separable types of TOCs that can operate as viable entities, within markets that are large enough to be viably competitive
- countries aspiring to join the European Union (although institutional vertical separation is not an EU requirement)
- countries with strong implementation, administrative and regulatory capacity

What are the least favorable circumstances?

- Vertical fragmentation of small national rail markets that are unable to support competition or have no intention of seeking private participation in TOCs

5.5 Assembling the Building Blocks: Options for Industry Structure

The three building blocks—business organization, market competition, and separability—must be assembled to develop industry structures that improve on the archetypal railway. This toolkit presents policy options that exist within one of two alternative frameworks that emerge from the archetypal railway. Each framework is distinguished by its policy on public ownership and control of the railway infrastructure network.

- *Public infrastructure framework.* This option retains public sector ownership and management of the railway infrastructure network. The framework assumes a mix of passengers and freight but the passenger role is substantial because experience shows that under these circumstances, governments are most committed to network ownership.
- *Private infrastructure framework.* This option privatizes the national railway network and train services or offers the opportunity of concessions. The framework also assumes mixed passenger and freight but freight services predominate over more marginal passenger services because experience shows that under these circumstances governments have been willing to privatize their public rail network⁵⁹.

Both public and private frameworks can yield solutions that involve private sector participation, contestability, and business separation.

5.5.1 The public infrastructure framework

Box 5.5 summarizes the main structural options for reforming a public railway within the public framework. The options in Box 5.5 are sequenced in order of increased industry diversification, contestability, and private sector participation,

⁵⁹ The only exception in the last thirty years was Great Britain, which has a passenger dominated railway network that was nevertheless privatized, though this was later reversed.

but the sequence and option variants presented can be modified to suit country circumstances;

- **Option 1:** commercialize an existing departmental railway by separating it from the government policy and regulatory functions and establishing it as a state-owned enterprise (SOE) or a state-owned company (SOC). This key step toward reform within the public framework is insufficient unless bolstered by far-reaching substantive actions such as: (i) creating a professional and independent board of directors; (ii) selecting management on merit; (iii) boosting management accountability with short- and medium-term business planning targets; (iv) creating business management structures geared to markets and focusing on core functions; (v) allowing greater freedom of pricing; (vi) using internationally recognized commercial accounting and auditing standards; and (vii) formalizing agreements between enterprises and government for reimbursement of any government-imposed public service obligations.
- **Option 2:** create horizontal separation to facilitate policy decentralization and devolve to sub-national government authorities (LGAs) the funding responsibility for any separable regional or suburban rail operations. Option 2 devolves responsibility and accountability to communities with the greatest stake in providing services and finding the resources to sustain them. Several variants on this option include: (i) the national company can operate services under contract to the local transport authority; (ii) train services can be divested to the local authority and run on the centrally-owned network under network access agreements; or (iii) both the local network (if it is reasonably separable) and the train services can be devolved to the local authority. Obviously, Option 2 works only if sub-national governments have the financial and administrative capacity to fulfill the functions.
- **Option 3:** the local authority offers a concession or franchise through competitive bidding for delivery of regional or suburban services. The national government might assume responsibility for concessions if sub-national governments lack financial and administrative capacity⁶⁰. In principle, the national public company might compete with private train operators for the concession, which could include local rail infrastructure. Box 5.5 presumes a model of a private train operating a concession under a network access contract on a joint-user network administered by the national railway company. This type of train operating concession should be re-bid periodically to ensure competition.
- **Option 4:** government adopts a policy of separating rail freight services into an independent commercial public company. Freight services are split from passenger service, staff and freight train operating assets are transferred into a new incorporated structure with separate accounts, board of directors, and shareholders—independent of other parts of railway business. The company would operate under a network access contract with the main public passenger company. This separation recognizes differences between freight and passenger transport customers, service needs, and economic drivers, not to mention

⁶⁰ Examples of different approaches include, for example, passenger rail concessions in Buenos Aires offered in concession by the national government (including the Metro) and the Rio de Janeiro metro and suburban rail services offered by the State government.

different political profiles that typically result in higher resource allocations for passenger services when both freight and passenger transport are under the same corporation.⁶¹

- **Option 5:** the state privatizes the separated rail-freight company, partially or wholly; privatization variants include an initial public offering (IPO), trade sale, or concession. If national capacity is sufficient to offer and regulate access to the public rail network, privatization of rail freight is entirely consistent with continued state ownership and control of the railway network. Privatizing the public rail-freight operator on an exclusive basis may be justified (variant in Box 5.5) if the market is insufficient to support on-rail competition. But if freight-rail competition is favored, a case can be made for a period of exclusivity before implementing a policy of track access rights, which would allow enough time for a company accustomed to public sector constraints to prepare for the rigors of competition.
- **Option 6:** introduce a degree of competition in the rail-freight market through specific or general track access rights for qualified private freight train operating companies. This option offers direct market competition if justified by the scale of the freight market, but it can result in uneconomic market fragmentation in countries with lower freight density. In principle, third-party access rights can coexist with continuing public sector rail freight operation; EU countries are an example. But, new private operators can cherry pick the most profitable public operations, leaving the public rail-freight operator with a financially unsustainable traffic mix, in part because a public operator is less commercially agile and has more institutional constraints. Instead, a more commercially rational reform strategy is to first privatize the state rail company (option 5) and then introduce rail-freight competition (option 6). This would allow the state to sell its ‘cherries’ before other operators are encouraged to pick them.
- **Option 7:** cause a vertical separation of national railway infrastructure from all the entities offering train services. Box 5.5 presumes prior separation of local passenger services and rail freight, and would require corporate separation of inter-city passenger services into one or more inter-city train operating companies. Horizontal separation of inter-city passenger companies under public ownership may provide more commercial independence and market focus. Also, establishing a free-standing rail network company may provide a more independent and neutral framework to administrate a fair and transparent track access regime, although it is certainly not essential to implementing track access arrangements.

⁶¹ Option 4 presumes that the archetypal railway has a substantial passenger role, that the freight company should be separated, and that the network and passenger services remain corporately connected. However, if rail-freight services predominate, and passenger services are marginal, horizontal separation to constitute passenger services as a separate train operating company would leave a vertically integrated freight company as the core public railway, offering network access under contract to the passenger company.

Box 5.5 Illustrative Structural Options within the Public Infrastructure Framework (assumes mixed-use railway with a substantial passenger role)

	Main Railway Functions				
Main policy options	National main-line railway network	Local railway networks	Intercity passenger train services	Freight train services	Local passenger train services
Archetypal railway system	National public railway department or authority				
1. Re-constitute as SOE/ SOC plus commercialization measures	National public railway company (or SOE)				
2. Decentralize regional/ suburban train operations to local authorities	National public railway company (or SOE)				National or a local public TOC operating under LGA contract
3. Concession regional and suburban passenger operations to private sector					Private passenger TOC concessionaire(s) operating under service contract to central or local government authorities
4. Horizontal separation of public rail freight train operating company	National public railway company (or SOE)			Exclusive national public rail-freight TOC	
5. Privatize freight train services on an exclusive basis				Exclusive national private rail-freight TOC	
6. Privatize freight plus 3 rd party access rights				Competing private rail-freight TOCS	
7. Vertical separation of public infrastructure and operations	National public railway network company (or SOE)	Exclusive inter-city passenger public TOC (s)			
8. Concession intercity passenger operations	National public railway network company (or SOE)	Competitive bidding for inter-city private passenger TOC concession (s)			
TOC: Train Operating Company SOE: State-owned Enterprise SOC: State-owned Company LGA: Local Government Authority					

- **Option 8:** maximize the diversification of the public framework with competition and private participation. Privatize inter-city passenger train operations through franchise or concession—as a single operation, by region, or by corridor.

Box 5.5 shows that public ownership and railway network control are compatible with a diverse, market-oriented, competitive industry structure that has substantial private participation. Box 5.5 shows that a coherent reform program can be built from re-sequencing priorities and creating variants.

The case studies in this toolkit will provide international examples of these options and variants and the industries and companies that have thereby emerged. Typically, options increase in complexity from Option 1 to Option 8, therefore, each country must evaluate its capacity to implement and administer the structure selected.

5.5.2 The private infrastructure framework

Box 5.6 summarizes the main structural options for reforming a public railway when government is willing to privatize the railway network—through sale or concession. Options presented assume a mixed passenger and freight railway; rail-freight is predominant and passenger services are subordinate. Features of each option, and possible variants, are described below:

- **Options 1, 2, and 3:** Essentially, these are the same in the public framework above. Under Option 1, central government converts a public department or authority into a state-owned enterprise or company. Under Option 2, central government separates and devolves responsibility to local government for running any local passenger services, and Option 3 is a concession for passenger services.
- **Option 4:** government creates a vertically integrated freight railway as the core railway entity. This implies separating any inter-city train operating services into an independent state-owned enterprise or company that would then operate on the predominantly freight network under a network access contract.
- **Option 5:** the state partially or wholly privatizes the vertically integrated rail-freight company through the variants of initial public offering (IPO), trade sale, or concession. In larger countries the national freight company could be divided into smaller regional freight concessions as in Brazil, Argentina and Mexico.
- **Option 6:** the state offers concessions to private operators for inter-city passenger train operations; the private passenger operators pay track access charges to private freight operators. A more common alternative is that the state offers or requires the private freight company to assume responsibility for managing the inter-city passenger services under a government contract, accompanied by contractual compensation payments to cover any losses.

Box 5.6 Main Structural Options within the Private Infrastructure Framework (assumes mixed-use railway but with a marginal passenger role)

	Main railway business functions				
Main policy options	National main-line railway network	Local railway networks	Freight train services	Intercity passenger train services	Local passenger train services
Archetypal railway system	National public railway department				
1. Reconstitute as SOE/ SOC plus commercialization measures	National public railway company (or SOE)				
2. Decentralize regional/ suburban train operations to local authorities	National public railway company (or SOE)				National or a local public TOC operating under LGA contract
3. Concession regional and suburban passenger operations to private sector	National public railway company (or SOE)				Private passenger TOC concessionaire(s) operating under service contract to central or local government authorities
4. Horizontal separation of public inter-city train operating company	National public rail-freight company (or SOE)			National inter-city passenger TOC	
5. Privatize freight railway as a vertically integrated entity(ies)	Privatized national rail-freight company (ies) (single or multiple regional concessions)				
6. Concession or contract inter-city passenger services to the private sector				Inter-city passenger TOC under government contract: private concession or private rail freight company (ies)	
TOC: Train Operating Company	SOE: State-owned enterprise	SOC: State-owned company	LGA: Local Government Authority		

- **Option 7:** introduce a degree of competition in the rail-freight market through specific or general track access rights for qualified private freight train operating companies.

5.5.3 Reform motives and reform choices

In either infrastructure framework—public or private—not all options are relevant for all countries, and option variants can be tailored to national circumstances. Restructuring is a pragmatic search for a model that works in specific markets and in which railway management objectives are reasonably aligned with national policy objectives for railways, not an exploration of ‘ideal’ models or theoretical elegance. Railways need to be continually changing to adapt to changes in markets and technology. The case studies in the book illustrate many useful alternative approaches.

Clearly, market structure affects model choice. Private infrastructure framework options have been adopted by governments in countries heavily dominated by rail freight markets, where long-distance passenger rail services were marginal in the overall transport system. These governments view meeting freight transport demand as a role for the private sector in a market environment so that government need not be directly involved. If passenger demand and service dominates the national rail network, most governments have discerned a much stronger public interest or political benefit in state involvement and been unwilling to privatize the railways network, except for Japan and the UK, but subsequently reversed in the latter case.

Markets also matter within each framework. Options for horizontal separation of regional or urban passenger services make sense only if there are significant sub-networks of these services. Options for multiple freight operators make sense only if overall freight markets are strong enough to sustain multiple operations.

The frameworks and their variants imply a measured, progressive, rational program to rebalance the public and private sectors, redefine competition and regulation, and reset boundaries between industry sectors. Such a program will transform an archetypal and monolithic railway into a diverse, decentralized, pluralistic industry that is transport market-focused and responsive. Ideally, this type of providential program would emerge by stages in a country that has well-developed policy and implementation skills, sufficient transaction resources, and a meticulously designed program prior to implementation. However, in reality, many governments are rudely awakened by the alarm bells of necessity for railway restructuring only when time and money have run out.

Reformed structures will boost management incentives to improve efficiency, offer more control over public expenditure, and create better value for public money than the traditional monolithic railway. Some options can also reduce public budgetary support for rail systems, but that is a separate objective and typically requires a separate policy decision. However, only radical downsizing of the network, services, and/or employees will reduce a large public subsidy quickly in a publicly-owned railway, and if the market can bear it, increasing tariffs. If these are the imperatives of the situation then the quest for a new long-term industry structure may need to take second place to more immediate surgery on the existing structure.

Although crisis responses are sometimes inevitable, well-considered policies consistently applied over the long term are more successful in supporting public interests than ‘slash and burn’ solutions that may result in a demoralized workforce operating a poor service with underinvested assets. Even emergency surgery will make more sense in the context of a longer-term structural strategy to create a competitive railway that is affordable to users and taxpayers.

The Case Studies contain descriptions of many railway industry structures and individual rail entities that illustrate structures described in this toolkit. Individual case studies illustrate variants of core railway structures. Collectively, the case studies illustrate the diverse solutions to organizing a national railway industry.

5.6 Dealing with Non Core Activities

In much earlier times, archetypal railways needed to be highly self-sufficient. Often, they manufactured at least some of their own rolling stock and/or constructed their own infrastructure according to the specifications of their own design offices, in which they employed engineering staff who had been trained in their own educational institutes. Railways also printed their own tickets, timetables, and manuals, employed their own security force, and sometimes accrued other businesses such as hotels, ferries, ports, haulage companies, and so on.

Few railways now retain such a wide range of activities. This section explains the historical reasons behind archetypal railways initiating so many non core activities, why most railways now find it necessary and desirable to reject this strategy, and business processes for dealing with these non core activities.

What is ‘core’ business? ‘Core’ is generally interpreted to mean the market focus of organizational activities—a focus that differentiates a business from its competitors, or from activities of other sorts of businesses.⁶² For railways the core business is delivering competitive transport services through efficient use of railway technology. Constructing railway lines, manufacturing rolling stock, or printing tickets and timetables are non core activities—not only unnecessary for a railway to do itself to be successful, but also responsible for diverting resources from the core business.

Four main groups of activities associated with archetypal railways can be considered, *prima facie*, outside the ‘core’ railway business. These are social and recreational services for employees; materials supply and manufacturing companies; business support services; and ‘extended’ businesses that are ancillary, diversified, or involve real estate holdings. Box 5.7 gives examples of such activities.

⁶² An influential management text by Peters and Waterman (1982) identified poor results among companies that diversified beyond their fields of real competence, and concluded that an organization's core business consists of activities delineated by its core competencies.

Box 5.7 Examples of Non Core Activities in Railways			
Social & recreational employee services*	Railway materials & manufacturing	Business support services	'Extended' businesses
Schools Universities & institutes Clinics Hospitals Nursing homes Staff housing Social clubs Sporting clubs Staff holiday resorts	Quarries (ballast) Forests (timber ties) Concrete ties Mines (steaming coal) Power stations Railway sleepers Maintenance tools Locomotives Coaches and wagons Rail motors and units Wheels & brake shoes Track circuits & relays Telephonic equipment Office furniture	Occupational health Occupational training Engineering design Architectural design Construction services Heavy repairs Vehicle cleaning Printing & publishing Police & security Railway banks	Car parking Hotels & restaurants Train catering Road haulage Passenger road coaches ICT & logistics parks Freight & pass ferries Forwarding & logistics Travel agencies Rolling stock leasing Property development Advertising
* Occupational health and training should be treated as a railway business support service			

Modern, competitive railways must concentrate on sourcing and procuring those necessary but non core services in the way that will best support the core transport business. They must pose a number of questions. Is the activity necessary at all? If so, what are the alternative sources of supply? Which alternative delivers the activity at the most efficient cost?

Each group of activities shown in Box 5.7 has a different origin and rationale, therefore each requires a somewhat different assessment.

5.6.1 Social and recreational services to employees

During the mid-nineteenth century, large companies in industrializing economies, including private and public railways, began to extend social benefits to employees and their families to attract and retain workers and minimize absenteeism. In the railway industry, pressures to provide employee benefits such as health care, education, and employee housing emerged as railways expanded their territories into more remote locations. At that time, most central governments provided no such services or benefits for its citizens.

Healthcare

Early railways work was hazardous and many employees were killed or seriously injured in the line of duty, particularly at railway construction sites, marshalling and heavy repair yards, and often in remote locations. The railway industry had to make its own response and in the USA, for example, private railway companies began to employ their own medical specialists. U.S. railway medical services expanded to an array of health services including routine check-ups, vision and hearing tests, obstetrical care and advice to railway managers on workplace safety and sanitation. By 1896, American railways employed over 6,000 railway doctors and operated 25 hospitals that treated over 165,000 patients annually.

Education

Early railway companies provided education services to impart specialist railway knowledge and skills that were unavailable in trade schools or universities. Later, education services expanded to include basic education for workers' children in remote railway communities. In countries such as Australia, Canada and Russia, railway communities were often the first settlements to be established and railway-provided schools were often the only viable means of obtaining an education.

Housing

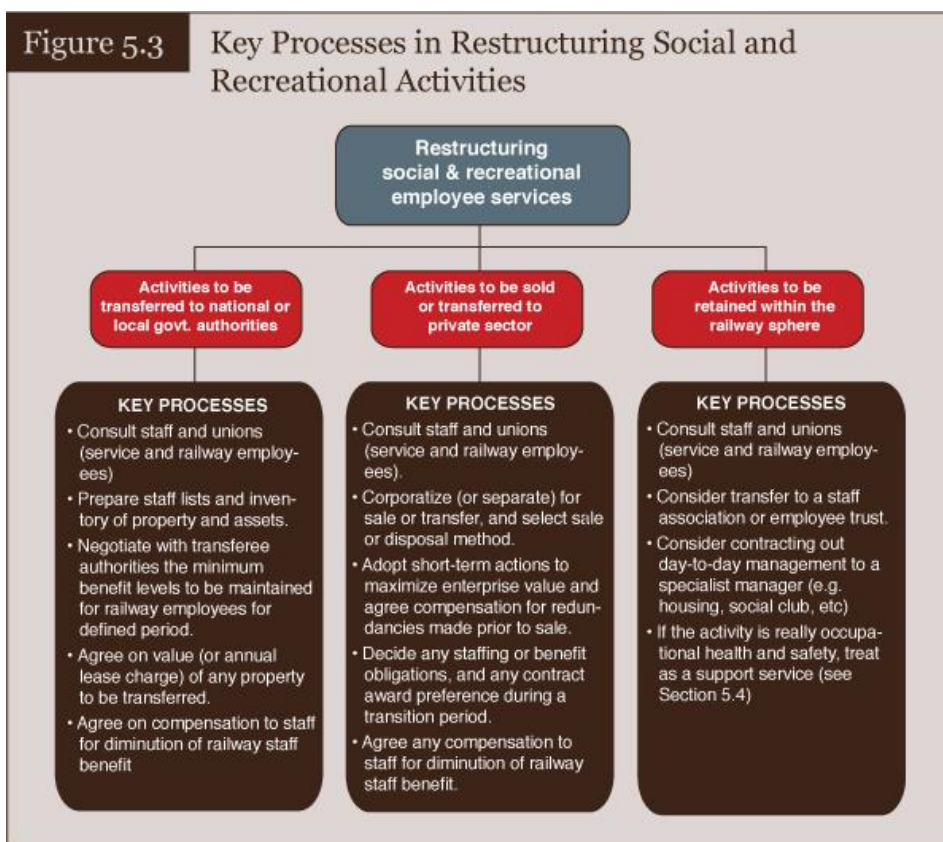
Since railway communities were often the first settlements in remote areas, railways provided housing for new railway workers and later found it convenient to own houses or flats to facilitate staff mobility, for example, among station masters and superintendents.

During the twentieth century, railway-provided social services expanded in many socialist countries as governments decreed state-owned enterprises a main channel for social services delivery. Soviet railways provided their workers with a full range of health, education, and housing benefits from cradle to grave. In addition to health, education, and housing, the paternalistic age of railway companies provided or supported many other staff benefits such as libraries, annual social events, and social and sports clubs.⁶³

Today, few railways provide social services. Demand has declined because many trade unions and employees now prefer to rely on national schemes rather than company benefits. Insurance products are available to protect against adversity, and labor markets are more mobile. On the supply side, central and local governments now provide social services, which have expanded rapidly throughout the world, replacing services once provided by companies and state-owned entities. Moreover, railway companies could sustain these services *only* because they had enjoyed a virtual monopoly in long-distance land transport. After WWII, rail modal share declined, as did absolute traffic levels in some countries, which demanded financial stringency and market focus. Railways could no longer afford to divert increasingly scarce resources into activities better provided by other branches of government, and could no longer guarantee employment security and 'cradle-to-grave' benefits. Now many railways explore other supply options for non core activities. For example, even occupational health and safety training, which supports railway core competencies, can be contracted out.⁶⁴

⁶³ Amongst many famous football clubs that began as railway teams are Manchester United, Locomotive Leipzig, and Moscow Dynamo.

⁶⁴ A website for a medical services firm in Europe highlights services to railway management, which includes fitness-for-work assessments; drug and alcohol screening; medication advice for safety-critical workers' absence management; health surveillance; and trauma advice and counselling.



Dealing with the issue of social services remains a key first step in the process of streamlining railways to meet market competition. Most railways in developed countries, in the former Soviet Union and Eastern European transition countries, and in China, have successfully withdrawn from providing many social services.

Railways that retain a significant range of social activities, but seek to lessen their burden, should consult Figure 5.3 for a basic division into three types: (i) can be transferred to more appropriate public providers such as central or local government departments; (ii) can be sold or transferred to a private provider; (iii) cannot be readily transferred to a more appropriate provider, and supply important benefits to maintain staff morale.

Key tools, or business processes, to handle these three categories appear in Figure 5.3. (Occupational health and safety functions are carved out of these categories and treated as a business support service).

Experience suggests that most social and recreational activities can be restructured within such a framework. Activities must be discontinued if they fail to demonstrate significant value to staff morale and productivity, and cannot be transferred to a more appropriate provider, using fair procedures to deal with any retraining or redundancy.

However, adjusting long-established worker benefits requires utmost caution and respect, because employee resentment can easily spill over and impair other aspects of railway reform. For this reason, the proposed process includes the highest requirement for staff communication and consultation. Ultimately, if some em-

ployee benefits are cost-effective, not easily transferred to a more suitable provider, and demonstrate high value in terms of staff morale, it is often best to retain and improve them.

5.6.2 Railway materials and manufacturing enterprises

Historical reasons abound for railways annexing materials supply and manufacturing. Industrial development and international economic competitiveness drove railway construction in nearly all countries. Typically, these railways adopted national or imperial-based technical and engineering standards. National (or imperial) supply industries were often protected by import restrictions, tariffs, and local purchasing policies, and larger countries manufactured their own locomotives, rolling stock, signaling systems, and other infrastructure components.⁶⁵

Many early railway manufacturing and materials companies were privately owned and independent from the core railway. But the mutual dependence of 'large buyer/large seller' led some railways to develop their own manufacturing capability. Moreover, in China, Great Britain, India, and the Russian Federation, railway nationalization and integration led to co-locating ministerial or departmental structures with responsibility for both railway system and manufacture of capital assets.

When supply chains were less efficient or competitive, some railways sought to control their own supply of strategic materials. As a result, it was not uncommon for railways to own mines for high-quality steaming coal for locomotives, quarries for ballast, and forests for wooden sleepers. Later, some railways even built their power stations to avoid dependence on monopoly suppliers, or to ensure power in areas of low availability or reliability.

Supporters of integrating railways with manufacturing and materials supply pointed to the benefits of controlling specifications and prices, and the manufacturing units enjoyed secure and predictable demand levels. In planned economies, political support was attracted to the theoretically higher savings from the 'efficiency' of joint planning of supply and demand for enterprise outputs.

Today, most countries have dismantled these structures in all industries, not just railways, because experience has proven that the exclusive relationships of co-owned public industries reduced incentives for efficiency and innovation for both. In the railway transport industry it produced technologically outmoded locomotives, rolling stock, and other equipment. In railway manufacturing industries, it undermined their potential to be internationally competitive.

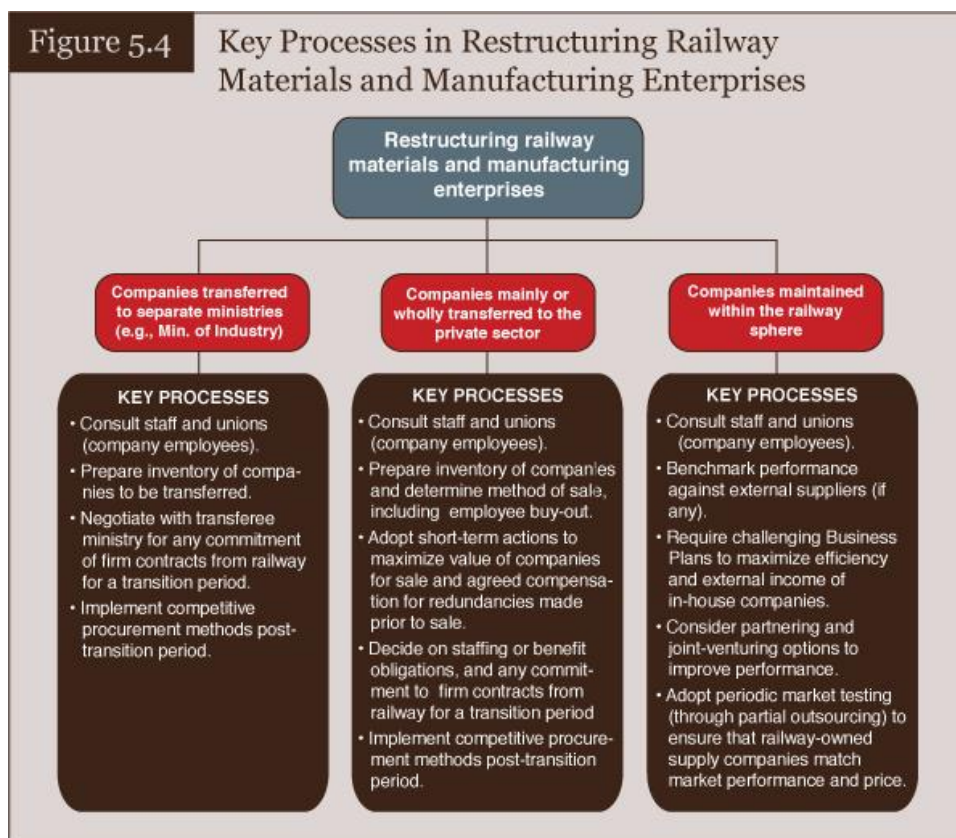
Today, the railway supply industry is diverse, global, and competitive. Nearly all capital equipment and materials for railway infrastructure or operations can be

⁶⁵ The most striking impacts of such policies survive in Europe in a patchwork of sub-systems that include four main track gauges, eight main signalling systems (and twelve others), six main electrification systems and sundry other differences in loading gauge, pantograph headroom, maximum axle-loads, direction of running, safety systems and others.

procured competitively using domestic or international tendering. Technical ability to specify and monitor railway equipment performance is a core railway competence, particularly for assets that provide competitive advantage in the transport market. However, preserving significant manufacturing capability within a railway transport organization is difficult to justify because the required competencies do not serve the core business of passenger and freight transport. Some railways might try to make a business case for manufacturing if they require spare parts with non standard specifications to run their inherited bespoke system, but it is nearly always possible to source parts through franchising or contracting with an outside company.

Retaining manufacturing capability undermines railways competitiveness but the social and industrial consequences of withdrawal may be significant, although they can be mitigated. Railways must establish a process that provides sufficient time for developing an effective procurement strategy, and for divesting manufacturing and materials plants in a way that maximizes ownership value and increases the probability of success as an independent entity. In lower-wage economies, international manufacturers typically create alliances or joint-ventures with local plants.

Figure 5.4 suggests a division of railway materials and manufacturing suppliers into three types of companies: (i) industries or public enterprises supervised by a separate ministry to reduce procurement conflicts of interest; (ii) companies with full or majority private ownership; and (iii) companies maintained within the railway sphere because they provide critical materials or parts unavailable through normal competitive means, and/or that have no private sector markets.



These processes are based on pursuit of long-term interests of the core railway and the enterprises. During these processes, it is possible to discover that some materials and manufacturing activities have no value—for the railway or other parties—even with incentives, such as a commitment to purchase outputs for a specified transition period. The only sensible commercial decision is to close them down.

5.6.3 Business support services

Most railways developed a wide range of in-house business support capabilities as shown in Box 5.7. Railway management, often delegated to regional administrations, viewed the railway industry's specialized needs as core competencies because private suppliers might be unavailable locally or too distant to be reliable.

The regulatory environment also favored large national railways supplying their own services. For example, policing the railways required statutory rights and duties, such as the power to perform arrests. Government was more comfortable bestowing these rights on a national railway than a private supplier. Similarly, national management positions such as Chief Civil Engineer or Chief Mechanical Engineer sometimes carried statutory legal responsibility for the safety of assets under their management, which inclined them to preserve direct personal control over the organizations and plants that maintained the assets.

Bureaucratic incentives have shored up large in-house service structures well past their useful lifespan. The archetypal railway management structures encouraged empire building rather than profit making—greater staff numbers and bigger budgets were key to increased corporate influence and rewards, so each region and department would build up their own business support service units in addition to their core units.

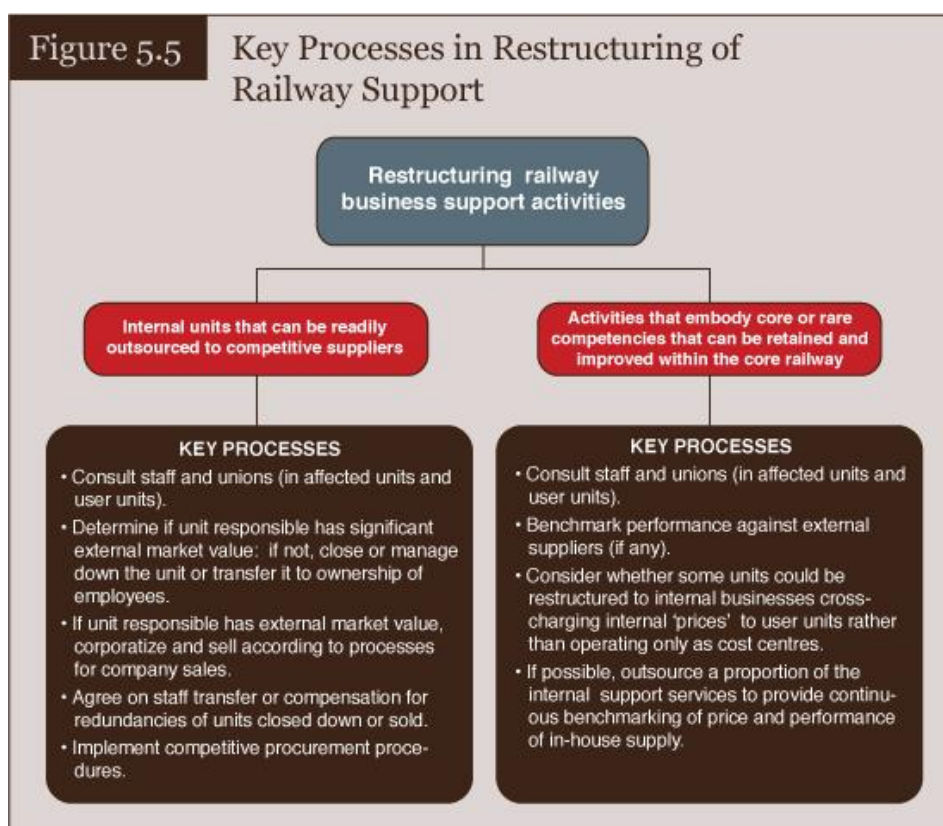
Today, thanks to improvements to supply chains and the electronic communications needed to source and manage them, a wider range of private suppliers offers access to many of the services that most railways need. Some railways buy services in volumes sufficient to influence the shape of the supply industry in a way favorable to those railways.

Similar to other industries, railways must decide which support services to retain in-house and which to outsource, based on business justifications for each compared with the alternative of contracting out. This will differ from railway to railway, and service to service. Some service activities embody core skills or competencies, which if divested entirely to outside contractors, could increase critical risks, or reduce organizational ability to assess or control those risks. For other services, the external market may be too thin or poorly developed to justify competitive outsourcing. But, modern railways have found that many non core services can be reliably outsourced, sometimes improving the quality of service and almost always providing long-term cost savings that improves competitive advantage in the core transport activity.

The strategy for rationalizing internal business support activities has important social and industrial dimensions that must be sensitively handled, and will require

complementary changes to procurement strategies, similar to the strategy for divesting materials and manufacturing. Figure 5.5 suggests processes for restructuring: (i) activities that can be readily outsourced to competitive suppliers; or (ii) activities that embody core or rare competencies that can be retained and improved within the core railway.

Retained activities require further evaluation and upgrading. All large organizations find it difficult to maintain pressures and incentives for high performance in units shielded from daily contact with external customers or competing suppliers. Figure 5.5 suggests strategies to strengthen incentives, including ‘internal pricing’ and external benchmarking through partial external procurement.



5.6.4 Extended businesses

The final category of non core activities includes three types of businesses that extend railways services beyond passenger travel or freight transport. Here they are treated, *prima facie*, as non core but sometimes they are not, as discussed below.

Ancillary passenger businesses

Ancillary businesses widen the range of passenger services to include station car parks, railway hotels and bars, train catering, and left luggage offices, among others. On-board services are restricted to rail travelers but the other businesses developed as an adjunct to passenger marketing or an opportunistic commercial venture, supported by regular passenger flows that provide customer turnover.

The general value of these activities is undisputed. However, many railways have found that the best way to maximize the performance and value of such activities

to the core railway business is to sell, lease, or franchise them to businesses with the greatest competencies in the activities, thereby generating the highest net revenues. These include specialist car park operators, hotel chains, fast-food franchises, and so on. This enables railway managements to concentrate on their core business *and* get the best value from extended businesses through revenues from sales, leases, or franchise payments.

Property utilization businesses

Some business activities utilize railway assets in ventures only tenuously connected with transport, if at all. These include telecommunications companies that use railway rights-of-way, train stations redeveloped as retail or offices, advertising hoardings, and commercial car parks, among others.

Strategies that unlock revenues from railway property and other assets are to be applauded, but rarely do railway companies have specialized expertise in property development to maximize asset value. Therefore, the best strategy may be to monetize unused land, and sell or lease access or air rights to the highest bidder, depending on core railway capital needs. If projects require longer-term cooperation between railway and property developer, the railway could choose to share longer-term risks and rewards through a joint-venture in special-purpose companies, tapping into specialist partners' skills and expertise as needed.

Supply chain diversification businesses

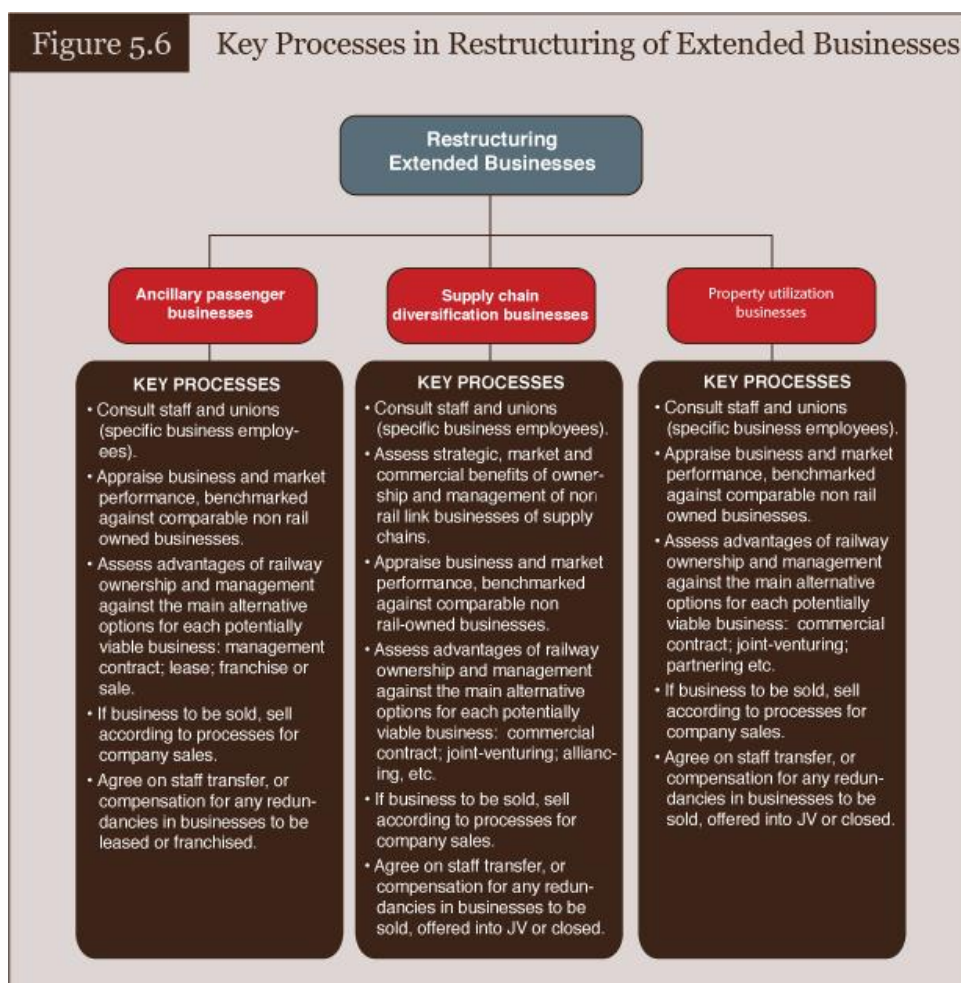
Some business activities increase railway market reach through diversification into the supply chain, mainly in freight, but also in passenger services. Examples include companies that handle road haulage, bus services, ports, ferries, logistics, travel agencies, wagon leasing, and shipping among others. Some of these are complementary to rail services, such as truck or bus rail-feeder services, but some railways have also invested in competing long-distance transport operators.

In the most persuasive cases, these businesses were acquired to expand core rail operations beyond just running trains into the larger world of freight transport and logistics or, in the case of passenger-related services, into travel and tourism. Through acquiring or developing extended businesses, railway management can access competencies neither found nor retained in a traditional railway enterprise. However, most railways have substantial investment needs but limited capital. They should therefore also consider contracting, joint-ventures, or partnering with specialist organizations to extend their business or integrate other services.

Diversification decisions must be supported by thoroughly researched market potential and commercial viability, or valuation of potential synergies from co-ownership of core and extended business. Instead, some unsuccessful examples of diversification have resulted from a 'copy-cat' response to another railway that has successfully diversified but in a different market environment. The reasons for other diversifications have been superseded by changes in market demands and endure only through inertia.

Generally, this toolkit advocates against diversification and in favor of management focus on improving core railway business, particularly when the core business faces capital constraints or requires on-going budgetary support. However, a

well-supported business case would justify exceptions. Railways contemplating restructuring should review all extended businesses and select the most efficient business strategy. Figure 5.6 presents a process for reviewing and for any restructuring activities in the three groups described.



5.6.5 Use of professional advisers

The complex process of analyzing and restructuring non core railway activities involves appraising large numbers of diverse activities, in diverse corporate forms, involving distinct skills, operating in distinct internal and external markets. No transport ministry and few railway organizations have all the skills to develop and implement a strategy to rationalize non core activities.

Also, the process of implementing reforms is industrially sensitive—always in the affected units and often in the core-railway itself—and if prolonged, liable to depress worker morale and performance and guaranteed to encounter opposition. Neutrality and deep expertise is required to separate legitimate commercial issues from entrenched vested interests.

For these reasons, external business consultants are the best choice. They can supply the requisite range of competencies and independence to undertake business appraisals, identify the best alternatives, and assist in implementing the recommendations.