Chapter 6: The Roles of Government
6 The Roles of Government

6.1 Government, Railways, and the Public Interest

Chapter 6, 7 and 8 address the roles of government in the railway sector. Collectively, the execution of these roles is referred to as sector governance, to distinguish it from corporate governance (the governance of the individual railway entities themselves).

Essentially, this toolkit promotes greater market focus and commercial orientation in the railway sector, so it may seem surprising that the role of government is given such prominence. But experience shows that government actions are always influential and often decisive in helping or hindering a successful railway industry. Rail sector governance affects who may be industry participants and the terms on which they compete, environmental and safety standards, the extent of public financial support, long-term infrastructure development, among many other factors. All of these are matters of public interests—hence also of government interests.

What are the public interests? This toolkit defines public interests as the following: the railway industry should be efficient; railway service levels and quality should respond to market demands while maintaining affordability for the public purse; and rail services should maintain national—perhaps international—safety and environmental standards (Figure 6.1).

The six main roles in which governments pursue public interests are summarized in Figure 6.2.
By necessity, there is overlap among these six government roles, but it is useful to analyze them individually, not least because the success of each role requires unique skills and tools. The remainder of this chapter will summarize each role and more details are presented elsewhere in this toolkit.

6.2 National Transport Strategy

The railway industry is subject to the overall umbrella of government policies and actions for the transport sector as a whole. Transport strategy specifies sector-wide objectives and then adopts consistent principles and establishes priorities for using public resources to attain the sector objectives.

Many countries lack an explicit or documented national transport strategy. Nevertheless, an overall umbrella exists whether or not it is strategically coherent, and the nature and consistency of the fabric of the umbrella will influence the fortunes of those who shelter beneath it.

National transport strategies may differ, but broad government policy aims and principles for transport should be coherent when applied to the sector as a whole, independent of mode. Similarly, public policy instruments should avoid obvious conflict between modes. However, this can be difficult to achieve because policies for public infrastructure investment, infrastructure cost recovery, transport taxation, environmental and safety regulations, among others often are formulated by different groups of people, pursuing different objectives, in different modal departments, using different economic principles and tools.

In most countries, transport demand is highly market-driven, but transport supply depends heavily on government policies for funding public infrastructure. In developing countries, most rail passenger and freight traffic moves on publicly-owned networks, just as most road freight, road coach services, and private vehicles travel on publicly-owned roads. However, public funding for developing and maintaining each modal network (and other public networks such as airways or...
inland waterways) is not always aligned with an overall national transport strategy or multi-modal assessment. Similarly, infrastructure regulation and pricing policies are usually determined independently. Both factors influence the relative fortunes and potential of industries that use this publicly funded infrastructure.

In most countries, governments consider the road system a ‘public good’—government is responsible for planning and funding highway network enhancement, expansion and maintenance, except for a few toll roads. Government responsibility for the highway network is presumed, and large national permanent administrations exist to plan, finance, and manage road networks.

By contrast, railway network development is most often presumed to be an internal matter for the industry and any government funding or investment, other than for prestige projects, is considered a temporary aberration that might be avoided if the rail industry restructured or privatized. In reality, substantial public funding underwrites national railways, but funding tends to be sporadic and handed over reluctantly in amounts that fluctuate arbitrarily. As a result of this unpredictable flow of funds, many rail systems’ financial management flounders, seeking to achieve equilibrium among an often ill-defined mix of deficit support, fare subsidy, maintenance back-log, and system enhancement.

In fact, international experience has demonstrated that full infrastructure cost-recovery directly from railway users is infeasible in most countries, except those with highest density of traffic flows, particularly of freight traffic. Full cost recovery would include total capital costs of building, renewing, or expanding railway infrastructure networks. But similarly, full cost recovery is neither possible nor expected for national road networks, other than for trunk routes.

The argument is not for public spending parity—rather that public investment in each mode should make economic sense. Attaining a rational and economically justifiable balance between modes can emerge only from a national transport strategy that applies common policy aims and consistent benchmarks for public investment performance.

Similarly, if standards and compliance regulations differ by transport mode, national safety and environmental regulations can affect modal operating costs thereby affecting customer choices. Regulations include market-entry licensing, standards for driver or operator training, vehicle environmental compliance, load limits, hours of operation, hazardous cargo movements, and so on. Often, for no apparent reason, standards differ by transport subsector, which affects modal competitiveness.

Achieving inter-modal consistency in a national transport strategy is not easy. Common accounting and cost allocation methodologies, and costing principles must be developed and implemented for infrastructure segments to avoid competition distortions between modes. Methods of comparing disparate environmental and safety impacts must be devised.

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66 Even in the high traffic-density countries the densest rail corridors typically support infrastructure costs in the less densely trafficked parts of the rail network.
National transport strategies should help establish broad policy principles and settings, such as sector governance, public and private sector roles, the extent of competition, the types of interventions necessary to attain co-ordination and integration between modes, the nature of regulation, consistent pricing principles across modes to reflect costs and avoid user choice distortions, integrate global warming policies with transport policies, ensure equity to meet the transport needs of disadvantaged and remote populations, and ensure safety and security standards. The role of government in establishing a level playing field for transport modes is perhaps the most complex, but better done imperfectly than not done at all.

6.3 Railway Industry Structure

Focusing on the railway sector, the second role of government is to create or modify rail industry structure by determining which institutions will deliver rail transport services and developing the policy environment in which they will operate.

Every national government inherits an existing railway industry structure and most continue to administer it extant, either because railway performance is judged adequate, or because the perceived difficulties and political risks of change outweigh expected benefits. International development bank experiences in the sector have shown that national appetite for radical reform occurs only in the face of chronic deterioration in railway operating performance, a rail industry financial crisis, a major shift in political ideology, or some combination of these. Moreover, experience shows that conditions for achieving reforms include sufficient public support to counteract the losses of vested interest groups when reforms are enacted, and a cadre of professional administrators or advisers sufficiently motivated and skilled to guide the reform process. The confluence of these factors is rare enough that radical structural reforms in national railway industries are uncommon. Nevertheless, government remains responsible for railway industry structure—maintaining a sinking railway industry with scarce public funds is, by default, a policy decision.

Recognizing this, governments cannot avoid structural decisions. This is most obvious in countries with publicly-owned railway delivery institutions, but also true in countries with railways that are predominantly privately-owned. For example, merger proposals for private American railways invariably trigger government investigations into the competitive risks and potential benefits of such mergers. Whether private or public, the industry structure should respond to market forces. Government has a critical role in industry governance, but it should not deteriorate into micromanaging individual institutions.

The previous chapter addressed industry structure, including the three main building blocks—business organization, market competition, and separability. Business organization is the railway’s degree of commercial orientation, including the extent of private sector ownership or participation. Market competition is the degree to which railway transport services are contestable through competition in the market or for the market. Separability is the degree to which the archetypal railway’s monolithic industry structure can and should be split into sub-
businesses and decentralized. The strategic nature and significance of these choices and alternatives were addressed in detail in Chapter 5.

6.4 Purchase of Transport Services

Most governments influence the passenger services that railways provide and the tariffs for those services. They do so for a variety of reasons.

If transport policy aims for equity, basic transport services are considered similar to health or education—a service that government should ensure is accessible and affordable for all citizens, including disadvantaged, low-income, or remote populations. If an environmentally-oriented transport policy aims to encourage the use of railways, subsidized services and prices for services make rail an attractive alternative to private vehicle use. If policy is based on the precepts of welfare economic theory then it may favor charging only marginal costs for use of services leaving government to pay for the fixed costs of infrastructure.

Budgetary support of passenger transport services is a common and legitimate public policy choice. However, budgetary support should not imply simply picking up the bill for whatever losses occur. Unsustainably high passenger rail subsidies, exacerbated by political pressure to avoid fare increases, create long-term funding instability, underinvestment, and unreliable low-quality services. Instead, budget support should be accurately targeted to those it is intended to serve; operators should receive incentives to improve efficiency and revenues; and the budgeting process should be open and transparent to underpin long-term affordability and ensure that the policy choices are visible to stakeholders.

Central or local governments can achieve these aims by purchasing railway services through a contractual mechanism such as a Public Service Obligation (PSO) contract or Passenger Services Contract (PSC). These purchasing models are described in Chapter 8, along with a discussion of opportunities for competitive bidding for those contracts to seek the best value for public money.

Although the purchasing models in Chapter 8 are more relevant to passenger rail, a few legitimate government-imposed obligations exist in specific freight markets, such as hauling relief supplies to areas suffering natural disasters. However, governments that own shares in mining operations, oil production and refining, steelworks, or similar industries sometimes pressure rail freight managers to keep tariffs artificially low to support so-called ‘strategic’ industries. This type of intervention is difficult to justify with economic arguments and this toolkit recommends avoiding such interventions.

6.5 Industry Regulation

The fourth role of government in the railways industry is to establish regulatory systems to protect or advance public interest. Government is responsible for developing the regulatory framework, administering some of the regulations, and delegating the rest to specialist administrative bodies.

67 Strategic in this context often means industries with more political influence than the rail freight industry.
This toolkit addresses economic, safety, environmental and technical regulation (Figure 6.3). Regulatory systems must be designed to suit industry policies and structures. For example where there is a high degree of competition between railways and other transport modes, or between different railway operators, economic regulations may be minimal or aimed merely at sustaining that competition. Similarly, if infrastructure access rights are granted it requires a national system to regulate infrastructure access and ensure that rights are respected.

Theoretically ideal requirements of any regulatory system are: the regulator must be independent from the organizations and/or agreements it is regulating; deliberations should be open and transparent; regulators should be accountable for their decisions; and regulatory principles must be known and consistently applied. Regulatory models that aspire to these principles are described in Chapter 9.

### 6.6 Transnational Railway Agreements and Treaties

The fifth role of government is as facilitator of international rail integration, important to the railway industry in many regions. Most railway networks were built within national borders resulting in multiple barriers for railways, particularly rail freight services. This may have been acceptable before globalization but international transport, because of its longer distances, now represents a large, fast-growing and potentially profitable market for railways. Inward-looking policies impede international rail corridor development, creating the following problems.

- **Absence of transit management:** International freight train transits are not all actively managed to achieve a specific origin-destination train path. Instead, some national railways simply move trains from border to border according to their own methods of working. After border processing is completed, trains are allocated to whichever train paths are available. Therefore, unpredictable border processing times creates unpredictable train path assignments. Moreover, international trains do not always obtain priority in train path allocation, locomotive assignments, mechanical repairs, or management attention. Border delays typically occur in remote locations at in-
convenient times and local decision makers may prioritize their national trains over international trains.

- **Unnecessary or incompatible train inspections**: Receiving railways carry out mechanical inspections of trains to reject wagons in poor condition that might cause safety problems or require repair. If a wagon is rejected it must be shunted out of the train and the train must be re-marshaled, creating delays. However, because national inspections are inconsistent, a wagon authorized to proceed in one country may be rejected in another country.

- **Locomotive and driver changes**: Locomotives and drivers may be changed at each border, which does not take long if fully-crewed locomotives are ready and waiting at the changeover yard but this is not always the case, particularly if schedules are unpredictable. For example, a domestic train that supplies locomotives for an international train may be delayed, or the local train dispatcher may allocate waiting locomotives to a waiting domestic train if the international train appears to be delayed. When a new train is marshaled, the train brakes must be tested for continuity, which also adds delay.

- **Bunching and queuing**: High variability in border processing times combined with inevitable perturbations in train running performance can result in bunched trains and longer waits at borders for processing. These problems are self-amplifying—unpredictable processing time at borders is itself a major cause of schedule disruptions.

- **Information flow**: Sometimes the wagon or train manifest is not sent to borders in advance but arrives with the train, affording no opportunity for advanced processing by customs or other border agencies.

- **Customs and other border procedures**: Procedures are also unpredictable due to variations in railway operations and their own processes. However, border services delays are inevitable if train bunching occurs. If customs officers want to carry out a full inspection of a freight train wagon the railway faces a difficult choice—whether to detach the wagon and allow the train to proceed, or accept inspection while the train-consist remains whole. Detaching keeps the train moving, but the detached cargo will experience a major delay.

‘Seamless’ international rail freight corridors require close and coordinated political and managerial attention across borders. In large countries such as China, India, Russia, or the United States, the ratio of international to domestic traffic is low. But in parts of the world with smaller contiguous national railway networks, developing successful long-distance railway corridors is vital to operate transnational train services. These international relationships are plagued by perverse incentives for each railway to maximize its own return from transit traffic or through-trains, which is why inter-governmental agreements are essential to provide coherent frameworks for railway management co-operation, to streamline national border controls, to minimize delays, and avoid the unreliability that is the norm at many international rail borders.

Political and managerial boundaries can magnify technological boundaries. For example, the European rail network comprises a patchwork of inherited national
systems with diverse technical standards—four main track gauges, eight main signaling systems plus twelve others, six main electrification systems, differences in loading gauge, pantograph headroom, maximum axle-loads, left or right train running tracks, safety systems, and others. This creates troublesome operating constraints and railway equipment suppliers cannot exploit scale economies, so European railways are less competitive. Other regions such as sub-Saharan Africa and South East Asia have aspirations for creating regional networks and similar problems of integrating networks and services. In all regions, government engagement is essential to provide the enabling international frameworks to encourage solutions among national railway management and border agencies that allow international rail corridors to compete successfully with other transport modes.

A related problem is that of consistent freight pricing or access pricing across international borders. Without overarching political accords, local financial incentives may lead each railway to try to gouge out a higher share of the total movement revenue thereby inflating the through rate to the detriment of overall traffic prospects.

### 6.7 Administrative Apparatus

The sixth and final role of government is to create and use state apparatus to perform all the other roles described above. The state apparatus must suit the industry structure adopted, which can differ by country. Some dimensions include: (i) distribution of responsibilities among ministries; (ii) delegation of decision making between national and local governments; (iii) preference for departmental or agency-type institutions; (iv) preference for single-mode or multi-modal functional divisions within the ministry.

A key requirement is to avoid conflicts of interest by separating the sector policy and regulatory functions from the commercial operation. When policy/regulatory advisory functions and the day-to-day responsibility for a government railway are co-located, government railway administrators are usually able to persuade themselves that the interests of the public railway coincide with the public interest in railways.

Co-location of railway policy, regulation and corporate oversight of railway operations makes it difficult to evaluate policy options such as increasing the degree of competition because that adds risk to the incumbent railway’s financial position. Also, seeking private finance for rail projects can be difficult because potential investors in a new rail venture may feel that partnering with government is like giving a single stakeholder control over entry to the playing field, rules of the game, ownership of a preferred team, and the selection of referees. Finally, safety and environmental regulations that protect the public interests shown in Figure 6.1 seem unlikely to emerge from administrators of the organizations affected by the regulations.

After railway policy and regulatory roles are separated from commercial management, governments must decide how best to shape it departments to execute those roles. These options are explored in Chapter 7. Issues of ‘corporate governance’ of railway entities—integral to the role and operation of railways rather than governments—are in Chapter 10 of this toolkit.