

CONTENTS PAGE

Executive Summary	2
1. Introduction.....	4
1.1 Scope of Report	4
1.2 Policy Context	4
1.3 Status of Economic Regulation and Possible Needs	6
2. Current Structure	7
2.1 Industry Structure	7
2.2 Transparency	8
2.3 Public Service Obligations and Subsidies.....	8
2.4 Competition.....	8
2.5 Institutional and Regulatory Arrangements	8
3. Rail Markets and Performance	10
3.1 Freight	10
3.2 Passengers	13
4. Regulatory Requirements and Issues.....	14
4.1 Freight	14
4.2 Passenger Services – Current Arrangements.....	14
5. Structural and Regulatory Options.....	17
5.1 Introduction	17
5.2 Corporatisation and Public Services Obligations	17
5.3 Options	18
5.4 Preliminary Assessment of Options and Caveats	21
6. Role of Regulator and Institutional Structure.....	23
6.1 Comments on Government Statements.....	23
6.2 Principles.....	23
6.3 Interim Arrangements	24
Appendix A - Legal Framework for Regulation of Railway Sector ..	25
A.1 Introduction	25
A.2 Legal Framework.....	27
A.3 Economic Regulatory Issues	42
Appendix B: Lessons from Other Countries and Sectors.....	47
B.1 Introduction	47
B.2 North American Railways.....	47
B.3 European Union.....	51
B.4 Economic Regulation in Other Sectors in South Africa	58
B.5 Conclusions	60

Executive Summary

This report covers economic regulation, including the related issues of industry structure and competition. At present, formal economic regulation of the industry is mainly limited to commuter rail.

There is no rail v rail competition in any markets but there is strong competition from road transport in some markets (parts of GFB and Shosholoza Meyl). Spoornet estimates that about 40% of GFB tonnage is carried unprofitably and both these businesses lose money. We do not know the method used for allocating costs but, given the findings of earlier consulting studies, it seems likely that subsidies will be required under any structure if the government wishes these services to continue at their current levels.

These studies also indicate that GFB is not efficient partly because of the requirement to provide uneconomic lines and services and partly because of overstaffing and partly because of management inefficiencies. These inefficiencies demonstrate the need for economic regulation of Spoornet.

According to Spoornet accounts, COALink and Orex, for which Spoornet has significant market power, appear to make large profits.

Metrorail has a high market share in the markets it serves but cost recovery appears to be low, partly because of low fares. Contractual relations between SARCC and Transnet/ Metrorail are ineffective.

For both passenger and freight services, there are essentially no mechanisms for the Government to trade off service levels, fare and subsidies. This is because they are mainly determined by Transnet, not the Government. However, even the Metrorail contract does not appear to allow for the Government to make these choices.

We compared various structural options for the freight railway to assess to what extent competition can be used as an alternative to regulation. Our conclusions are that three options are particularly worth considering further:

- Converting Spoornet into a Holding Company with the introduction of Third Party Access mainly on a negotiated basis between Spoornet and other operators
- Separating completely rail infrastructure from operations, focussing public sector investment on infrastructure and encouraging private sector investment into operations.
- Breaking Spoornet up into Vertically Integrated Regions or Lines, competing to the extent possible and regulated through yardstick competition.

In order to evaluate fully the structural options and associated regulatory requirements, it will however be necessary to assess the likely implications of each option for Spoornet's finances and for subsidy requirements.

It is critical that an independent rail regulatory body be established as soon as possible. A regulator should have the powers to extract information from Spoornet in order to permit further

policy decisions to be taken in an informed manner and will be able to start restraining the abuse of monopoly power.

The eventual institutional structure for regulation of the railways will depend on the structure adopted for the industry and the form of regulation needed to complement the competitive forces arising from that structure. However, there are some common principles that will apply in each case:

- The regulator should be independent of both the industry and government
- The regulator should however follow overall sector policies set out by government
- The regulator should be the implementation agency charged with monitoring and enforcing compliance with sector policy within its designated area of responsibility and should determine the regulatory policies, methods and procedures required to perform this function.

We consider there would be considerable advantages in having economic regulation of rail combined with safety regulation. Also rail regulatory functions should be combined (clustered) with other parts of the transport sector as there are similar regulatory issues across the sector, especially in relation to safety.

1. Introduction

1.1 Scope of Report

In view of the recent enactment of safety legislation in the railways, this report deals mainly with economic regulation. It covers all publicly owned railways in South Africa, both freight and passengers. It therefore excludes the mining and industrial railways which may be regarded as extensions of those companies that own them.

The report takes a broad approach to economic regulation. It considers not just the introduction of economic regulation but also the possible introduction of competition into the rail sector in order to reduce the need for regulation.

We have written a single report providing deliverables on Phases 1 and 3 of the project:

- Phase 1: Review of Requirements (contained in Chapters 2-4 – a Legal Review is contained in Appendix A)
- Phase 2: Review of International and Local Regulation (contained in Appendix B)
- Phase 3: Consideration of Appropriate Regulatory Options (contained in Chapters 5-6).

As with our other projects, our work has been hampered by lack of access to Spoornet personnel and data.

This report draws extensively from an earlier report produced under SRPESA.¹

1.2 Policy Context

Regulation should reflect Government objectives. However, government policy with respect to the railways is evolving. This constrains our ability to define what form of regulation is required to achieve government policy. However, we attempt below to bring together the policy statements which we consider are most relevant to the regulation of railways.

The 1996 *White Paper on National Transport Policy*² outlined a vision for the transport sector focussing on the objectives of safety, reliability, efficiency, integration and economic and environmental sustainability. The most relevant policy principles to the regulation of railways are:

- Separating of ownership and regulation of transport through the use of concessions;
- Regulation of monopolies (tariffs, service standards and safety);
- Ensuring a level playing field between modes.

In 2000, the National Land Transport Transition Act established transport authorities at local and metropolitan level with substantial jurisdiction over transport issues, with national government retaining authority over the national transport strategy and, for the time being, commuter rail.

¹ Teljeur, E, Gillwald, A, Steyn, G, & Storer, D, (2003), *Regulatory Frameworks: Impact and Efficacy; Executive Report*, available: www.tips.org.za

² *White Paper on National Transport Policy*, Department of Transport, September 1996

The National Land Transport Transition Act states that land transport planning must focus on the most effective and economic way of moving from one point to another in the system.³

The draft National Rail Transport Policy⁴ contains a Vision Statement (Section 1.2.2) which includes the following points of relevance to this project:

- *Rail transportation must play a major role within the broader multimodal transport system. Railways must provide effective, efficient, competitive and sustainable services that will be well utilised and which will attract and retain users through meeting their needs for safer, more reliable, quicker and more competitively priced transportation.*
- *Passenger railway service provision must receive focused attention to ensure that it provides an affordable and sustainable public transport option for urban and inter-city travellers and in particular, for lower income transport users. In this regard, the State has a social responsibility to ensure the provision of transport services that meets the needs of the majority of South Africans. Parastatals and/or public-private-partnerships will be used to extend services and/or develop new services. ...*
- *Freight rail services will be promoted where they provide the lowest total cost to the economy and will, in the main, operate on commercial business principles within a restructured freight railway system.*
- *Fair competition between rail and road freight will be promoted and intermodal collaboration and partnerships to maximise the optimal use of freight railways will be encouraged.*
- *A competitive and efficient freight railway sector will serve as a key contributor to effect Government's goal of a strategic shift of goods from the roads and onto railways. Freight railway services must serve the economic development needs of the country and the provinces.*
- *Transparent cross-subsidisation between the business units of the freight railway entity will help to sustain general freight railway services."*

The Draft Policy (Section 1.2.4) also includes statements on regulation:

- *"The national rail transport network for all operators is to be strategically regulated by government in the national interest.*
- *Private sector participation in railway investment, operations and maintenance, where introduced, is to be defined and regulated in the interest of effective service delivery to railway users."*

It goes on to state (in section 1.3.4) that *"the(economic regulatory) function would include, where applicable: promoting effective planning (both operational and capital), managing competition and contractual regimes in railways (e.g. regulating access agreements), subsidy management, performance compliance, and public and consumer protection.....It will require sufficient information and reporting from operators, asset owners, transport authorities, etc. It will also continuously monitor and benchmark railway performance from a strategic national perspective. Through this process, it will develop the standards and tools for Government to implement and monitor progress towards a more optimised, effective and efficient railway*

³ Section 18(2).

⁴ "National Rail Transport Policy: Towards a sustainable rail transport system for South Africa (draft), December 2002

system.”

Finally, it states that *“If, for strategic reasons, Government requires the provision of railway services in the absence of a current and/or anticipated business case for the service provider, then Government will commit to facilitating appropriate funding arrangements to ensure that the service provider is fairly compensated.”* This has implications for current loss-making but unsubsidised rail services such as parts of GFB and Shosholoza Meyl.

1.3 Status of Economic Regulation and Possible Needs

The existing regulatory framework for rail differs markedly from that in other network industries, such as telecommunications and electricity. There is a strong emphasis on safety and standard regulation but economic regulation is currently very limited. The rail freight sector therefore remains largely without economic regulation, despite Spoornet’s monopoly in many of its markets. Recent rate increases, service withdrawals and a decline in the quality of service have led to calls for regulation. The nature of regulation required for rail may change under the some of the structures we consider in Chapter 5 of this report.

2. Current Structure

2.1 Industry Structure

The rail sector is the responsibility of a publicly owned company, Transnet (Pty) Ltd, which also has interests in other modes of transport and whose rail division, Spoornet, manages most of the rail system as a vertically integrated operator (i.e. it also managing infrastructure). Spoornet also owns and manages most of the network it uses⁵ and controls access to its network.

Other Transnet subsidiaries and divisions provide rolling stock engineering services (Transwerk), maintain the track, electric traction and signalling (Protekon), and provide telecommunications services (Transtel).

Freight Services

Spoornet's has two bulk freight businesses, COALink and Orex (dedicated coal and iron ore lines respectively) and a General Freight Business (GFB Commercial) which also carries mostly bulk traffic. The three businesses are now managed jointly for operational purposes although they will continue to have separate accounts.

Passenger Services

Spoornet also operates low fare, long distance rail services, known as Shosholozza Meyl.

Commuter railway services in the main urban areas are the responsibility of the South Africa Railway Commuter Corporation (SARCC), a corporatised entity under the NDoT. SARCC owns most track⁶ and rolling stock assets used for commuting and is responsible for renewal and upgrading of assets. Metrorail, a division of Transnet, operates commuter passenger services under contract to SARCC. Metrorail also carries out some maintenance of rolling stock and track.

Arrangements for mutual access to track and other facilities are contained in an **Agreement for the Use of Assets and Related Services**, concluded between Transnet, trading as Spoornet, and the SARCC. This is a typical access and use agreement and appears to work well because there is mutual dependence (Spoornet uses SARCC facilities and *vice versa*).

Transport Authorities now have responsibility for local transport and carry out planning for all modes. However they do not yet have the funds to subsidise services or the capability to formulate their requirements, negotiate contacts and monitor compliance. The Legal Succession Act provides for SARCC to carry out its regulatory role *vis a vis* commuter operations on behalf of Transport Authorities.⁷

⁵ Spoornet manages 20,000 km of lines, of which 17,600 km currently have services (Source: Spoornet). Spoornet also uses SARCC track around cities but also provides access to commuter trains.

⁶ SARCC owns 1865 km of lines (excluding yards) in the six cities served by rail commuter services. Metrorail also operates on 862 km of Transnet/Spoornet track.

⁷ Once funding for passenger rail passes to them. SARCC already relies on Transport Authorities for planning.

2.2 Transparency

Pricing of railways services, inter-company charging, costs, cross-subsidies, project investment and the debt profile are all lacking in transparency throughout the railway sector. This has important implications for regulation. Whilst the absence of published prices for rail transport allows Spoornet to discriminate between customers based on ability to pay⁸ and may be justifiable as a means of recovering fixed costs, greater transparency and justification for those costs is essential if other operators are to have fair access to the network and to other services provided by Spoornet.

2.3 Public Service Obligations and Subsidies

SARCC receives subsidies to cover operational losses (passed on to Transnet/Metrorail) and capital grants to met capital expenditure.

No subsidies are payable to Spoornet even though the rates charged to some general freight customers and long distance passengers do not appear to cover the full cost of the service. Railways often charge different rates to different businesses, depending on the price sensitivity of different types of traffic, and this helps cover fixed costs.⁹ However, the current opaque process of cross-subsidisation determined by a commercial entity is not desirable.

If some form of cross-subsidisation is deemed necessary, decisions should be made on the basis of transparent information about the losses on individual services. The Government should set the overall policy for railways pricing and the regulator should check for compliance with that policy. The regulator might also set the cost attribution and reporting conventions that the companies should observe in establishing the actual level of cross-subsidies ‘paid’.

2.4 Competition

The introduction of competition has been given limited attention in transport sector reform. There is external competition with road vehicles in some parts of both the freight and passenger markets, but no competition within the railway sector.

In rail passenger services, consideration has been given in the past to competitive concessioning as a means of introducing competition “for the market”. This is increasingly common internationally. Although commuter services are provided by Metrorail under contract, this is on a non-competitive basis, and long distance services are provided by Spoornet without a contract.

2.5 Institutional and Regulatory Arrangements

The relationship between Government, Transnet and Spoornet will be considered in detail in our report on Corporate Governance but we review it briefly here as it determines the current regulatory arrangements for rail freight and long distance passenger services.

Transnet is accountable to the Government of South Africa (GSA) as its sole shareholder. The Department of Public Enterprises (DPE) is the sponsoring GSA department for Transnet and is responsible for Transnet’s performance. It approves its business plans and monitors its performance against a ‘Compact’ or shareholder agreement. DPE is also the lead department in issues of restructuring of SOEs and privatisation and concessioning processes. In carrying out

⁸ As is common internationally.

⁹ The most economically efficient way of doing so is to use Ramsey Pricing whereby charges are marked up above variable cost according to the sensitivity of traffic to price (in inverse relation to the elasticity of demand). A commercial rail company would always ensure that variable costs are covered for each type of traffic. We have not been able to obtain any such information on the situation at Spoornet.

these responsibilities the DPE is primarily concerned with the financial viability and stability of Transnet and with the transformation towards a competitive enterprise. However, it also has some responsibility for ensuring Transnet meets wider governmental objectives such as regional development, BEE, and social, health and environmental responsibilities.

The National Department of Transport (NDoT) is responsible for transport policy but it has limited direct control over rail policy implementation as it does not manage Transnet. NDoT has a limited mandate for economic regulation, which is mainly in the aviation sector.

SARCC is defined in the Public Finance Management Act No 1 of 1999 (PFMA) as a National Government Enterprise and is subject to similar controls to those applied to Transnet. This is discussed in chapter 4. It is under NDoT and procures commuter rail services on behalf of NDoT.¹⁰ SARCC also has a regulatory function through its management of a negotiated service level agreement with Transnet (Metrorail); it currently procures these services from Transnet although the Legal Succession Act (which established SARCC as well as Transnet) does not restrict SARCC to procuring these services from Transnet.

As a result of these institutional arrangements, the regulatory framework for each transport mode includes a complex web of overlapping (especially between DPE and NDoT) and at times conflicting institutional roles. An example is DPE which, as the sole shareholder in Transnet, is mandated with monitoring its profitability but is also expected to oversee the implementation of non commercial objectives.

The introduction of a regulator with explicit responsibility and powers of enforcement could:

- short cut problems by strengthening the corporate governance system - at present shareholder requirements do not percolate down to Spoornet due to Transnet's intermediary role
- reinforce the need to meet goals other than financial performance by providing direct reporting and financial inducements and penalties, thereby cutting through the ineffectiveness of the current governance system.

¹⁰ It could also do so on behalf of Transport Authorities (defined by the Legal Succession to the South African Transport Services Act No 9 of 1989 to include any Department of State (e.g. Department of Transport) or a local government body designated by the Minister of Transport)

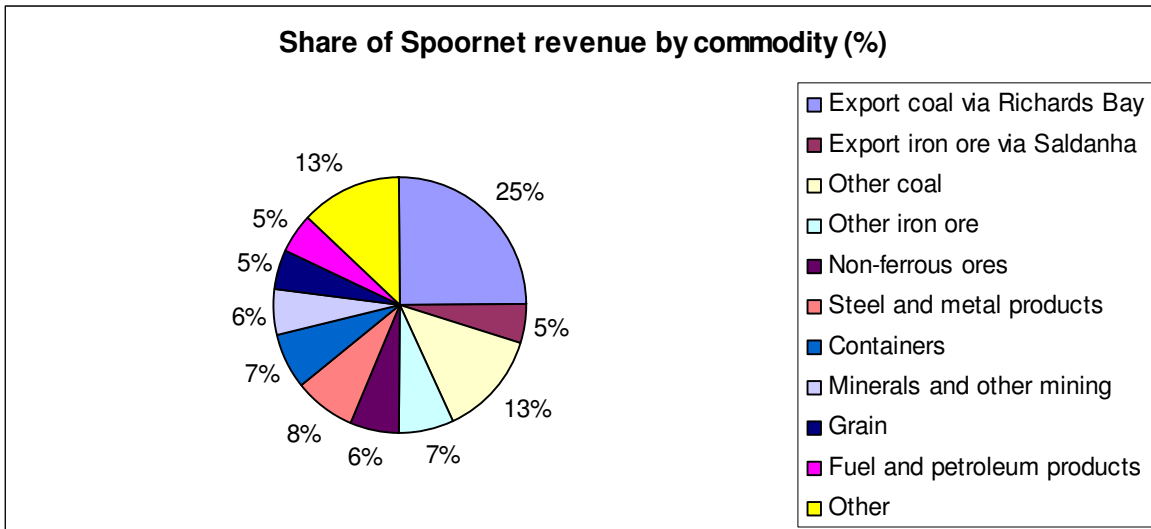
3. Rail Markets and Performance

3.1 Freight

The market for rail freight is dominated by the mining sector which accounted for 141 million tons out of the total 180 million tons in 2002/3.¹¹

About half of Spoornet’s revenue in 1999 was from coal and iron ore and most other revenue was from other bulk commodities:

Figure 3.1 Proportion of Freight Revenue by Commodity



Source: Spoornet STAR database; COALink and OREX projections with adjustments; CSIR “Estimation of the Size of the Road Freight Sector in South Africa,” 1999; Spoornet/Mercer analysis.

Rail’s share of the total market for long distance freight was estimated by Moving South Africa at 26% in 1996. Spoornet estimate that rail’s share in 2003 was 22% (on a tonnage basis).¹² This indicates a decline in market share but we do not know whether the method of measurement and estimation of these figures are consistent. However, rail’s share of container traffic via Durban¹³ has also declined from 45% in 1996/7 to 32% in 2000/1, again indicating a decline in market share.

Rail’s market share on long haul high density routes is about 80%,¹⁴ indicating that Spoornet has significant monopoly power in markets served by these routes.

¹¹ Source: Spoornet

¹² The proportion of commercial freight transport is 55% as most road transport is carried by shippers on their own account. However, we do not consider that commercial freight transport to defining the relevant market for assessing monopoly power as own account operators can always switch to commercial operators.

¹³ Source: Containerisation International, April 2002. Containers represented 7% of Spoornet’s freight revenue in 1999 (Source: Mercer presentation “Spoornet Transformation Options”, presented to Spoornet Board, July 2, 1999). Containers are a growing market internationally.

¹⁴ Source: Draft National Rail Transport Policy

Table 3.1 shows Spoornet’s market share for each of the major commodity groups:

Table 3.1: Market Share by Commodity Group

Commodity	Market share by rail	Share of Spoornet revenue
Coal for export from Richards Bay	>90%	25%
Other coal	>90%	13%
Iron ore through Saldahna	>90%	5%
Other iron ore	>90%	7%
Non ferrous metals	>90%	6%
Steel & metal products	40%	8%
Grain	75%	5%
Minerals and other mining	25%	6%
Fuel and petroleum products	50%	5%
Other (high rail share) ¹⁵	~50%	20%
Other (low rail share) ¹⁶	Mostly <20%	

Source: Mercer “Spoornet Transformation Options”, presentation to Spoornet Board, July 2, 1999.¹⁷

Spoornet’s market share exceeded 45% for most of the major commodity groups (these are shaded).¹⁸ These commodity groups represent about 60% of Spoornet’s revenue.

¹⁵ Cement & building products, chemicals & fertiliser, and wood products.

¹⁶ Motor vehicles, machinery and equipment, paper products and food.

¹⁷ These figures contained in the “Joint Labour/ Government NT Task Team Report on Spoornet Restructuring” are different from those above but not enough to change the conclusions.

¹⁸ Under the Competition Act, a firm is automatically considered dominant in a market if its market share exceeds 45% (or if it has a lower market share but has market power - market power is normally defined as being able to raise prices without significantly reducing demand for the product).

Table 3.2 summarises Spoornet’s freight markets in terms of tonnage carried, income and cost.

Table 3.2: Market and Financial Performance by Business (2001/2)

Business	Tons (million) ¹⁹	Total income (R million)	Average charge (R per ton)	Operating expenditure (R million)	Cost (R per ton)	Operating profit (R million)
GFB	85.4	7607	89	8076	95	-469
COALink	64.8	2489	38	988	15	1501
Orex	25.8	892 ²⁰	35	375	15	517
Total (freight)	176	10988	62	9439	54	1549

Table 3.2 shows that Spoornet’s General Freight Business (GFB) represents about half Spoornet’s tonnage and 70% of its freight income. According to the figures contained in the Spoornet Corporate Report 2002, GFB loses money each year (R469 million in 2001/2) implying that GFB’s losses are in effect funded from COALink and Orex profits.

Based on this data, the main reason for GFB’s losses is the high cost per ton of GFB (R95/ton) compared to about R15/ton for COALink and Orex. Spoornet makes a loss on GFB despite these high average charges. In contrast, the data indicates that Spoornet charges on average about 2.5 times average costs on its COALink and Orex operations. However, we do not know the basis on which Spoornet’s costs are allocated between its different businesses. It is therefore possible that, with a more appropriate cost allocation system, GFB would appear less unprofitable and COALink and Orex less profitable than these figures suggest.²¹

According to the draft National Rail Transport Policy, inland transport costs accounts for over 20 percent of the delivered cost of coal into Europe. If Spoornet does indeed make a substantial surplus, this acts like an export tax which may impact South Africa’s competitiveness and employment in the coal (and possibly) steel industries.

It is difficult to conclude anything about Spoornet’s efficiency from these average cost figures as, in addition to not knowing the basis of the cost figures, we have no data on length of haul. Also GFB’s extensive network, social services and excessive staff numbers cause increases in average costs which would distort any international comparisons. However, Mercer estimated that, if fully efficient (reducing staff numbers by 70%) and providing mainly siding to siding services on a reduced network of 7,000 km, GFB’s net cash flow would improve by about R3 billion a year, turning it into a highly profitable business.

According to Mercer reports, GFB, as constituted in 1999, was inherently unprofitable. Mercer estimated that that over 11 000 km of the 20,000 km network did not generate revenue in excess of avoidable costs (assuming the related costs can also be removed). Of Spoornet’s 1144 freight

¹⁹ Source: Spoornet: A Force in Africa, 28/8/03

²⁰ Figure for turnover (total income for Orex is not contained within Spoornet Corporate Report).

²¹ For example, wagon and axle loads may be much higher for bulk operations, resulting in higher track maintenance costs, but these costs may be allocated without reference to loads. This would overstate GFB costs.

customers in 1999, 322 (less than 30%) generated 98% of the revenue.²² The number of Spoornet customers had fallen to 912 by 2002/3, reflecting its effort to focus on more profitable traffic.²³ However, Spoornet estimates that even now only 21% of its GFB customers and 40% of GFB tonnage carried are profitable. This casts some doubt on whether this strategy was the right one.

Spoornet's monopoly profits on COALink and Orex (and presumably on parts of GFB) are used to subsidise the unprofitable parts of GFB.

3.2 Passengers

Metrorail had an estimated 14% share of urban public transport trips in 1996 (520 million passenger trips).²⁴ However, these trips were limited to the six cities served by commuter rail and to the corridors served in each of these cities. Rail's modal share is therefore quite high in the corridors served, largely because fares are significantly lower than for other modes.

SARCC received a capital subsidy of R545 million in 2002/3. The operational subsidy to Metrorail (through SARCC) was R1386 million in 2002/3. This is only 11% more than in 1995/96, an increase that is well below inflation.²⁵ Overall cost recovery in commuter rail was 31% in 2002/3²⁶ compared to 28% in 1996.²⁷

Spoornet operates long distance passenger services (as Shosholoza Meyl) over 13 routes covering about 30% of the Spoornet network. Most services operate on the core freight network, where freight densities are high. Spoornet carried 3.1 million long distance passengers in 2002/3, representing a small proportion of the total long distance passenger market.

Although not all Shosholoza Meyl services are loss making, Spoornet estimates that overall it recovers only two thirds of its operating cost from fares and that they made an estimated loss in 2001/2 of R165 million²⁸. As Spoornet receives no government subsidy for these services, it funds their losses from its profits on bulk freight traffic.

²² Source: Halcrow, "Spoornet GFB and MLPS Turnaround", Final Report, Main Volume, October 2000.

²³ Source: Spoornet.

²⁴ Source : Moving South Africa

²⁵ Source: SARCC. The draft National Rail Transport Policy makes a similar point showing that real subsidy per passenger declined by 28% between 1990 and 2000.

²⁶ Source: SARCC data and ASI analysis

²⁷ Source: Moving South Africa

²⁸ Source: Transnet. Again we do not know the basis for estimating the costs.

4. Regulatory Requirements and Issues

The review of structures and markets in Chapter 2 and 3 indicate that a number of regulatory requirement and issues need to be considered.

4.1 Freight

The first issue for freight is whether an appropriate balance is being achieved between the objective of profitability and those of low charges and comprehensive services. The Government has stated that it is content for the profits from profitable businesses to be used to fund unprofitable but socially necessary ones.²⁹ However, it is not appropriate that this is just left entirely to the discretion of a commercial enterprise such as Transnet, even if the source of funds is its profitable businesses (in Section 2.3 we suggested the Government sets the framework for cross-subsidisation and the regulator ensures compliance without becoming involved in its implementation). It is also important that decisions are based on appropriate costs.

A second and related issue is that, in assessing the possibility of regulatory control over the railway and/or the removal of Spoornet's monopoly in rail operation, account needs to be taken of the impact this would have on Spoornet's profitability and therefore on its ability to continue cross-subsidising its loss making operations. Profits from the COALink and Orex (as estimated by Spoornet) are already insufficient to both support operating losses in GFB³⁰ [and Shosholozha Meyl and to fund investment]. Increased regulation and/or the removal of Spoornet's monopoly would increase the funding gap and exacerbate under-investment which may lead to further shortfalls in capacity. This may lead to significant costs to the economy as a whole, given that Spoornet carries 60% of exports by volume.

There have also been calls for regulatory control of rail infrastructure (the monopoly element of the railway) to ensure sufficient maintenance and upgrading. However, such a requirement would lead to a further deterioration in Spoornet's financial position, unless the government were willing to finance the expenditure or unless Spoornet improved its financial performance through some other means. However, Spoornet may not be able to improve its financial performance significantly if rates, services and line closures are subject to intrusive regulation.

4.2 Passenger Services – Current Arrangements

The SARCC regulates commuter rail services through its management of a negotiated service level agreement with Transnet (Metrorail).³¹ A notable feature of this agreement is the fluidity in service levels and resulting compensation. This partly reflects fluctuations in the availability of Government funds. It also reflects cost increases within Metrorail which arise, at least in part, from the increasing age and deteriorating reliability of the rolling stock fleet. In the absence of benchmarking, cost and performance monitoring by SARCC is difficult and SARCC therefore lacks a basis for determining an appropriate level of payments to Metrorail.

Metrorail is responsible for estimating the demand for commuter services and for proposing service levels and fares (under guidelines contained in the service level agreement). SARCC reviews Metrorail's proposed fare increases but final approvals are made by the NDoT. Metrorail is also allowed to make small service changes without obtaining approval. These processes do not

²⁹ The draft National Rail Transport Policy states that "Government approves of transparent cross-subsidisation within the state-owned freight railway to ensure the provision of general freight services across the country".

³⁰ Cross-subsidies are also provided from ports operations.

³¹ Agreement entered into between the SARCC and Transnet Ltd (trading as Metrorail).

provide for any trade off to be made by NDoT or SARCC between fares, service levels and subsidies.

These arrangements differ from international best practice, and practice in bus tendering in South Africa, whereby the government authority defines what it wants and what fares should be charged. They also mean that SARCC suffers from a lack of information and control of the negotiating process.

Further difficulties with the current contractual relationship between SARCC and Transnet arise because it is a non-competitive arrangement between two government entities that used to be parts of SATS. The Legal Succession Act does not restrict SARCC to only procuring services from Transnet but the Act is silent on procedures to be followed in respect of procurement from other operators. Nevertheless, competitive concessioning of rail commuter services has been under consideration for some time although it is less in favour than it was some years ago when a pilot was planned. Rail concessioning has generally been successful internationally in reducing costs and increasing the number of passengers when compared to the previous state controlled entities. It should also lead to better contracts and greater accountability and makes regulation easier.

There is a need to increase the transparency of information provided to SARCC as regulator and specifier of services provided by Metrorail. These changes would also assist in transforming the current opaque processes regarding these critical decisions into explicit policy choices.

The main difference between the commuter and long distance services, from a regulatory perspective is the high market share for commuter services and the low market share for long distance services. This means that long distance fares could be regulated by competition rather than stipulated in a contract. However, given that long distance rail passengers generally have low incomes, the government may not wish to deregulate long distance rail fares without researching the alternatives available and the relative levels of incomes of rail, bus and taxi passengers in this market.

4.3 Impact of Planned Changes on Organisation of Passenger Services

The government has decided to combine commuter and long distance passenger rail services into a single entity. However, it has not yet decided whether the combined passenger operation will be located within Transnet or not.

In either case, SARCC's operational functions would be moved to the combined passenger company and SARCC would retain only its contractual and regulatory functions, but extended to long distance passenger services (and possibly freight). However the Legal Succession Act provides a poor basis for regulation and contracting of long distance passenger services since the Act is mainly geared to local transport.

If passenger services are located within Transnet, long distance services could in theory be cross-subsidised from the apparent profits of Transnet's ports and bulk rail freight operations. However, profits from these operations are no longer adequate to provide for the necessary levels of cross subsidy for GFB and passengers services and to fund the investment required in rail freight. Continued cross subsidies will therefore lead to further deterioration of Transnet's finances.

The financial scenarios modeled in the Consolidation Paper³² assume that the cash shortfall of the combined passenger operator would be covered by subsidies. If so, this means that long distance services would need to be subject to broadly the same type of public service contract that Metrorail has now, irrespective of whether the passenger service entity is located within Transnet or not.

Establishment of a separate company or Transnet subsidiary responsible for all passenger services will however change the relationship with Spoornet for long distance passenger services. These are dependent on Spoornet for access to track, other facilities and locomotives but, unlike Metrorail, they would offer little or nothing in return. Regulation may therefore be required to ensure that long distance passenger services have access to Spoornet assets on reasonable economic terms and in a way that meets Metrorail's service requirements.

³² Joint Position Paper on Passenger Rail Restructuring, NDoT/NT/DPE/SARCC/Transnet, December 2002, Annexure B.

5. Structural and Regulatory Options

5.1 Introduction

In this Chapter we develop and evaluate structural and regulatory options for the railways aimed at introducing greater transparency and promoting greater efficiency. In developing these options, we focus on main lines because branch lines are the subject of a separate project. We also limit the discussion to freight as on rail competition (between operators on the same line) is not a realistic option for passenger operations.³³

A recent framework document³⁴ suggested the break up of Spoornet into Network, Maintenance, Freight Operations and Passenger Operations. The document suggested that these be established as separate subsidiaries or companies. It wisely noted that this break up should be carried out cautiously because of the possibility of undesired consequences.

5.2 Corporatisation and Public Services Obligations

There are issues concerning corporatisation and public services obligations that affect all options considered below. The Government expects Spoornet to meet public services obligations for both freight and passenger services. Partly because Spoornet and Metrorail are divisions of Transnet, rather than subsidiary companies, they are not required to publish accounts (see Appendix A). As business units of Transnet, they are equally subject to the other corporate governance requirements of the *Public Finance Management Act (PFMA)*. However, the expectations and monitoring framework imposed by the shareholder is not sufficiently detailed in relation to these business units.

Transnet already maintains accounts separately for each business unit and could be required to publish these on a divisional basis. However, corporatisation (creating separate legal entities) would reinforce the pressures to behave commercially within each business unit, and would expose non commercial activity and help price the costs of such activity. A common requirement of all the structural options set out below is therefore that all the railway entities should be corporatised.

The shareholder position in the proposed corporatisation is also important. If Spoornet were to remain within Transnet, the impact of corporatisation would be different to the impact if it moved outside Transnet, with say DPE as a direct shareholder, or if the shareholding were split between different agencies. If Spoornet stayed inside Transnet, there is a greater risk of performance being hidden and of enforced cross subsidisation.

Any public services obligations should be set out in contracts between Government and the operator. These contracts would stipulate the information on costs and revenues to be provided for services provided to meet those public services obligations. These contracts should set out the level of compensation payable to the operator for running such services.³⁵ These changes will

³³ On rail competition (between operators on the same line) is also not a realistic option for low density freight operations as the market is too small to split without major loss of efficiency.

³⁴ National Freight Logistics Strategic Framework, dated 03/10/2003.

³⁵ These could be cross-subsidies from profitable parts of the company but care would need to be taken to ensure that this does not weaken the operator's incentives to efficiency in those profitable areas and its overall financial position.

ensure that Government is aware of the costs of meeting its requirements so it can take this information into account in deciding what services it requires operators to provide in the future.

5.3 Options

In assessing the options, we start from the issue of how each would assist in increasing efficiency and introducing competition into the sector and then consider the implications for how the sector would then be regulated to compliment any competitive forces brought about through structural change. Each option could include some concessioning, particularly of loss making services, thereby introducing “competition for the market”.

We set out below six structural options for freight operation and their regulatory implications:

Option 1: No Structural Change

If no change were made to the structure of Spoornet and it were allowed to maintain its monopoly, there may be a case for regulating rates, services (both their discontinuation and their quality) and possibly the process for line closure. This is because many shippers are essentially captive to rail and Spoornet appears to have considerable market power in most of the markets it serves.

However, international experience suggests that regulation of rates and services can be counter-productive. In the US and Canada, for example, when regulation was pervasive, it stifled initiative, reduced efficiency, reduced investment and ultimately disadvantaged the customer until eventually deregulation was accepted by customers. When the sector was deregulated, leaving only protection on an exceptional basis, the industry underwent a major turnaround.³⁶ There is therefore a risk that regulating Spoornet rates and services without structural change could worsen Spoornet’s already weak financial position.

Option 2: No Structural Change with Third Party Access

If no change were made to the structure of Spoornet but third party access were introduced, there might be less need to regulate rates and services since customers would, at least in theory, be able to operate services themselves or buy services from third parties.

However, there would be a need to regulate access to ensure third party operators are allowed fair access to the network at prices that reflect cost. This would require changes to Spoornet’s costing system which would allow infrastructure costs to be fully separated from the costs of operations. It would also require separate infrastructure management within Spoornet to reduce the probability that the infrastructure part of Spoornet would control access in a way that favoured its operating part, possibly by erecting barriers to entry for third party operators. A regulator would be needed to oversee and police this process.

Option 3: Transform Spoornet into Holding Company with Third Party Access

³⁶ The situation in these countries is different to that in South Africa because the railways are privately owned and inherently more economic because of longer distances of haul (See Appendix B for more details). However experience there shows that regulation does not necessarily increase welfare and this is an important lesson for South Africa.

The advantage of this option is that it would allow the introduction of choice and competition into the rail market. Customers would be able to operate trains on their own account or could contract operators other than Spoornet to do so. Competition should reduce the need for regulation of rates and services and is more effective at promoting efficiency than regulation.

The separation and independence of infrastructure management within Spoornet would be facilitated if Spoornet were transformed into a Holding Company. The Holding Company structure would facilitate co-ordination between the infrastructure and operational sides of the business.

There would however still be a need to regulate Third Party Access. Experience elsewhere, particularly Germany, suggests that, under a Holding Company structure, the incumbent operator tries to erect barriers to entry to prevent third parties entering the market. However, over time, the regulator may be able to reduce these barriers.

The main disadvantage of this option is that while it may combine the access advantages of separation while maintaining the advantages of integration, it may retain some disadvantages of each. It therefore needs to be designed and implemented carefully. Again the role of effective regulation would be critical.

Option 4: Complete Vertical Separation

Under complete vertical separation, Spoornet would be split into independent infrastructure and operations companies. This would facilitate Third Party Access since the infrastructure company would have no interest in favouring its own operator(s). There would still be a need to regulate access but this task would be less onerous than under option 2, focussing primarily on access charges rather than discrimination between operators.

The main disadvantage of this option is that separating infrastructure and operations completely can be risky if not handled properly. Investment, planning and day to day operations of railways are best carried out jointly by the infrastructure and operating parts of railways and whilst these activities can be co-ordinated between different companies, it is in practice more difficult to do so efficiently and effectively. Only a few countries have completely separated infrastructure from operations and the results have on occasion been problematic:

- In Sweden, the infrastructure authority has sometimes invested in the wrong projects that do not meet the needs of operators and customers (although this also occurs in integrated monopolies)
- In Britain, vertical separation has been a factor in major problems occurring in the industry, particularly regarding cost and performance, although other factors played a major role too.

It is this clear that a move to vertical separation in South Africa should take account of problems experienced elsewhere and be designed in such a way as to seek to avoid their repetition in South Africa. However, complete vertical separation does have the great advantage of introducing proper clarity and accountability into the structure, enabling the state to focus on investment into infrastructure and the private sector on investment into operations. It also provides the basis for competition which will increase customer choice and should increase efficiency.

The draft National Rail Transport Policy raises the possibility of a variation on complete vertical separation, asking “*should strategic (as opposed to operational) control over freight and long distance rail infrastructure rest with an entity that is independent of the operator/s?*.” This variation is not developed in the document but we assume the authors had in mind that operators would continue to have operational control over railway infrastructure, thereby avoiding some of the co-ordination problems experienced in Britain. However, the distinction between strategic and operational control is not easy to make: if timetable planning is included in operational control, as we would expect, given that this is a fundamental part of running a railway, Spoornet might still be able to discriminate against third party operators, unless tight regulation were introduced. Clearly if this option were chosen, these choices would need to be considered.

Option 5: Vertically Integrated Regions or Lines

Under this option, Spoornet would be split into vertically integrated regions or lines. Spoornet was until recently partly split on such a basis with the separate operations of COALink and Orex. However, this could be extended more widely.³⁷ The advantage of this approach is that it would allow the benchmarking of the performance of the different railway companies, making it possible for yardstick competition to be introduced. This would make it easier for the regulator to assess the efficiency of companies and may also assist in the determination of rates. One of the difficulties with yardstick competition in this context is that there would not be many companies to compare and the characteristics of their markets and infrastructure are likely to be quite different. A common sense approach would therefore need to be taken to assessing their efficiency, including the comparisons with their efficiency when still part of Spoornet.

It may be possible to develop a limited amount of competition between lines to different ports although the potential is likely to be limited due the considerable distances between ports in South Africa. Splitting Spoornet up should also increase the manageability of the railway business and allow managers to focus on their markets.

Under this option, Third Party Access would be needed (at least in some situations) to permit seamless operation across railway boundaries.

One potential disadvantage of this structure is that economies of scale and scope might be lost as a result of breaking the railway up. For example, it might reduce the utilization of the rolling stock fleet.

Option 6: Competing Vertically Integrated Operators

Competition between vertically integrated operators is broadly the situation for the railways in North America although most markets there are served by only one rail operator. There would still be a need to regulate access– but only light touch regulation would be required, and the regulator should probably not intervene unless a shipper complains (as in North America - this is known as passive regulation in contrast to active regulation where a regulator can intervene whenever he sees a justification).

In our preliminary view, this option may only be feasible in South Africa if investment is made in what are now alternative routes that are used where main routes are impassable. Unlike the North

³⁷ A separate project is also considering the possibility of separate companies for branch lines but our focus here is on the main lines.

American network, the South African has been built and improved upon as a single network and, between any two major points in the network, there appears to be always one route that is preferable in terms of distance and other characteristics. Establishment of vertically competing operators would therefore require investment and this is unlikely to be justified unless there is sufficient demand to justify duplication of assets. Only the line between Johannesburg and Durban is sufficiently intensively used to warrant more capacity but the costs of building a duplicate line would probably be prohibitive and the extra distance of using an upgraded existing line may be too great.

5.4 Preliminary Assessment of Options and Caveats

Our preliminary assessment of options is summarised in Table 5.1:

Option	Advantage	Disadvantage
1. No Structural Change	Retains Spoornet's economies of scale.	Need to regulate rates but this may be ineffective. Critical current problems caused by rail inefficiency not addressed.
2. No Structural Change with Third Party Access	Provide some customers with choice and put competitive pressure on Spoornet to reduce rates.	Spoornet would have an incentive to erect barriers to deter new entrants. Access to be regulated.
3. Holding Company with Third Party Access	As 2. Also separate subsidiary would have less incentive to erect barriers.	Complexity. Still possibility of barriers to deter new entrants.
4. Complete Vertical Separation	Level playing field between operators. Clarity and competition introduced. State can concentrate on investment in infrastructure and private sector in operations.	Complex and risky. Need to avoid problems encountered elsewhere.
5: Vertically Integrated Regions or Lines	Yardstick competition and possibly between competing lines. Improved customer focus.	Possible loss of integration and economies of scale.
6. Competing Vertically Integrated Operators	Competition between operators should reduce need for regulation.	May not be feasible with current system configuration.

In our view, three options are particularly worth considering further:

- Option 3, the Holding Company with Third Party Access, represents an acceptable compromise between the meeting the needs of customers and the desirability of avoiding excessive regulation. It supports competition without causing major dislocation to the railway industry (which could be risky). However, it would be complex.

- Option 4, Complete Vertical Separation, which provides a clear way forward for substantive reform but needs to be handled well and accompanied by the early introduction of a strong regulator,. Marginal branch lines would have to left outside this arrangement if turned over to low cost operators.
- Option 5, Vertically Integrated Regions or Lines, with yardstick competition, would reduce the need for interfaces between infrastructure owner and operator. However, there are practical issues that need to be investigated concerning whether and how the network could be split and consideration would need to be given to how yardstick competition would work in practice

In order to evaluate fully these structural options and associated regulatory requirements, it would be necessary to assess the likely implications of each option in terms of practical difficulties and potential barriers and ways addressing these, taking account of lessons learnt elsewhere.

It will also be necessary to consider the likely implications for Spoornet's finances and for the subsidy requirements from Government. The first step in doing so would be to understand the current financial position of the rail industry. This was to have been carried out under the Financial Review project but this project has been delayed. Once this work has been completed, we plan to revisit the structural issues under the proposed Institutional project.

However, any of the six options outlined above, whether they involve more regulation or more competition, would in all likelihood lead to a worsening in Spoornet's financial position³⁸, at least in the short term, unless other measures were taken. This would be the price paid for improving customer service, improving rail efficiency, reducing rates and generally providing a boost to the economy, particularly the export sector. These objectives have to be the prime ones for government, rather than protecting the current operator.

Possible measures to offset the financial impact of these options on Spoornet include the provision of government funding for loss-making social services or the withdrawal of some of these services. At present, however, there is a lack of information for making such decisions.

³⁸ Financial analysis would be required to assess the extent of this for each option.

6. Role of Regulator and Institutional Structure

6.1 Comments on Government Statements

The draft National Rail Plan listed the possible roles of an economic regulator: promoting effective planning, managing competition and contractual regimes in railways (e.g. regulating access agreements), subsidy management, performance compliance, and public and consumer protection. Of these, we consider the key roles are the management of competition and contractual regimes in railways (particularly access agreements) and consumer protection.

The Passenger Rail Consolidation Paper envisages that: “*SARCC’s performance monitoring function (vis a vis commuter rail operations) will be expanded to include broader economic regulation for all railways in South Africa*”. We have two comments on this statement:

First, there is the issue of whether economic regulation should be separate from safety regulation. We see considerable advantages in combining the two functions in one body.

Secondly, if planning and subsidy management (including monitoring compliance with contractual regimes) were the responsibility of a regulator, the regulator could have a conflict of interest between its regulatory (referee) role and its role as agent for government in subsidy management. It might therefore be preferable if the regulator were to have its role in service agreements and other contracts limited to dispute resolution. However, we recognise that cost and the availability of skilled staff may mean that the regulator will also have to take on a contract management role.

The government has already given consideration to the possible institutional structure for economic regulation. The draft National Rail Transport Policy states that: “*The railway economic regulator function will be independent of operators/service providers in the railway sector and will be directly accountable to the Minister of Transport. Initially the function will be performed within the National Department of Transport.*” In our view, it is important that the regulator should be independent of Government as soon as possible.

6.2 Principles

It is not possible at this stage to determine the precise institutional structure for regulation of the railways since this will depend on:

- The structure adopted for the industry;
- The form of regulation needed to complement the competitive forces arising from that structure;
- The functions assigned to the regulator.

However, there are some common principles that will apply in each case:

- The regulator should be independent of both the industry and (eventually) government
- The regulator should however follow sector policies and principles (e.g. that transfer of traffic to rail should be encouraged – targets should ideally be quantified) which should be set out by government

- Government policies and priorities for the sector should be clearly set out and published by government to give the private sector (e.g. wagon owners) confidence
- The regulator should be the implementation agency charged with monitoring and enforcing compliance with sector policy within its designated area of responsibility and should determine the regulatory policies, methods and procedures required to perform this function. This would include setting regulatory policies (e.g. what factors should be considered in determining access charges and rates to customers), mechanisms and procedures – these must be aligned with government policy
- Economic regulatory functions could be combined with safety regulatory ones
- The regulator should have an unambiguous right to receive information from the industry
- Rail regulatory functions should be combined (clustered) with those in other parts of the transport sector, in order to save cost and use scarce regulatory skills effectively
- The regulator should probably be funded from the rail industry,³⁹ possibly through licence fees, but the budget should be approved by Government
- Regulators must have appropriate technical, economic and legal skills.

6.3 Interim Arrangements

We recognise that evaluating alternative industry and regulatory structures in more detail and making decisions will take some time. Meanwhile the problems with Spoornet will get more intractable unless something is done about improving its performance and aligning its objectives more closely to those of the Government, not just on rates but on all aspects of the business. The successful implementation of whichever option is chosen will also be influenced by whether the direction, monitoring and governance of Spoornet can be improved. These issues will be addressed in our Corporate Governance and Performance Indicator projects.

Whatever option is finally chosen, a regulator will be required and it is important that one be established soon and that ideally it be given powers that are adaptable to whatever solution might finally be adopted.

³⁹ This is normal practice internationally because it is rail customers that benefit most from regulation not the general public. The only argument for government funding the regulator would be if there were major savings in the costs of road provision resulting from rail regulation.

Appendix A - Legal Framework for Regulation of Railway Sector

A.1 Introduction

In terms of the Constitution Act of 1996, the regulation of the railway sector is a function exclusive to the competence of the national government. Pursuant to national government competence, the **National Railway Safety Regulator Act (NRSRA)**, No. 16 of 2002, regulates the safety of railway operations. Although the NRSRA through the issuing of a safety permit introduces a market entry requirement, it contains no provisions in respect of economic regulatory considerations in respect of market entry. National legislation on the economic regulation of the railway sector as such has not been enacted.

Although economic regulation of the railway sector, in particular, has not been enacted, the legislation highlighted below address, in addition to the NRSRA, institutional, planning and procurement aspects related to the railway sector.

The **Legal Succession to the South African Transport Services Act** (Legal Succession Act), No. 9 of 1989, *inter alia* provides for:

- corporatization of the state-owned company, Transnet Ltd., providing *inter alia* railway services through its Spoornet and Metrorail business units;
- establishment of the South African Rail Commuter Corporation Ltd (SARCC);
- economic and strategic objectives of the State to be considered by Transnet; and
- a Transnet is obligation to provide, at the request of a transport authority or the SARCC, services that are in the public interest in terms of a negotiated service level agreement.

An example of such a negotiated agreement is the **Agreement entered into between the SARCC and Transnet Ltd (trading as Metrorail)**. An **Agreement for the Use of Assets and Related Services**, concluded between Transnet and the SARCC, supplements the provisions of the service level agreement.

Schedule 4 of the Constitution lists the areas of jurisdiction on which national and provincial government have concurrent competence, these include public transport (passengers), regional planning and development and such public works that are relevant to the execution of provincial areas of competence. The **National Land Transport Transition Act (NLTTA)**, No. 22 of 2000 defines the role of the national and provincial spheres of government in respect of land transport planning (including rail passenger and freight), development of public transport (passengers), regulation of road passenger services, subsidisation of public transport services and procurement of such services. It may be noted that the purpose and scope of the Act suggest that it is an instrument to transform and restructure the land transport system and as such to give effect to the national policy concerning the first phases of the process; these first phases largely address matters related to road transport although the Act is not completely silent in respect of the railway sector.

In addition to the transport sector legislation noted above, the generic or cross-sectoral **Competition Act**, No. 89 of 1998 and the **Public Finance Management Act (PFMA)**, No.1 of

1999, are relevant to the regulation of competition and the financial and performance accountability of the state-owned entities (e.g. Transnet and SARCC), respectively.

The **Competition Act**, No. 89 of 1998 applies to all economic activity within, or having an effect within, the Republic⁴⁰. The Act regulates restrictive horizontal and vertical practices, abuse of dominance, price discrimination by dominant firms and mergers. The potential of concurrent jurisdiction between sector regulators and the Competition Commission is recognized. As no economic railway regulatory legislation has been enacted, the competition authorities currently have exclusive jurisdiction over the regulation of competition in the sector. Should independent economic railway regulatory capacity be established, a potential for concurrency of jurisdiction will arise.

The object of the **PFMA** is to secure transparency, accountability and sound management of the revenue, expenditure, assets and liabilities of national and provincial government departments, constitutional institutions, public entities and executive authorities. Both Transnet (national public entity) and the SARCC (national business enterprise) are listed as Schedule 2 public entities to which the PFMA apply. The requirements of the PFMA are further amplified through the **Treasury Regulations** of 2001 and **National Treasury Best Practice Guidelines on Monitoring and Reporting and a Guide to Accounting Officers**. Pursuant to the Treasury Regulations, the relationship between Government and Transnet is further regulated through a **Shareholder's Compact**. Collectively, the provisions of the Act and the Shareholder Compact are largely focussed at financial and performance accountability. It may also be noted that in the event of inconsistency between the PFMA and any other Act, the provisions of the PFMA prevail.

It may be noted that the legislation highlighted above present a fragmented legal framework in respect of the railway sector; the legislation have been enacted over a period of 13 years in the absence a comprehensive railway sector policy. The provisions of the legislation are discussed with specific reference to institutions and institutional relationships, what is regulated and to what extent and what is not regulated.

⁴⁰ Except collective bargaining and collective agreements in terms of the Labour Relations Act, 1995 as well as concerted conduct designed to achieve a non-commercial socio-economic objective or similar purpose.

A.2 Legal Framework

Transnet Ltd. (Trading as Spoornet and Metrorail)

In view of the fact that Spoornet and Metrorail are business units of Transnet Ltd, the institutional discussion of these units is presented with reference to the legal status of Transnet Ltd, its governance, assets, corporate structure as well as its common carrier and/ or public service obligations.

Governance

Transnet was incorporated as a public company with share capital pursuant to section 2 of the Legal Succession Act; the Act does not expressly define the purpose and mandate of Transnet but provides for Transnet to succeed the South African Transport Services (SATS)⁴¹ and for the whole commercial enterprise of the SATS to be transferred to Transnet⁴². Transnet's corporate mandate is further defined through its Memorandum of Association and Articles of Association as required in terms of the Companies Act, 1973. With the exception of provisions related to the required minimum members, a quorum and liquidation of a company, the provisions of the Companies Act, 1973, apply to the corporate governance of Transnet Ltd.

Although it may be considered that Transnet, as a public company is free to determine its own commercial policy, it is, in view of its shareholding, subject to compliance with the governance requirements of the Legal Succession Act, PFMA and Treasury Regulations as well a Shareholder's Compact between Transnet and the Minister. In addition, the National Treasury issued National Guidelines on Best Practice to be considered when preparing for compliance with the objectives of the PFMA and Treasury Regulations; these guidelines do not have statutory status but adherence thereto would certainly influence compliance with the PFMA.

In terms of section 2 of the Legal Succession Act, the State was (and currently still is) the only shareholder and member of Transnet; the Minister of Public Enterprises has been assigned to exercise the rights of the State⁴³. The Minister, pursuant to his rights as only shareholder and member appoints the Board of Directors; no requirements in respect of the size and composition of the Board are provided in legislation. Transnet's Articles of Association determines that the Board shall comprise no more than ten (10) members. Pursuant to the Shareholder's Compact the Minister appoints only the non-executive members and the Chairman of the Board. The non-executive members of the Board appoint the executive members after consultation with the Minister. The wording "after consultation" suggests only a requirement to consult and not a requirement to obtain approval. The only statutory requirement in respect of committees of the Board relates to the establishment of an audit committee in terms of the Treasury Regulations issued in terms of the PFMA.

Pursuant to the PFMA (section 63), the Minister serves as the "executive authority" of Transnet and as such must exercise his/her ownership control to ensure that Transnet complies with the PFMA and his financial policies. In this regard, the Minister is required to convey all instructions

⁴¹ SATS succeeded the South African Railways & Harbours Administration in terms of section 2 of the SATS Act, 1981.

⁴² Legal Succession Act, section 3.

⁴³ The State is defined as the Republic of South Africa.

to Transnet that may have financial implication, in writing. The annual report and financial statements of Transnet are tabled by the Minister in the National Assembly.

In terms of the PFMA (section 52), Transnet must submit a projection of revenue, expenditure and borrowings for a particular financial year as well as a corporate plan (covering the affairs of Transnet and its subsidiaries) for the following three (3) financial years to the accounting officer of the Department of Public Enterprises (DPE) and the National Treasury, at least one month before the start of its financial year (31 March) or another period agreed with the National Treasury.

The PFMA (section 49) also defines the Board as the “accounting authority” for the financial management and performance measurement of Transnet. The instrument through which the relationship between the accounting authority (Board) and the executive authority (Minister) is to be regulated is a shareholder’s compact to be concluded on an annual basis (paragraph 29 of the Treasury Regulations). No time scale is determined for the conclusion of the Shareholder’s Compact. The shareholder’s compact must document the mandated key performance measures and indicators to be attained by Transnet as agreed between the Board and the Minister. The achievement of performance measures and indicators must be monitored through quarterly reports from the Board to the Minister and should facilitate effective monitoring, evaluation and corrective action. The provisions of the PFMA, the Treasury Regulations and Best Practice Guidelines issued by the National Treasury generally point to the equal importance of key performance indicators for both financial accountability and performance measurement. As the appropriate “executive authority”, the Minister must evaluate and monitor Transnet’s performance against its budget and service delivery plans. Whilst it is not the purpose of this assignment to present the financial management requirements of the PFMA in detail, it is worth noting that the Act, Regulations and Guidelines all steer in the direction of instilling greater importance on outcome and output as it relates to overall financial and performance reporting (goal mapping).

The Shareholder’s Compact between Transnet and the Minister of Public Enterprises establishes the exclusive point of contact between Transnet (including its business units and subsidiaries) and the State as the Chairman of the Board of Directors and the Minister, respectively. This reflects an expectation that all governmental communication be channelled via the Minister and likewise, all communication from Transnet business units and subsidiaries channelled via the Chairman of the Board. Despite this formal arrangement it is noted that informal facilitating consultations are conducted directly between individual business units and the Department of Public Enterprises.

Notable features of the Shareholder’s Compact include agreement on or acknowledgement of:

- Performance measurement in respect of both financial and non-financial terms as well as the need to set performance targets;
- Value of good governance principles of transparency, accountability and sound business management;
- Freedom of the Board to manage the affairs of Transnet in a vigorous and enterprising manner;
- Shareholder’s Compact is the instrument through which the Minister communicates what it requires from Transnet;

- National Framework Agreement (NFA) and an undertaking by Transnet to observe the spirit of the NFA, although Transnet is not a party to the NFA;
- Submission of the Transnet Corporate Plan⁴⁴ on 1 March of every year, before the beginning of its financial year, in terms of section 52 of the PFMA;
- Government’s expectations for the restructuring of state-owned enterprises SOEs and Transnet, in particular⁴⁵;
- Shareholder expectations of the Board of Directors⁴⁶;
- Performance measurement criteria⁴⁷;
- Transnet’s complex business structure, the business oriented and aggressive nature of its corporate plan and government’s expectation in evaluating performance;
- Requirement that Transnet shall enter into shareholder compacts with its main subsidiaries;
- Transnet’s freedom to regulate its relationship with its subsidiaries⁴⁸ largely through the Board - Transnet subsidiaries will report directly to Transnet and the latter reports to the Minister in respect of its subsidiaries;
- Subject to approval in terms of the PFMA, Transnet invests sufficient of its own funds for the adequate capitalisation and ongoing investment in Transnet and in certain subsidiaries;
- No dividend shall be declared or paid except out of profits of Transnet or out of cumulated distributable reserve funds/profits;

⁴⁴ The Shareholder’s Compact defines the “Corporate Plan” as the Business Plan, Funding Plan, Strategic Plan and Restructuring Plan or a combination thereof. The Treasury Regulations issued under the PFMA lists the content of the Corporate Plan as:

strategic objectives and outcomes identified and agreed on by the executive authority (Minister) in the shareholder’s compact;
strategic and business initiatives as embodied in business function strategies;
key performance measures and indicators for assessing the entity’s performance in delivering the desired outcomes and objectives;
risk management plan;
fraud prevention plan; and
financial plan comprising projections of revenue, expenditure and borrowings, asset and liability management, cash flow projections, capital expenditure programmes and dividend policies.

⁴⁵ Objectives detailed in Table 1.

⁴⁶ Expectations listed in Table 1.

⁴⁷ Performance measurement criteria listed in Table 1.

⁴⁸ Subsidiaries include sub-subsidiaries and business units of Transnet, eg. Spoornet and Metrorail.

- Independent arbitration in the event that disputes cannot be resolved amicably;
- Right to approach a Court of competent jurisdiction in the event of non-compliance by the other party to the agreement; and
- Precedence of the Companies Act and any other law in the case of conflict between the Shareholder’s Compact and such laws, subject to the overriding provisions of the PFMA.

As the Shareholder’s Compact serves as a dynamic instrument through which the Minister is able to communicate expectations of restructuring and performance, it is worthwhile to compare the indicative list of expectations and performance criteria as they are presented in the Compact; this comparison is presented in Table A1 below.

Table A1: Transnet Shareholder’s Compact - Expectations and Performance Criteria

RESTRUCTURING EXPECTATIONS	EXPECTATIONS OF BOARD OF DIRECTORS	PERFORMANCE MEASUREMENT CRITERIA
Enhancing efficiency and effectiveness of State Enterprises	Enhancing shareholder value	Measurement against financial criteria
Accessing globally competitive technology	Satisfying customer needs	Success in black economic empowerment policies
Creating effective market structures in the sectors currently dominated by the SOEs	Meeting expectations of all key stakeholders	Succession planning – internal to the company
Mobilising private sector capital and expertise	Developing new job creation opportunities	Social, health and environmental responsibility and principles of good governance.
Entrenching a culture of performance and accountability in SOEs.	Pursuing social investment projects, support black economic empowerment and employment equity and transformation	
	Enhancing a culture of good corporate governance and adhering to good corporate governance practices.	

It is evident from Table 1 that, although the listing of expectations and performance criteria in the Compact is only indicative and not necessarily exhaustive, the performance measurement criteria (column 3) do not present a comprehensive platform for Government to monitor and evaluate progress towards the achievement of the restructuring expectations as well as certain important outcome or output expectations of the Board of Directors, e.g. satisfying customer needs. Despite, some shortcomings of detail and linkages in its current form, the value of the Shareholder’s Compact in effectively communicating and enforcing Government’s expectations should not be underestimated; detailed business unit- or sector based short-to-medium terms strategy expectations linked to output based performance measure criteria may be considered.

Examples that come to mind is cost-accounting separation for infrastructure and operations that would support more a transparent and actual cost basis for PSO obligations, access charging and other non-operational subsidised costs. Moreover, evaluation of performance in terms of the Shareholder's compact may also be more directly tied to the submission of the annual budget and annual report; the annual evaluation and conclusion of the Shareholder's Compact is not date bound and thus not a requirement for the submission of and approval of the annual budget.

However, the submission of the Transnet Corporate Plan covering the affairs of Transnet and its subsidiaries) for the following three (3) financial years at least one month prior to the start of Transnet's financial year may counter shortcomings of the Shareholder's Compact in respect of detail on restructuring targets and subsidiary output and outcome targets. Also, it appears that the submission of the Corporate Plan has some bearing on the approval of the annual budget (see paragraph 2.1.13). However, the interrelationship between performance measurement in terms of the expectations and performance measurement criteria of the Shareholder's Compact and the Corporate Plan is not well defined. It should be recognized that it is principally the task of Government to restructure markets or sectors and not Transnet; at the same time it should be acknowledged that, considering the dominance of the enterprise in certain sectors, actions taken towards the restructuring of Transnet will have a direct impact on sector reforms.

In addition to arrangements of the Shareholder's Compact, the PFMA (section 54) also requires Transnet to obtain prior approval from the Minister for certain transactions; if no response is received from the Minister within thirty (30) days or within agreed period with the Minister, Transnet may assume approval. In addition, the National Treasury must be informed, in writing of these transactions but no approval is required. It may be noted that the PFMA mandates the Minister to exempt Transnet from these requirements. No document providing such exemption was traced as part of this assignment. The transactions listed are:

- Establishment or participation in the establishment of a company;
- Participation in a significant partnership, trust, unincorporated joint venture or similar arrangement or significant change in the nature or extent of its interest therein;
- Acquisition or disposal of a significant shareholding in a company;
- Acquisition or disposal of a significant asset; and
- Commencement or cessation of a significant business activity.

Transnet Assets and Structure

Pursuant to the Legal Succession Act (section 3), the whole commercial enterprise of the SATS (with the exception of movable and immovable property transferred to the SARCC) was transferred to Transnet. This transfer includes all assets, rights and obligations of whatever nature. Considering that SATS' asset base developed over a substantial period of time and through land expropriations not only by its predecessors but also by other government entities, section 3(4) of the Legal Succession Act recognises that the transfer of assets to Transnet includes rights vested in the State, the State President and the Government insofar as it related to the commercial enterprise of the SATS. Such transfer may, however, not be construed as conferring ownership rights in respect of immovable property not owned by the SATS, or any of the other State entities listed. It may, nevertheless, include servitude rights registered or established through prescription in respect of immovable property owned by others.

In view of the fact Transnet's succession of SATS was preceded by at least two legal successions entailing similar statutory transfer of assets, it may also be expected that the land register of the Registrar of Deeds may not be fully aligned to Transnet's land asset profile. Moreover, it has been noted that not all the land in Transnet's asset profile, especially land previously owned by the State, have been surveyed for the purposes of due legal transfer to Transnet. It is evident that while there is no uncertainty as to the statutory transfer of commercial enterprise of the SATS, and particular, ownership and servitude rights in respect of land, the historical development of the asset profile presents potential constraints in respect of the ease with which Transnet will be able to transfer title to private entities. These constraints may, however, not be relevant in respect of sub-lease or concessioning arrangements where the precise definition of land as per title deed may not be relevant, rather Transnet's established rights of ownership and/or public servitude.

In respect of the restructuring and future ownership of Transnet, the Legal Succession Act (section 32) provides that Transnet shall be entitled to divide its activities into business units, incorporate such business units as companies and transfer assets, liabilities and obligations from such business units to their successor companies; as consideration for the transfer of assets to these companies, Transnet shall acquire fully paid-up shares in the former. South African Airways (Pty) Ltd. is the first and, thus far, only (wholly owned) subsidiary of Transnet whereas Spoornet and Metrorail are business units of Transnet. Such a transaction will be subject to approval with of the Minister in accordance with the PFMA.

It may be noted that sections 33 and 35 empower the relevant registrar of deeds to give effect to transfers contemplated above and to exempt Transnet or its subsidiaries in respect of the payment charges and taxes relevant to such transfers. Spoornet has indicated that Transnet holds title to most of the right of way over which its network runs; however, there are exceptions. It is, however, assumed that public servitudes of right of way have been registered or established over time, through prescription, against all the land not owned by Transnet. It is evident that, should Spoornet be corporatised pursuant to section 32 of the Legal Succession Act, it will take over the asset profile related to its business on the same basis, and with similar constraints as Transnet took transfer from SATS. As the purpose of this assignment is not to prepare Spoornet for corporatisation and privatisation, this matter is not discussed further in this report. However, should Transnet's restructuring steer in that direction, Transnet's legal rights in respect of Spoornet's right of way will have to be determined.

It has already been established that, as business units of Transnet, Spoornet and Metrorail are subject to the overall corporate direction of the Transnet Board of Directors. All communication with the Minister of Public Enterprises as the shareholder of Transnet is conducted via the Chairman of the Board. The Shareholder's Compact reflects agreement between the Minister and Transnet on arrangements for the appointment of the Directors of subsidiaries. The Transnet Board appoints the Chairman and non-executive Directors of Spoornet and Metrorail subject to approval by the Minister and in the case of the non-executive Directors in consultation with the Board of the subsidiary (Spoornet / Metrorail). Executive Directors of the subsidiaries are appointed by the subsidiary Boards subject to approval of the Chairman of the Transnet Board and, if required by him/her, the Minister.

It is evident that, by requiring the Transnet Board to conclude shareholder's compacts with its subsidiaries, the main Compact between the Minister and the Transnet Board contemplates a filtering though of the spirit, governance arrangements and expectations to all the business activities of the corporation. It could, as yet, not been established whether shareholder's

compacts have been concluded with Spoornet and Metrorail. It may be noted that vague, conflicting and limited expressions of expectation in the main Shareholder’s Compact are bound to filter through to subsidiary level and may place subsidiaries in a precarious position considering their institutional distance from the Minister as the principal shareholder. Whilst the corporate structure dictates that Transnet should be the link with the shareholder, the value of the shareholder compacts, at different levels, in improving communication on precise expectations and constraints should not be underestimated.

Transnet’s Common Carrier/ Public Service Obligations

Although common carrier and/or public service obligations in the railway sector are not unique to state-owned railway operators, the manner it applies to Transnet is directly derived from its shareholding. Pursuant to section 17 of the Legal Succession Act, the Minister may direct Transnet, in writing, to, within a reasonable period, desist from actions contrary to the strategic or economic interest of the Republic. By way of example, should Transnet, trading as Spoornet, decide to discontinue certain services, the Minister may direct Transnet to continue the provision of such services. Note that, should Transnet consider a significant cessation of business activity, it has to obtain prior approval from the Minister (PFMA). It may also be noted that the State President is mandated by section 36 of the Act, to repeal section 17, presumably this will be prompted by privatisation of Transnet.

Potential negative impact of intervention by the Minister pursuant to section 17 is mitigated through arrangements (section 15 of the Legal Succession Act) for Transnet to provide services that are in the public interest on a contractual basis. The prescribed procurement procedure allows for Transnet to define the technical and financial basis on which the negotiations with the SARCC and transport authorities are undertaken. This procedure is different to the procedure applied by transport authorities in the procurement of subsidized road passenger (bus) services; pursuant to the NLTTA, transport authorities determine the service levels and price parameters in advance and present these parameters for open bidding to all interested operators.

The Act only contemplates the SARCC or a transport authority to be contracting parties to such an agreement with Transnet. The definition of a “transport authority” in the Legal Succession Act includes any Department of State (e.g. Department of Transport) or a local government body designated by the Minister of Transport as such by notice in the *Gazette*; no transport authority has, as yet, been designated by the Minister for the purpose of section 15.

“Services” are defined as:

- making available a harbour works, railway line, pipeline, building, structure or movable property for the use of the SARCC or a transport authority;
- the construction, maintenance or operation of a harbour works, railway line, pipeline, building or structure;
- acquisition of movable or immovable assets; and
- provision of any other service that forms part of the business of Transnet.

In view of the definition of “services” it may be concluded that the DOT or a local authority may procure both rail freight and passenger services from Transnet.

The NLTTA (enacted after the Legal Succession Act in 2000) also introduces the concept of a transport authority. A transport authority in terms of the NLTTA comprises a municipality or two or more municipalities with whom the MEC of the province has concluded an agreement to establish a transport area and authority. A transport authority or municipality in terms of the NLTTA is, however, expressly to procure passenger services and not freight services. Moreover, the national government’s sphere of competence in respect of rail transport would, probably, dictate that, should a policy decision be taken to procure certain freight services pursuant to section 15, the appropriate transport authority would be the National department of Transport. Note that the same negotiation procedure as applies to the procurement of passenger services between Transnet and SARCC will be relevant in the event that freight services are to be procured.

Pursuant to section 15, the SARCC has concluded two agreements with Transnet. The first is an ***Agreement entered into between the SARCC and Transnet Ltd (trading as Metrorail)***. This agreement is essentially a negotiated service level agreement, with services and levels of services determined on a regional basis. A notable feature of the agreement is the fluidity in determination of services, service levels and resulting compensation; this is probably due to the fact that SARCC receives its funding via the Department of Transport’s annual appropriation budget and due to pressure on input costs on the part of Metrorail. Since the agreement was introduced in respect of the operations of a going concern, the input costs of Metrorail may represent elements of historical and overall network cost imbalances, and in the absence of a benchmarking zero base, may compromise “value for money” performance monitoring. The second is an ***Agreement for the Use of Assets and Related Services***, concluded between Transnet, trading as Spoornet, and the SARCC. This is a typical access and use agreement. In respect of the mutual use of railway network assets it may be noted that the basis for determining access charges or price is as follows.

- variable cost (restricted to maintenance cost for mutual compensation). The level of variable cost (per driver) taking into account best practices to be applied reciprocally; plus
- capital cost calculated at a percentage of book value and will applicable drivers to be agreed upon; and
- when new capital is introduced by one Party having a cost impact on the other, will require negotiations on allocation of capital cost between the Parties.

For the exclusive use of the railway network of the other Party compensation is paid on a calculated actual cost basis. The total actual cost represents the total cost of the asset used accumulated in a cost centre. In the event that the asset forms part of a bigger asset or group of assets whose actual costs are accumulated in one cost centre, the cost of the specific asset shall be proportioned on a work-performed basis.

Conclusions

The following conclusions in respect of the discussion on Transnet may be highlighted:

- Arrangements between Transnet and the Minister of Public Enterprises regarding communication channels, places Spoornet at a distance from the shareholder and his/her expression of expectations.
- The Shareholder's Compact is an important and potentially valuable instrument through which shareholder expectation may be expressed and performance monitored. The shortcomings in alignment of expectations and performance measurement criteria, vagueness and potentially conflicting expectations, however, compromise the value of the Shareholder's Compact to be effective in also influencing shareholder compacts between Transnet and its subsidiaries (business units).
- The Corporate Plan may arrest some of the shortcomings of the Shareholder Compact but it should be more effectively aligned with the latter.
- Although the Shareholder's Compact between Transnet and Spoornet and Metrorail was not available, this compact may, pursuant to requirements set in the main Compact between the Minister and Transnet, set out specific and detailed requirements such as cost-accounting separation between infrastructure and operations that would support more a transparent and actual cost basis for PSO obligations, access charging and other non-operational subsidised costs. Furthermore, targets and parameters for non-competitive negotiated access may be set should government decide to do express such an expectation.
- Commercial freedom of Transnet may be compromised by Government intervention and expectations but this may be mitigated through contracts for services provided in the public interest. Such services may include both rail and freight.
- SARCC may only contract in respect of passenger services and local authorities may contract on both freight and passengers but the expectation, based on national government competence, national policy and the spirit of the NLTTA, is that the role of local authorities will be limited to passengers.
- The process through which Transnet contracts with SARCC and/or transport authorities is informed by and negotiated on the basis of technical and financial definition provided by Transnet. This is different to the procedure followed by transport authorities for the procurement of subsidized road (bus) passenger services in terms of the NLTTA where the former first determines the technical and financial parameters and then invites operators to respond with bids.
- In terms of the Legal Succession Act, the Department of Transport (or any other Department) may contract for the provision of freight services in the public interest.

South African Rail Commuter Corporation (SARCC)

Section 22 of the Legal Succession Act establishes the SARCC as a legal person⁴⁹. The SARCC has two objectives and business mandates. Its primary objective and business mandate is to ensure that, at the request of the Department of Transport or a transport authority (Legal Succession Act definition), rail commuter services are provided in the public interest. The secondary mandate is to exploit the assets transferred to it in terms of the Legal Succession Act. The Minister responsible for SARCC is the Minister of Transport and may issue directives to SARCC clarifying, elaborating and giving to content to its objectives.

A Board of Control, comprising 11 members who appointed and dismissed by the Minister, manages the affairs of SARCC; the Board is supported by a full-time secretariat in the execution of its functions. Four of the members serve *ex officio* and represent the Departments of Transport, Finance and State Expenditure as well as the Association of Regional Services Councils; three of the other seven appointees must have expertise and experience in the management of a private sector enterprise. The Act lists a number of specific powers the SARCC may execute in respect of the achievement of its objectives:

- conclusion of contracts, including (but not limited to) contracts with Transnet for the construction, maintenance and operation of commuter rail services;
- acquire or alienate movable or immovable property and rights therein, e.g. railway assets;
- borrow, lend or invest money;
- conclude partnership contracts and participate in joint ventures;
- form companies or acquire interests therein and finance them and also transfer any portion of its business, assets and liabilities to such companies.

SARCC is defined as a Schedule 3B, National Government Enterprise in the PFMA and is as such subject to the provisions of the Act in respect of public entities and similar controls and arrangements as are relevant to Transnet. An important difference relates to budgetary arrangements. SARCC must submit a budget of estimated revenue and expenditure, to the accounting officer of the Department of Transport (DOT) at least six (6) months before the start of the financial year of the Department; the accounting officer of DOT may make recommendations to the Minister regarding the approval or amendment of the budget. Transnet may not budget for a deficit or accumulate surpluses unless prior written approval has been obtained from the National Treasury.

It should be noted that requirements of the PFMA in respect of a shareholder's compact and restrictions to certain transactions also apply to the SARCC and the Minister of Transport.

Conclusion

SARCC's mandate is limited to commuter services and, in effect, serves as a vehicle for the National Department of Transport to procure passenger services. The Legal Succession Act does not restrict SARCC to only procure services from Transnet. However, the Act is silent on procedures to be followed in respect of procurement from other operators.

⁴⁹ SARCC has the capacity and powers of a natural person of full capacity in so far as a juristic person is capable or exercising such powers. SARCC is not a company incorporated in terms of the Companies Act.

National Railway Safety Regulator

The National Railway Safety Regulator (the Regulator) is established in terms of section 4 of the *National Railway Safety Regulator Act* (NRSRA), No. 16 of 2002, as a juristic person with the primary objective of ensuring and promotion of safe railway operations. The Regulator comprises a Board of Directors, Chief Executive Officer and such other staff as may be required. The Minister of Transport appoints the members of the Board consisting of no less seven (7) and no more than thirteen (13) members. Members of the Board must have wide experience and demonstrate acumen in one or more of the following:

- Management of railways;
- Safety in transportation;
- Corporate management;
- Commerce, finance, legal and economic matters;
- Transportation of dangerous goods; and
- Special knowledge that may be of value to the functions of the Regulator.

The Regulator exercises its regulatory functions through the issuing of permits, inspections and safety audit and compliance directives. In addition, the Board must also, upon directive from the Minister, investigate railway occurrences⁵⁰.

A network operator, train operator or station operator may not undertake railway operations or a component of railway operations without a safety permit. This is effectively a market entry requirement. This requirement applies to all operators in the categories listed and will include Transnet and SARCC. It should be noted that the Act provides the Minister to, by notice in the *Gazette*, expand the list of categories of persons requiring a permit.

Applications for permits are considered on the basis of a safety management plan submitted by the operator, any inspections undertaken by the Regulator and any written objections to an application. It is within the discretion of the Regulator to conduct an inspection in respect of a license application and to determine whether an application must be published for comment. A decision to grant or refuse a permit is taken by the CEO. In respect of safety inspections and audits, any person whose rights may be adversely affected by a decision of a safety inspector may appeal to the CEO. Any person any person whose rights may be adversely affected by the decision of the CEO may appeal to the Board.

It may be noted that the Minister is mandated to issue regulations on a wide-spectrum of safety management systems and standards in respect of rolling stock, infrastructure and operations. This mandate is limited to the extent that the regulations are relevant to the regulation of railway safety and not with a view to economic regulation although the objectives may coincide.

Further notable features of the Act include a requirement upon the Regulator to formally recognise a representative association of operators and to involve such an association in the development of standards.

⁵⁰ Defined as accident or incident prescribed as such and may include criminal activity.

Conclusion

The safety permit requirement in the NRSRA is the only specific market-entry instrument in current legislation and the Regulator's mandate has a distinct safety focus. The Act relies on the Minister's regulation making powers to develop a wide-spectrum of standards to serve as basis for consideration of applications, monitoring and enforcement. Although these regulations may address technical matters with an economic regulatory impact, this will be merely coincidental as the mandate for the regulations is limited to safety considerations.

Authorities in Terms of NLTTA

As noted above, the NLTTA, was enacted in 2000 to give effect to the national policy regarding the first phases of the transformation and restructuring of the land transport (road and rail) system. As the title suggests, the process is not complete and, in fact, in respect of rail transport not yet fully enabled.

The Act provides for co-operative governance between the national and provincial spheres of government in respect of public transport and this regard requires the preparation of a number of interdependent land transport plans by national, provincial and local government⁵¹. In broad terms, the national government sphere (Minister and Department of Transport) is responsible for presenting guidance through the development of the National Land Transport Strategic Framework and to, through monitoring, ensure harmony between the Provincial Land Transport Frameworks and service delivery. Within provinces the (Members of Executive Committees responsible for transport) MECs are responsible for coordination of planning functions between designated transport authorities and municipalities (current transport record, operating licences strategy, rationalisation plan, public transport plan and integrated transport plan). It may be noted the Act requires all transport plans *inter alia* to address freight movements. The provisions of the Act are however, largely focussed at public transport defined as conveyance of passengers by road and rail. Although the Act provides for the regulation of road passenger transport, it addresses rail passenger transport mainly from a procurement of subsidised rail services perspective. Essentially, the spirit of the Act is to devolve planning, regulation and procurement functions for public transport to lower levels of government and, in particular, transport authorities and other local authorities.

The Act confirms that rail transport is a national government competence but also contemplates that the function may be devolved to another sphere of government (section 28). All plans involving components of rail commuter services must be submitted for approval to the Minister of Transport until such time as the function is devolved from the national government to another sphere of government. Moreover, the Minister may set maximum and minimum fares for subsidised passenger transport by rail until such time as the function has been devolved to another sphere of government.

Transport authorities are a single municipality or two or more municipalities working together as a transport authority and are established by way of an agreement between the relevant provincial MEC (sections 10-12). Transport authorities have planning responsibilities and public transport procurement authority within their transport area. As such they have responsibility for determining demand for public transport and to procure road and rail services to satisfy such

⁵¹ National Land Transport Strategic Framework, Provincial Land Transport Framework, Current Public Transport Record, Operating Licenses Strategy, Rationalisation Plan, Public Transport Plan, Integrated Transport Plan.

demand; essentially the rationale for transport authorities is to improve service delivery. The Act also allows for a transport authority to be established for a transport area that covers jurisdiction of more than one province. Where a transport authority has not been established, municipalities and core cities execute the planning and procurement functions. Transport authorities are financed by funds made available by the Minister of Transport, the relevant MEC and the participating municipalities. It may be worth noting that the possibility of devolving SARCC's rail commuter functions to transport authorities has been a point of discussion in the restructuring debate.

Regarding procurement, the Act provides for both road and rail services to be procured by a contracting authority; contracting authorities identified are the Department of Transport, provincial department, transport authority, designated municipality or core city. These contracting authorities may conclude a concession agreement with a public transport operator for the provision of railway passenger services in accordance with a public transport plan and at a specified price and service level. Note that the contracting authorities may conclude a concession agreement with any operator, not only Transnet. Also note that the definition of a concession agreement only refers to public transport, i.e. passenger services.

Conclusion

The NLTTA, in its current form, does not provide a platform for the economic regulation of rail freight transport. It does, however, recognise the concept of railway passenger concession agreement and mandates procurement from any operator by contracting authorities subject to the demand having been established in a public transport plan. The Act also provides an enabling framework for the possible devolution of procurement of subsidised railway passenger services to transport authorities.

Competition Authorities

The Competition Act provides for the establishment of a Competition Commission, a Competition Tribunal and a Competition Appeal Court and prohibits restrictive horizontal and vertical practices and the abuse of a dominant position. In view of the current railway market definition, restrictive horizontal and vertical practices are less relevant to the regulation of the railway sector as is abuse of dominant position. Thus, the discussion in this report is limited to the latter issue (see discussion below on Economic regulatory issues pertinent to the railway sector). Note that the role of Competition authorities is not to regulate market entry but rather behaviour in the market.

The remainder of the discussion on the role of the competition authorities is presented with reference to the three institutions, sanctions and enforcement.

Competition Commission

The Competition Commission is established as an independent juristic person subject only to the Constitution and the Act (sections 3, 19 and 20). The Competition Commission has dual roles, namely investigative and advocacy roles.

Its primary functions are to investigate and evaluate suspected contraventions of the Act, as well as applications for exemptions, to negotiate and conclude consent orders, to investigate and evaluate proposed mergers, to refer matters to and appear before the Competition Tribunal, to review legislation and to publish guidelines.

The Commission may investigate any suspected contravention of the Act either on its own initiative or upon receiving a complaint from an interested person. If an investigation reveals that a contravention has taken place, the Commission must refer the matter to the Competition Tribunal for determination. However, if the investigation fails to establish any contravention, the Commission must issue a notice of non-referral to the complainant. A complainant who is not satisfied with a notice of non-referral may refer the matter directly to the Competition Tribunal for a determination. If, during an investigation into a suspected contravention, the Commission and the firm being investigated can settle the matter, the Competition Tribunal may confirm the settlement agreement as a consent order.

Competition Tribunal

The Competition Tribunal is the adjudicative arm of the competition authority with jurisdiction throughout South Africa. It is responsible for adjudicating contraventions of the Act, imposing remedies, granting exemptions, and authorizing or prohibiting mergers. It must conduct a hearing into every matter referred to it, in public and in an inquisitorial manner. The Competition Commission, the complainant, the firm whose conduct forms the basis of the hearing and any other interested person may participate in such hearing. At the end, the Tribunal must make an order and impose appropriate remedies. A decision of the Tribunal is subject to appeal or review by the Competition Appeal Court.

Competition Appeal Court

The Competition Appeal Court has a status similar to that of a High Court but with jurisdiction throughout South Africa. It is not a court of first instance and will consider only appeals from or review decisions of the Competition Tribunal. A decision of the Competition Appeal Court is not subject to any further right of appeal.

Sanctions and Enforcement

Wide enforcement and punitive powers are conferred on the Competition Tribunal. The Tribunal can issue interdicts and impose administrative fines, and may even order divestiture in the case of prohibited mergers and abuse of a dominant position. The Tribunal may issue both interim and final interdicts in respect of any prohibited practice. It may order a party to supply or distribute goods or services to another party on terms reasonably required to end the prohibited practice, and may even order access to an essential facility on reasonable terms. The Tribunal may also declare the conduct of a firm to be a prohibited practice and declare the whole or any part of an agreement to be void. If a firm contrives any of the specific prohibitions, repeatedly contravenes any of the general prohibitions, or fails to comply with the merger control provisions, the Tribunal may impose administrative fines not exceeding 10 per cent of a firm's annual turnover in South Africa during the firm's preceding financial year.

The Competition Tribunal and the Competition Appeal Court share exclusive jurisdiction in the interpretation and application of the Act, but they have no jurisdiction to award damages arising out of a prohibited practice. Although the civil courts retain the exclusive jurisdiction to award damages arising out of anti-competitive conduct, they may not consider any issue concerning conduct prohibited in terms of the Act. A person who has suffered damages as a result of a prohibited practice may commence action in a civil court only once the Competition Tribunal or Competition Appeal Court has found that the conduct constituting the basis for the action is a prohibited practice under the Act.

A prohibited agreement is not void unless it has been declared so by the Competition Tribunal or the Competition Appeal Court. A party wishing to enforce a contract must approach a civil court. If the defendant raises the defence that the agreement is a prohibited practice under the Act, the civil court may not consider the issue of its merits but must refer it to the Tribunal for a determination. When the Tribunal has determined the status and validity of the agreement, the civil court must proceed to apply it and make an order on the enforceability of the contract.

A.3 Economic Regulatory Issues

Market Entry

Existing legislation was tested with reference to barriers to market entry as well as the potential for competition between operators.

The only specific market entry requirement is a safety permit issued pursuant to the NRSRA (section 22). Furthermore, indirect economic regulatory influence provided for in existing legislation and agreements is focussed more on the relationship between Transnet and Government entities.

Although economic regulatory barriers to entry in the railway sector do not exist, no provision is made to facilitate or enable investment in the railway sector by other operators other than Transnet. Also, no regulatory instrument exists to consider the financial, technical (other than safety) and operational capability of railway operators, nor do provisions exist in respect of a consideration of competition between operators in the sector.

It may be noted that, other than the PFMA (section 54) requirement that Transnet requires approval by the Minister of Public Enterprises for certain significant transactions, there are no evident legal barriers to Transnet allowing other railway operators or users access to the Spoornet infrastructure at own initiative and discretion, i.e. on a negotiated basis. Conversely, there is also no mandate that Transnet must provide such access.

A notable hurdle to a potential investor to the railway sector will be the ability to access existing network (see discussion below) or to obtain land to construct a new network. Although access arrangements have been concluded between Transnet and SARCC, it should be noted that they are not competitors and both obliged by statute to contract in this regard. The availability of land for the construction of new railway network is currently facilitated by government entities procuring the construction of network and provision of services. An example in point is the Gautrain project procured by Gauteng independent from Transnet. The Gautrain project is being procured through the application of National Treasury Rules and the province is deploying its expropriation mandate to assist the new operator with the availability of land. It may also be noted that the Gautrain project provides for a complete new network and will only rely on the leasing of station facilities from Transnet/ SARCC. Note also that both Transnet and SARCC are empowered to expropriate land for the purpose of their business activities (Schedule 1 of the Legal Succession Act).

Public sector entities with the express authority to procure railway network and services are:

- SARCC (Legal Succession Act for commuter services);
- Departments of State (Legal Succession Act for passengers and freight).

All these authorities may procure services from Transnet or any other operator. Thus potential for the introduction of new operators on SARCC network or new network, independent from Transnet does exist. Also, it may be noted that there are no legal barriers to Transnet issuing a concession to operate certain networks on a long-term basis.

Thus, although potential exists for introducing operators other than Transnet, limitations do exist in respect of regulating access (see discussion below on abuse of dominance), introducing competition and regulating financial, technical and operational capability of operators.

Access

It has been established (market entry discussion) that existing legislation presents no barrier to Transnet or SARCC providing access to other railway operators, be they public or private operators. In fact, the secondary objective of the SARCC is to exploit the commercial value of its assets, including its network. The access agreement between Transnet and SARCC on the use of assets serves as an example. However, there is no obligation upon Transnet or SARCC to provide access to other operators other than the provisions of the Competition Act.

The Competition Act (89 of 1998) does provide for the regulation of access to essential facilities where access is denied by a dominant firm (see discussion below). However, no sector-specific legislation provides for rules of access defining reasonable rights of access, parameters for access charging, conditions of access and regulatory oversight in the event that access is denied.

Pricing

Freight rates and passenger fares are not expressly regulated as a consideration of market entry.

The fares of subsidised passenger services are regulated to some extent. The Minister of Transport may regulate the fares of subsidised passenger services (minimum and maximum). In addition, fares are regulated indirectly through the negotiated contracts between SARCC and Transnet and may be regulated in the same way by transport and local authorities pursuant to a concession agreement.

Freight rates are not regulated but may also be regulated where a contract for the provision of freight services in the public interest is concluded with Transnet.

In general, it may be noted that the Minister of Public Enterprises may also indirectly influence both freight rates and passenger fares through an intervention pursuant to section 17 of the Legal Succession Act.

No sector specific restrictions in respect of excessive pricing, price discrimination between customers or confidential shipping contracts exist. These issues are, however, addressed with regard to abuse of dominance in the Competition Act (see discussion below).

Service Levels

Service levels for both freight and passenger services are generally determined on a contractual basis and not regulated independently.

Again the Legal Succession Act, section 17, intervention by the Minister of Public Enterprises as well as his performance measurement mandate as shareholder of Transnet, may be deployed to influence services levels.

Abuse of Dominance

Pursuant to section 7 of the Competition Act a firm is dominant if:

- it has a market share of at least 45 per cent;
- it has a market share between 35 and 45 per cent, unless it can establish that it does not have market power;
- it has a market share of less than 35 per cent, but has market power (it is implicit that the burden of proof lies with the competition authorities, not the firm).

The Act prohibits the abuse of a dominant position. It is not the existence of a dominant position as such that is prohibited but its abuse. So the prohibitions are based on a combination of both the size or structure of the offending firm as well as behaviour.

Determining the competitive implications of any conduct depends on market context and size. The Act, however, does not define “market” neither does it provide any pointers or criteria to assist towards such a definition. It is presumed that it will be up to the Competition Commission to define the market in a particular sector. The definition of market generally has two components, namely the product and geographic reach and the extent to which behaviour manifests anti-competitive behaviour will be determined on a case-by-case basis.

Notable practices for the purposes that are prohibited outright are:

- charging of an excessive price to the detriment of consumers; and
- refusal to give a competitor access to an essential facility when it is economically feasible to do so.

An essential facility is defined as an infrastructure or resource that cannot reasonably be duplicated, and without which competitors cannot reasonably provide goods or services to their customers. This definition is wide enough to cover both state and privately owned facilities and networks.

Price discrimination by a dominant firm as the seller of goods or services is prohibited if:

- it is likely to have the effect of substantially preventing or lessening competition;
- it relates to the sale, in equivalent transactions of like grade and quality to different customers and it involves discriminating between those purchasers in terms of:
 - the price charged for the goods or services;
 - any discount, allowance rebate or credit give or allowed in relation to the supply of the goods or services;
 - the provision of services in respect of the goods and services; or
 - Payment for services provided in respect of the goods or services.

A dominant firm may rebut a presumption of dominance if it can prove that the differential treatment:

- makes only reasonable allowance for differences in cost or likely cost of manufacture, distribution, sale, promotion or delivery resulting from the differing prices to which, or quantities in which, goods or services are supplied to different purchasers;
- is constituted by doing acts in good faith to meet price or benefit offered by a competitor; or
- is in response to changing conditions affecting the market for the goods or services concerned, including:
 - any action in response to the actual or imminent deterioration of perishable goods;
 - any action in response to the obsolescence of goods;
 - a sale pursuant to a liquidation or sequestration procedure; or
 - a sale in good faith in discontinuance of business in the goods or services.

The Act also prohibits the following exclusionary acts:

- Requiring or inducing a supplier or customer to not deal with a competitor;
- Refusing to supply scarce goods to a competitor when supplying those goods is economically feasible;
- Selling goods or services on condition that the buyer purchases separate goods or services unrelated to the object of a contract, or forcing a buyer to accept a condition unrelated to the object of contract;
- Selling goods or services below their marginal or average variable cost; or
- Buying-up scarce supply of intermediate goods or resources required by a competitor.

A dominant firm may escape the adverse consequences of such conduct if it can show technological, efficiency, or other competitive gains that outweigh the anti-competitive effect of doing so. The relevance of the exclusionary acts prohibition may not be as relevant to the realities of the railway sector but may become more relevant in the event of on line competition.

It is evident that the Competition Act may address some of the economic regulatory issues relevant to the railway sector. However, there are limitations to a reliance on the provisions of the Competition Act for the purpose of the economic regulation of the railway sector. In particular arrangements regarding access are critical elements of market entry, especially in realizing a policy objective of introducing competition between operators. This reality has been recognized in other sectors where market liberalization is complex and sector-specific regulators have been established with concurrent jurisdiction to regulate aspects such as access and price discrimination from a sector reform perspective.

Conclusion

The following conclusions may be drawn in respect of what is regulated in the rail sector and what is not:

- Market entry is regulated in respect of safety requirements;
- Financial and operational competence is not regulated;
- Although the Competition Act regulates access to essential facilities, conditions of access and access charging is not regulated, except where there is excessive pricing;
- Transnet may, at own discretion, negotiate access;
- Land expropriation is facilitated through public procurement;
- Prices and service levels are, generally, not regulated and determined on a contractual basis. Excessive pricing by a dominant firm may be regulated in terms of the Competition Act;
- The Competition Authorities (cross-sector regulators) are currently the only independent regulatory entities empowered to carry out economic regulation in the railway sector, whilst the mandate of the National Railway Safety Regulator is limited to safety considerations.

Appendix B: Lessons from Other Countries and Sectors

B.1 Introduction

In deciding what structure and method of regulation is most appropriate for the railways in South Africa, experience with railways in other countries and with other natural monopolies in South Africa should be taken into account. In this way the mistakes made elsewhere can be avoided and best practice can be copied.

In deciding which railways to review, we have been influenced by whether the characteristics of the railways in each country have similarities with those in South Africa (in terms of market characteristics) and whether reforms have been made from which lessons can be drawn. We begin by reviewing railways in North America (US and Canada), where railways carry mainly long distance freight profitably and Europe (Britain, Germany and Sweden), where subsidised railways carry mainly passengers (except in Sweden where freight is also important) but relevant reforms have been made. We have included in this review the related issue of third party access.

We then go on to consider experience in other sectors in South Africa in which there are natural monopolies and for which regulators have been established: communications, energy and transport.

B.2 North American Railways

Inappropriate, intrusive and unbalanced rail freight regulation, combined with rigid labour work rules and a labour cost structure which was not sustainable, bankrupted parts of the railway system in North America in the 1970s. Deregulation led to a turnaround which provides important lessons for South Africa. As long as freight charges were set by law or regulatory authority, labour and management could avoid facing the necessity to improve efficiency to meet market demands.

United States⁵²

Up to 1980, the rail freight industry in the US had suffered from the effects of intrusive, close and adverse regulatory interference for nearly 100 years. The Interstate Commerce Commission (ICC) had exercised its power to intervene on freight rail tariffs, originally to limit rate increases, but later to prevent railroads from undercutting competing modes, and this led to a system of politically imposed distortions in the rail freight rate structure that harmed the competitive position of the railways and prevented them from being managed as commercial businesses in full competition with trucks and barges. The practical effect by the 1970's was to keep railroads from lowering prices and changing services to meet market demands.

Beginning in the early 1950s, when wartime production had been re-converted to peacetime purposes, car ownership grew, truck fleets increased, highways were built at public expense, and the civil aviation industry began to develop. By the end of the 1960s, as a result of competition from other modes, the privately owned rail network⁵³ was nearing a financial collapse. In 1971,

⁵² This section is based on an upcoming report by OECD, *Regulatory Reform of Russian Railway*, to which the author of this report was a contributor.

⁵³ Intercity railroads – freight and passenger – have mostly been privately owned in the U.S. In Canada, the Canadian Pacific has always been private, but the Canadian National was publicly owned until 1996 when it was privatized.

the U.S. Government created Amtrak, the nationally owned intercity passenger rail carrier, in order to end the cross subsidy from freight to passenger services⁵⁴ and this removed a burden on the rail freight industry. However, the industry continued to have problems.

By the late 1970s, the regulatory system for trucks, for rail and for airlines had also become so obviously inefficient and expensive that the US Congress passed, in rapid succession, deregulatory legislation for airlines (1978), then railways (1981 – the so called “Staggers Act”), and then trucks (1982).

The current position of US railways is summarised below:

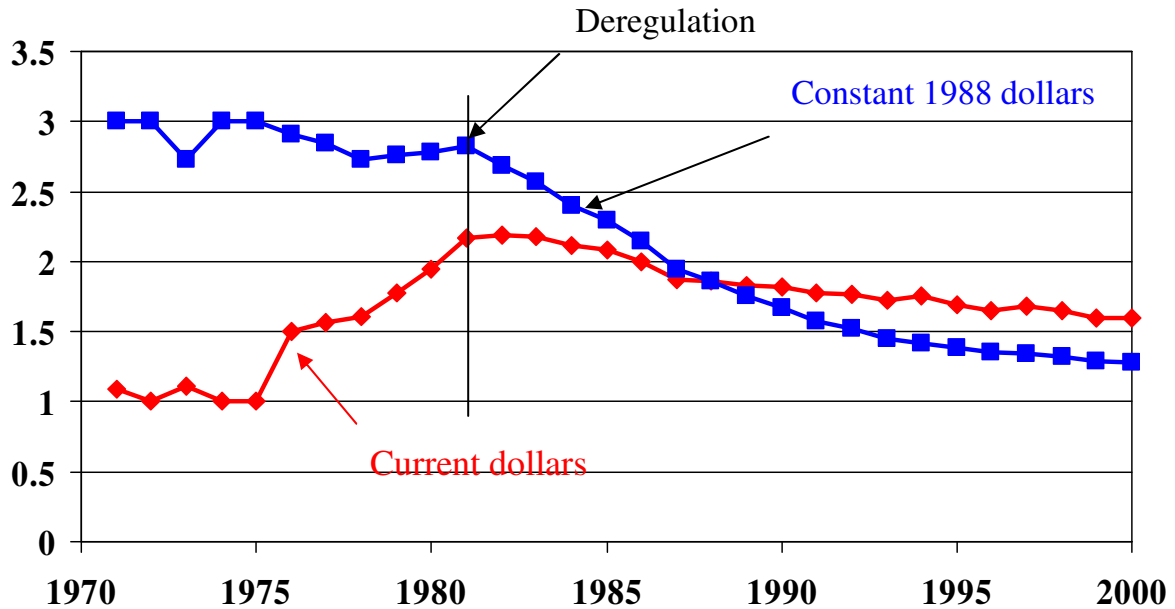
Role of railways	Structure	Ownership	Financing	Regulation
Freight				
Provider of commercial not social services. Some uneconomic lines therefore closed.	Class I railways have been consolidated and branches sold to independent (short) lines. No specialisation by commodity – CSX has separate inter-modal business	Mainly privately owned.	Each line of business self – financing	Minimal regulation
Passengers				
Essentially provider of social services. Highly subsidised.	Intercity run by Federal agency (Amtrak), which pays freight carriers for use of tracks. Commuter railways under States or municipalities.	Owned by public sector	Owner provides capital and operating subsidies. Cost recovery low.	Highly regulated

The results of deregulation have been highly beneficial from the point of view of shippers and the railways. Freed from regulation, rail freight rates, the actual cost per ton km, fell significantly both in current and real terms (see Figure 1 below), the rail market share stabilized,

⁵⁴ When Amtrak was created, intercity rail passenger amounted to less than 1 percent of public passenger-km, but was absorbing over 25 percent of the total net income from freight operations of the freight railroads, leaving them with inadequate resources for their own financial needs. This is an experience with direct relevance to South Africa.

and productivity of labour and assets increased to such an extent rail earnings increased.

Figure 1: US Rail Freight Rates (US cents/ton-km)



Source: AAR Handbooks of Railway Facts

The success of deregulation cannot entirely be attributed to the Staggers Act alone but also the way it was implemented. The appointment to the ICC of several individuals of high intellectual calibre and practical experience meant that key decisions affecting the establishment of short lines by sale of branches were made in such a way that the new operator started without rigid labour contracts. This in turn provided a framework for real negotiation between labour and management.

The greatest driver of the decrease in actual rail freight charges and the increase in volume is believed to be the advent of contract rates which were prohibited prior to deregulation but which, today, appear to apply to more than 60 percent of all rail tonnage. Contract rate agreements permitted railways and shippers to invest in specialized facilities (rolling stock, loading and unloading facilities) and to commit to ship stable volumes: this, in turn, rapidly increased efficiency. These contract rates, being voluntary agreements between railway and shipper, are generally not public and not subject to regulation. Increasingly, large railroads also post public quotations by geographic location for use by smaller customers where detailed contract negotiations are not justified.

The presumption behind the U.S. rail freight regulatory system is that in most markets, adequate competition exists, either from trucks, barges, other railways, or competing sources; rail freight rate regulation is therefore normally deemed to be unnecessary. So long as the total earnings of a railway do not exceed the cost of capital for the railway, and so long as its total revenues from

freight operations do not exceed a stated ratio (180 percent)⁵⁵ of its “variable costs”, the presumption of adequate competition is difficult for a shipper to challenge.

When a shipper believes that a quoted rail rate may reflect abuse of market power by the railway, the shipper may seek intervention by the Surface Transportation Board (STB, formerly the ICC). The shipper must demonstrate that the railway *does* have market power *and* that the proposed rail tariff exceeds a ratio of 180 percent of its variable cost, *or* that the proposed tariff exceeds its “stand alone cost” (the cost of an efficient railway providing service only to the shipper in question). If these tests are met, then the STB *may* prescribe a tariff that it considers reasonable.⁵⁶ This does not apply to voluntarily negotiated contract tariffs that are, for the most part, unregulated and confidential.

As a result of this approach, virtually no rail freight traffic moves under prescribed tariffs, and little or none moves under a simplified commodity tariff grouping. Instead, virtually every shipment is unique, with a rate agreement specific to the circumstances (contract rates, commodity, equipment type, railway, distance, competition, etc). The result is that the range of rates is quite broad, from US 1 cent/ton km for coal to US 7 cents/ton km for transport equipment although the ratio of revenue to long run variable costs is similar at slightly over one.⁵⁷

Access arrangements between railways are normally governed by written documents, most often formal contracts (interchange agreements, trackage rights agreements, agency agreements). These contracts are enforceable in Court, and normally, to avoid the cost of litigation, have arbitration provisions. However, they do not require regulatory intervention. Most access arrangements are therefore negotiated, though some are mandated in specific circumstances and for specific shippers. There are no truly open access requirements.

Access prices reflect these negotiations. They are usually based on simple arbitrary allocations, for example, on the basis of wagon-km. This simple average cost based pricing has the disadvantage of pricing off the less profitable traffic that could nevertheless make a contribution to fixed costs. On the other hand, if access charges were based on marginal costs, that would place the vertically integrated operator at a disadvantage. This dilemma would need to be considered in South Africa if open access were introduced.

Canada

Regulatory reform in Canada has been similar to that in the US, although it happened later and is less complete. Both major freight operators are vertically integrated and now privately owned.

Under the National Transport Act 1967, rates made more market responsive and subsidies replaced cross subsidies. Then the National Transport Act 1987 removed the requirement on operators to publish rates. However, it kept barriers to the abandonment of lines and the sale of lines was made difficult by labour transfer requirements. As a result, short lines were mainly limited to industrial railways.

⁵⁵ The 180% ceiling is an arbitrary figure set by Congress on the basis of data showing an average ratio of freight revenues to variable costs for the rail industry as a whole of 140%.

⁵⁶ In Canada, tariffs are negotiated between railway and shipper, and the regulatory authority can only intervene by choosing between the best and final offers of parties in dispute. In addition, shippers located on a line of one vertically integrated railway company but within 30 km of another have an automatic right for access to be provided to the second company’s line at a regulated rate. This competitive access provision has rarely been used in practice.

⁵⁷ Source: STB

Under the 1996 reforms, deregulation was introduced with the aim of reducing subsidy whilst maintaining the system. It made the creation of independent short lines easier and encouraged provinces and communities to intervene on proposed abandonment. As a result, many lines have been transferred to short lines companies and only a few abandoned. Effective marketing by short lines has since meant that traffic has increased.

National intercity passenger services are provided by Via Rail, a government-owned corporation, which contracts with the two major freight carriers. As in the US, intercity passenger transport is not commercially viable due to high car ownership, the low densities and distances which are too long for rail to compete with air.

B.3 European Union

The railways in the E.U. have a small freight market share (average 15%) and rail freight tariffs throughout the E.U. are therefore essentially unregulated. However, there are lessons to be learnt from countries where there has been vertical separation of infrastructure.

EU policy in network industries has been to separate infrastructure (normally a natural monopoly) from operations or service provision. The primary purpose of this is to create a single market within the EU with no discrimination against companies from other member states. This rationale does not of course apply to South Africa,

In reviewing the EU, we focus on Germany, where the railways have been restructured under a Holding Company, and Sweden and Britain, where the railways have been vertically separated under completely independent ownership. All three countries have open access for freight.

Germany

The approach to reform in Germany was systematic and long term. It began in 1994, when German Railways (DB) was established as a company with five Divisions:

- Network
- Freight
- Short distance passengers
- Long distance passengers
- Stations

In 1999, these Divisions were established as subsidiaries of a DB Holding Company. Open access was also introduced but entry was initially limited due to various obstacles, some allegedly erected by DB to keep out the competition. DB claims that it is not deliberately anti-competitive but, like other state railways, it has a long standing conservative engineering mentality, which can make it appear hostile to outside influence.

The retention of the incumbent state owned rail monopoly organization, after on track competition had been introduced, was a notable difference compared to Britain. The principle of a fair playing field for on track competition was not considered as important as the improvement in DB's financial and operational performance.

New rail freight and passenger operators have made inroads into DB's monopoly. However, new operators are taking an increasing share of the market and currently 18 rail freight and 26 rail

passenger companies operate on DB track and now account for 8.5% of trains operated on its network (*Deutsche Bahn*, 2004). However, DB *Regio* continues to compete hard for regional passenger contracts and is expected to retain well over 80% of its market over the next few years. DB *Reise und Touristik* remains dominant in the commercial intercity passenger as does DB Cargo in unit freight train markets. Rail freight carried by third parties reached 5.5 m tonne km in 2003 (having grown at about 50% a year over the period 2000-03). This is out of an overall market of 79.5 bn tonne km and represents a market share of 7%.

The Federal Railway Office (*Eisenbahn Bundesamt* or EBA), an authority of the Ministry of Transport, with 1300 staff and budget of US\$ 75 million, is responsible for:

1. Granting and revocation of licences to all railway undertakings operating in Germany
2. Ensuring non-discriminatory network access including arbitration if customers cannot agree charges with DB
3. Approval and technical supervision of roadway and rolling stock, and building inspection of installations (this is essentially a safety role)
4. Accident investigations
5. Railway land
6. Preparation of projects and implementation of funding agreements for Federal government.

Responsibilities 1 and 2 are economic regulatory roles, 3 and 4 safety regulatory ones and 5 and 6 are essentially strategic management roles such as those carried out by the SRA in Britain. The main advantage of all these responsibilities lying in one organisation is that a pool of scarce technical skills is available to work in all these areas. It also ensures co-ordinated and consistent decision making.

After 10 years, the reforms are beginning to achieve their intended effects as DB's freight business (Railion) has merged with those in several neighbouring countries and formed a joint venture with a major logistics company. Also open access operators are entering niche markets.

Britain

Rail reform in Britain has not been an overall success. Although traffic has increased since privatisation in 1996/7, train service performance remains poor and industry costs have escalated alarmingly.

The main options considered at privatisation were to:

- privatise the railways as a single unit;
- break it into separate companies based on regions;
- break it into separate companies based on its existing market 'sector' businesses (e.g. train load freight and intercity passenger);
- separate infrastructure from the operation of train services.

These break-up options all presented practical difficulties, particularly with respect to separating the profitable from the unprofitable elements of the business, targeting subsidy, creating

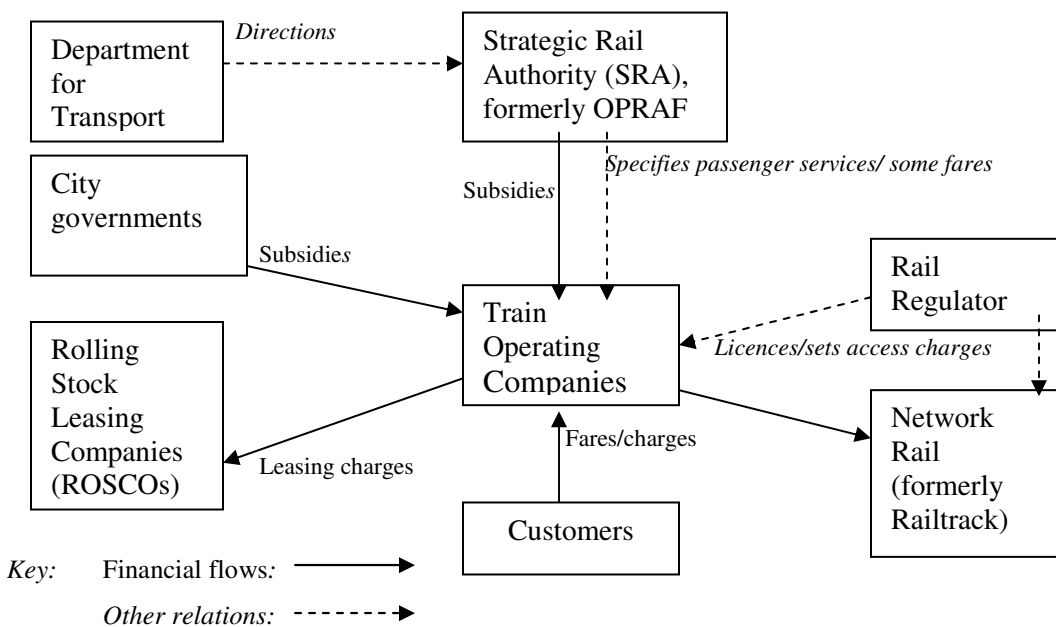
incentives for efficiency in investment and operational practices, and the need for competition within the industry. The separate infrastructure company option was chosen largely to provide for the possibility of competition and to comply with emerging EU policy. However, the original vision of competitive open access, that had influenced the choice of industry structure, was abandoned early on in order to protect the effective monopolies of franchised train companies and minimise subsidy requirements.

Rail reform in Britain was probably more radical than in any other industrialised country before or since. Yet it was carried out in a hurry and without adequate analysis. It is generally referred to as “privatisation”, although this word fails to convey the nature of the changes. In fact, although there was the widespread involvement of private interests, Britain’s rail system remained substantially under public control after privatisation and the degree of control has since increased with the formation of the Strategic Rail Authority (SRA) and the change in status of the infrastructure manager.⁵⁸ Right from the start, the reform was accompanied by the imposition of a relatively heavy regulatory burden.

The economic rationale for the reforms was provided by a 1992 White Paper entitled *New Opportunities for the Railway* in which the stated objectives of government were “to see better use made of the railways, greater responsiveness to the customer, a higher quality of service and better value for money (i.e. reduced government support).” Also safety standards had to be maintained. The Railways Act 1993 contained the necessary statutory provisions.

Privatisation involved the dismantling of the vertically integrated national railway operator (British Rail) and the creation of about 100 separate organisations linked to each other in a regulatory and contractual matrix. Some organisations (Railtrack and passenger franchises) were regulated whilst others (freight and rolling stock companies) competed with each other. The main elements of this structure are illustrated in Figure 2 below:

Figure 2: Structure and Relations within Privatised Rail Industry in Britain



⁵⁸ From a privately owned joint stock company (Railtrack) into a “not for profit” company, limited by guarantee (Network Rail, is financed entirely by debt, with the government providing a guarantee).

Managerial relationships within British Rail were therefore replaced by regulatory and contractual ones. The essential feature was the separation of infrastructure and operations, whereby a private company, Railtrack, became the regulated monopoly supplier of infrastructure services to a series of operators: the 25 passenger franchises were geographically separated and the three (now four) freight operators were focussed initially on different markets, but with the bulk traffic one carrying 90% of freight by tonnage.

Responsibility for regulating these new private sector companies was divided between:

- The Office of Passenger Rail Franchising (OPRAF), whose main responsibility was to set and monitor the conditions relating to the prices and quality of service offered by the passenger Train Operating Companies (TOCs) under franchise agreements – in 2001, OPRAF was replaced by the Strategic Rail Authority (SRA) with much wider duties
- The Rail Regulator, whose main responsibility was to oversee the conditions of access to Railtrack's network, including infrastructure charges.

The rolling stock leasing companies (ROSCOs) were established essentially to provide a banking service to operators, mainly so passenger operators have lower capital requirements, thereby lowering entry barriers for prospective franchise bidders. The ROSCOs had been formed from British Rail and also privatised. They have never been regulated on the assumption that competition would ensure adequate conduct and performance although there have been calls for regulation to be introduced in this area.

The commercial arrangements are made through a contractual matrix, mediated by charges and by performance incentive regimes between the key players in the industry. The 25 passenger train operating companies (TOCs) received revenue from passengers and fixed annual subsidy payments. The level of subsidy was determined through competitive bids submitted to win franchises with significant protection from on-rail competition, that would meet at least minimum service levels set by OPRAF. The TOCs paid pre-agreed lease and maintenance charges to the three rolling stock companies (ROSCOs) for the rolling stock they used, and regulated access charges to Railtrack for the use of infrastructure. In order to keep Railtrack 'lean,' the maintenance and renewal of the infrastructure were contracted out to 13 companies formed from British Rail and sold to the private sector. There were also freight train operating companies that did not receive operating subsidy.

The initial results of these arrangements were encouraging. Passenger and freight traffic grew by 35% and 50% respectively in the first few years after privatisation and, freed from public sector expenditure constraints, investment grew substantially. The initial franchising process offered the prospect of a rapid fall in the level of government subsidy levels. However this reflected bidding assumptions for fare box revenue and controllable costs that have since proved to be unrealistic.

The Government put Railtrack into administration as a result of a cash crisis. It decided that Railtrack's role should be taken over by a 'not for dividend' company funded from private sector loan finance, with supporting guarantees by the SRA and comfort from the government. This has effectively returned the risks of the infrastructure back to the taxpayer and, as observed by the Regulator, has created difficulties in developing effective means of incentivising the management of Network Rail. Railtrack was funded to carry out its maintenance and renewal (M&R) work but not to expand capacity substantially since long run trends in rail usage had indicated that there would be little demand growth. In fact, the unexpected growth in demand put strains on infrastructure capacity, but the process of negotiating capacity enhancement bilaterally between

Railtrack and the TOCs did not prove workable, partly because any enhancement investment in a loss-making industry was unlikely to be financially viable and would require substantial support from government.

Amongst the difficulties experienced by Railtrack in managing its costs were the flaws in the contractual arrangements that were made for the M&R of infrastructure during the privatisation process. The maintenance contracts created were fixed price and output-based, with performance regimes that had liabilities which were capped in order to make the new companies more saleable. The maintenance companies themselves decided what work needed to be done and made proposals on whether renewal rather than maintenance was required. Since renewals were carried out by separate companies, the incentive was for the maintenance companies to do as little as possible for their fixed price work and to seek to shift work onto the renewals companies who were paid on the basis of work done. Railtrack could not therefore be sure it was receiving value from the increasing amount of money being spent on M&R or how much was being lost to inefficiency or excess profits for the M&R companies.

One of the major causes of infrastructure cost escalation since 2000 has been the direct and indirect consequences of the heightened level of risk aversion that now permeates the behaviour of managers, staff and regulators operating in the industry. The reason for this can be traced to the reaction of the Government and the media to accidents on the railways since privatisation, but it was also sensitised by the hostility exhibited by the Government (and its appointees) to the privatised industry from the outset. This created a climate of blame and recrimination and a corresponding defensiveness in the industry that was not conducive to efficient operations. The separation of track and operations and the financial implications of accepting blame for accidents or delays contributed to the blame culture and its concomitant bureaucracy.

The accident at Hatfield precipitated a loss of control of railway infrastructure costs. The Regulator, who determines Network Rail's income, concluded in December 2003 that Network Rail should be allowed approximately £4.4 billion per year, compared to the £3 billion the Regulator had earlier agreed for Railtrack. Therefore, instead of subsidy steadily reducing while rail traffic expands, as originally envisaged, the Government now faces the prospect of escalating levels of subsidy simply to maintain the current level of traffic on the railway.

The Strategic Rail Authority (SRA) was created in 2001 to replace the original franchising agency (OPRAF) so as to provide strong strategic leadership in the industry. The creation of the SRA was in recognition of the difficulty being experienced in dealing with the strategic and policy issues in the industry, such as long term investment and the management of the supply/demand balance for rail capacity.

Direct commercial contracts between each TOC and Network Rail would be the ideal option if the TOCs were not dependent on government subsidy. But the direct involvement of the SRA is inevitable while the railway is so heavily dependent on government subsidy and while there is such a high level of uncertainty over longer term infrastructure costs and outputs.

The Government is currently undertaking a Major Rail Review which is due to be completed in the summer of 2004. The main focus of this review is on changes to the structure of the industry to improve performance. Another issue is the regulation of safety which is currently the responsibility of Her Majesty's Safety Railways Inspectorate (part of the Health & Safety Executive), not the economic regulator. Separate safety regulation is blamed for some of the increases in costs and, following the review, the two aspects of regulation may be integrated under one body.

One policy issue that has not been addressed, and is not expected to be addressed by the Rail Review, is the size of the network and the extent of rail services. The distribution of subsidy between the various services across the railway network had never been rational. This is largely because the issue of closure or withdrawal of rail services has been deemed to be politically sensitive, and hence has generally been ducked by those responsible for advising governments on transport policy. Yet this failure has resulted in resources being dispersed ineffectually around the network and has prevented the railway from concentrating on the markets it can win against road transport and in which it can make the greatest environmental and economic contribution. Failure to address these issues has therefore weakened the railways' long-term position and viability.

Sweden

In 1988, Sweden became the first country in the world to create a separate state owned infrastructure authority, Banverket, to manage national railway track. The primary objective was to provide a "level playing field" between road and rail through having rail infrastructure funded directly by government in the same way as road infrastructure.

Swedish Railways (SJ, a public enterprise) was organised into six groups:

- Three (passenger, freight and real estate) were to remain state owned – its passenger group must compete for local passenger franchises (though retains a monopoly on intercity) and its freight with open access operators
- Three (IT, stations services and maintenance services) were to be privatised.

In 2001, these groups were established as separate independent companies. The passenger company took over the name of the former state enterprise (SJ). It accounts for 90% of long distance rail passenger journeys and 20% of regional rail journeys in the country, the remainder being on private railway companies operating under concessions. SJ is subject to increasing competition and, following major operating losses, it began in late 2002 to prepare a balance sheet for liquidation.

Open access was introduced for freight in 1996. The new entrants operate on a small scale with many subcontractors to SJ on peripheral parts of the network (Nilsson, 2002⁵⁹). There was an exception, LKAB, a mining company, which for some years ran iron ore trains for its mine to a port but it now subcontracts this back to Swedish Railways, with cost savings of SK200/million/year when compared to the pre-open access position (US\$30million) (Kopicki and Thompson, 1997⁶⁰).

Private freight companies now have a 20% market share and competition has led to reduced rates and improved service quality, although at the cost of worsening the financial performance of Green Cargo, the freight part of the former Swedish Railways, which made a loss after financial items in 2002 and in 2003.

Also separation of infrastructure has been expensive for Government which funds most investment (investment is only partly recovered from access charges). According to Nilsson

⁵⁹ Nilsson, J-E, 2002, *Restructuring Sweden's Railways: the Unintentional Deregulation*, Swedish Economic Policy Review.

⁶⁰ Kopicki and Thompson (ed.), 1997, *Best Methods of Railways Restructuring and Privatisation*, Ch 8, *Swedish Railways Case Study*, World Bank.

(2002), investment levels increased five fold in the early 1990s and there is evidence that poor investment decisions have been made, partly due to political intervention but also possibly due to the disconnection between operator and infrastructure owner.

Access Prices in Europe

EU legislation on access charges is also worth noting. It provides for charges based on marginal costs but with mark-ups, in order to allow the recovery of fixed costs where public financing is unable to cover them.

The approach to access pricing varies widely in Europe reflecting the complexity of the issue and different government objectives (cost recovery v economic efficiency). A report by NERA for the European Commission on access charges⁶¹ classified track charging systems in Europe into three types:

- The Marginal Cost approach which bases charges on short run marginal costs. This approach has been adopted in Sweden, Finland, the Netherlands and, to a large extent, in Denmark. Cost recovery is low (typically 15-30%) and infrastructure is therefore funded mainly by Government. This approach prevents discrimination against new entrants and ensures use of rail where it is economic to do so. However, it does not allow full recovery of costs and places a vertically integrated operator at a competitive disadvantage;
- The Adjusted Average Cost approach, which bases charges on average rather than marginal costs. This approach has been adopted in Germany, France, Belgium, Italy and Austria. The level of cost recovery is generally higher than with the marginal cost approach, though not necessarily 100%. Variable charges (which vary with volume) are therefore sometimes well above marginal cost, even for price sensitive traffic, and fixed charges (which do not depend on volume) are sometimes also imposed. Traffic that could cover marginal but not average costs does not therefore use the railway. This reduces economic welfare and removes a potential source of income for recovering fixed costs;
- The British approach, where access charges were initially intended to provide for all Railtrack's (now Network Rail's) costs⁶² being recovered through access charges (though this is no longer the case as Network Rail receives some subsidy direct from the SRA) - there are fixed elements (not for freight operators) and variable elements and the variable element was intended to reflect marginal costs. The British approach is therefore a hybrid of the other two approaches.

All of the approaches therefore have drawbacks and it is a matter of deciding which best meets the objectives of the charging regime in the market environment in which the regime will operate. The key question that must be answered, when designing a regulated access charging regime (as opposed to one determined by the market as in North America) is whether cost recovery (avoidance of subsidies) is more important than ensuring that all traffic, that can most economically be carried by rail, is carried by rail.

⁶¹ NERA (1998), *An Examination of Rail Infrastructure Charges*, Report for the European Commission.

⁶² The Infrastructure Manager was Railtrack until 2002 when it was renamed Network Rail.

B.4 Economic Regulation in Other Sectors in South Africa

The problems in the rail sector that we have noted in our main report are by no means unique. Similar problems exist in other sectors we have reviewed. A common problem is the absence of clear policies and a lack of consistency which means that government owned entities can interpret policies to suit themselves.

A number of sectors are embarking on market structure reforms, so it is worth considering Government policy on economic regulatory practices in these sectors and also to take note of regulatory experience.

The presentation below first presents salient points from Government's Policy Framework for an Accelerated Agenda towards the Restructuring of State Owned Enterprises (2000) (SOE Restructuring Guidelines) published by the Department of Public Enterprises and presents brief summaries of comparative regulatory examples based on earlier work carried out under the SRPESA project (Teljeur et al, 2003).⁶³

Policy Guidelines

The State-Owned Enterprise (SOE) Restructuring Guidelines include the following points:

- There is a need for a sector-specific regulatory regime within the broader framework of current competition policy based on the type of industry and the potential for competition.
- In the interim, concurrent jurisdiction should prevail in all regulated industries by removing the exemption from the Competition Act that they had enjoyed.
- In the longer term, regulators could concede jurisdiction on competition matters to competition authorities and seek their advice and opinion on other regulatory decisions.
- All mergers should be within the jurisdiction of the competition authorities, albeit with the understanding that the competition authorities will seek advice from the regulatory agencies and that the dual notification process remains in place.
- Mergers that involve regulatory decisions, such as the transfer of a licence, will remain under concurrent jurisdiction.
- Restrictive practices and abuses of dominance will require a sector-specific approach, depending on the nature of the industry:
 - In industries undergoing transition, concurrent jurisdiction should be formalised. The competition authorities should play a leading role in assessing industry structures and desirable changes. The Competition Commission, in consultation with the regulator, should deal with competition issues and the competition authorities should preferably have the final decision making powers.

⁶³ Teljeur, E, Gillwald, A, Stain, G, & Storer, D, (2003) "Regulatory Frameworks: Impact and Efficacy; Executive Report", www.tips.org.za.

- In industries with little potential for competition, the regulator should remain the sole actor, although the Competition Commission should be able to investigate mergers, as well as abuses of dominance by the incumbent, where applicable.
- In industries with a high degree of competition, the Competition Commission should have jurisdiction on all competition matters and should simply be required to consult the relevant regulator. Final authority should ideally rest with the competition authorities.
- In all cases regulation and specific rules for matters not concerning the Competition Commission will remain with the sector regulator.
- Inconsistencies between national and industry-specific competition rules should be addressed, with industry rules being amended to conform to the Competition Act.
- Co-operation between the agencies should be institutionalized and embedded in the respective procedures.

Notable Trends in Sector Regulation in South Africa

The earlier SRPESA report (Teljeur et al, 2003) observed that “the most notable feature of sector regulation in South Africa, is its deeply sector-specific approach and the lack of coherence between regulatory frameworks across the regulated sectors. Although policy coherence does not require identical regulatory approaches across all sectors, it is certainly of importance that fundamental issues are approached in a coherent manner, using the same criteria upon which to base decisions. At present it appears that individual Government Departments responsible for policy development in a network sector operate in a vacuum, approaching each aspect ‘afresh’ and developing divergent approaches. This finding is relevant not only to detailed implementation decisions, such as which tariff setting methodology or asset base calculation to use, but extends to fundamental questions around market design; institutional arrangements; and implementation of regulatory interventions”.

Teljeur et al went on to observe that:

- fundamentally different approaches have been adopted to essentially similar issues in the different sectors, such as for instance market and regulator design and the degree of competition that is allowed;
- there is a marked divergence both in the mandates given to the different regulators and in their ability to act on an independent basis;
- the *de jure* and *de facto* ministerial involvement differ significantly between the different sectors;
- internal governance arrangements, in particular arrangements for Board oversight, diverge widely between regulators;
- there is no common approach to consultation, which ranges from formal quasi-judicial hearings to voluntary informal stakeholder workshops;
- appeal procedures vary between regulators.

They further noted that SOE monopolies in the transport sector are mainly characterised by their lack of economic regulation, as much of Transnet has only minimal obligations to the shareholding department (the Department of Public Enterprises), covered by a shareholder Compact. Economic regulation in the transport sector currently only exists in aviation and is proposed in ports.

In airports, the Regulating Committee was established by section 11 of the Airport's Company Act, No 44 of 1993 and incorporated by reference to the Air Traffic and Navigation Services Company Act, No 45 of 1993. The Regulating Committee is empowered to regulate the activities of two monopolies namely the Airports Company and the Air Traffic and Navigation Services Company. As such, the Regulating Committee has no jurisdiction with respect to airports not owned by the Airports Company. Section 12(10)(a) of the Airports Company Act, 1993, and Section 11 (10)(a) of the Air Traffic and Navigation Services Act, 1993 oblige the Regulating Committee to *restrain the Company from abusing its monopoly position in such a manner as not to place undue restrictions on the Company's commercial activities*. The Regulating Committee is empowered to set prices, approve business expansion in South Africa and recommend the closure of facilities and curtailment of services. It is also empowered to investigate complaints and direct compliance, suspend or withdraw permissions and prohibit any action relating to non-compliance.

The National Ports Authority (NPA) and the Ports Regulator (PR) may be established by sections 3 and 29 of the National Ports Authority Bill No. 5B of 2003 if this legislation is passed in its current form. The PR would be established as the regulator of the monopoly NPA and would be empowered to regulate any "abuse of power" on the part of the NPA, ensure equity of access to ports and the provision of services and approve NPA tariffs. The NPA would be the landlord entity that manages, controls and administers ports and procures ports services through licensing. The PR would therefore monitor and control how the NPA conducts itself in relation to port service providers and users. It would be empowered to investigate complaints and conduct hearings. It would be able to issue interim and final orders to interdict conduct, declare agreements partially or wholly void and condone breaches of rules and procedures.

In sectors with dominant SOEs and market restrictive complexities, sector regulators are established with concurrent powers to the Competition Commission, especially with respect to mergers, restrictive horizontal and vertical practices and abuse of dominance issues. The respective regulators are required to sign Memoranda of Understanding with the Competition Commission. Sectors recording good progress in market liberalisation, such as communications, tend to place responsibility for competition issues more squarely with the Competition Commission.

In developing an appropriate design for a rail regulator, it is important that lessons from the other sector regulators are learnt and applied. These include *inter alia* the need for appropriate market design (industry structure and the role of competition), regulatory independence, the role and constitution of the regulator's board of directors, the functions of the regulator, formal consultation requirements, funding mechanisms and appeal processes.

B.5 Conclusions

Experience of the freight dominated North American railways shows the disadvantages of regulating freight rates. It also demonstrates the advantages of competing vertically integrated operators, where these are feasible. Both these issues are relevant to South Africa and are discussed in our main report.

Experience in passenger dominated European railways shows the difficulties of vertically separating infrastructure and operations. These difficulties have been particularly marked in the UK. This suggests that other ways of increasing the efficiency of the sector should be considered. The introduction of open access for freight in Europe⁶⁴, which was one of the main reasons for vertical separation, has brought benefits to freight shippers through lower rates and better services but against this, must be offset the loss of business and economies of scale for incumbent operators.

Although not reviewed in this report, similar observations have been made concerning Australia, where a range of structural models have been adopted, including vertical separation. There the solutions adopted depend on the level of intermodal competition, competition in downstream markets, and whether the size of the market is sufficient to support competition. A recent paper by Productivity Commissioner Owens analyses the tradeoffs with vertical separation. She notes that “while vertical separation may assist in promoting competition and reducing monopoly rents, it may result in a lack of accountability, major co-ordination problems and significant safety concerns.” She also notes that “competition may diminish incentives for business to invest in maintaining and upgrading the rail infrastructure”.⁶⁵ If vertical separation and open access are adopted in South Africa, means will need to be found to address these potential drawbacks.

Turning to South Africa, the State-Owned Enterprise (SOE) Restructuring Guidelines note the need for sector regulators in monopoly sectors like rail. In the telecommunications and electricity sectors, the regulators have concurrent powers with the Competition Commission, especially with respect to mergers, restrictive horizontal and vertical practices and abuse of dominance issues. The key lessons for rail from other sectors concern the importance of market design and the development of competition.

Experience in other sector in South Africa therefore appears to contradict international rail experience which shows that competition can have drawbacks. However, this emphasises the importance of developing the right type of competition given the demand and cost characteristics of rail in South Africa.

⁶⁴ Open access has been very limited for passenger services, mainly due to timetabling difficulties.

⁶⁵ Source: Owens, Helen, *Rail Reform Strategies - The Australian Experience*, in Takatoshi & Krueger (eds.): *Governance, Regulation and Privatization in the Asia-Pacific Region*. See National Bureau of Economic Research website.

More detail on Australian experience can be found in *Rail Infrastructure Pricing - Principles and Practice*, Bureau of Transport & Regional Economics Report 109, 2003, Canberra. Available at www.btre.gov.au.