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DEPARTMENT OF
FINANCE AND
ADMINISTRATION

Ms Helen Silver
First Assistant Commissioner
Progress in Rail Reform

Productivity Commission
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Melbourne VIC 8003

Dear Ms Silver

Progress in Rail Reform

I am writing in response to your call for submissions on the Productivity Commission's pending inquiry into recent progress in rail reform in Australia.
I have attached this Department's submission to "The House of Representatives Inquiry into The Role of Rail in the National Transport Network" of October 1997. At that time we raised some issues which we believe are still relevant now and which may prove of benefit to your current inquiry. The issues include:

- The Commonwealth/State agreement on rail access was opening the way for more consistent or transparent rail access prices across the States and Commonwealth;
- The rail industry was in a state of transition with good prospects of greater competition and increased private sector involvement; and
- There appeared to be an opportunity to make progress in the harmonisation of the regulatory and operating arrangements of the various state-based networks.

Since that time, some of the key developments in rail reform have been:

- The Commonwealth/State agreement to establish the Australian Rail Track Corporation (ARTC) to provide an efficient, seamless regime to the interstate rail network and to promote the entry of private sector operators into the rail industry;
- The successful sale of the operation of the Australian National Railways Commission (AN) and progress toward the sales of the freight business of Westrail in Western Australia, V/Line Freight Corporation (VLFC) in Victoria and the National Rail Corporation (NRC); and
- The selection of the Speedrail consortium for the prove-up phase of the Very Fast Train project between Sydney and Canberra.

I trust this information will be of benefit to your inquiry.

Bert Johnston
Director
Transport Energy & Communications Sector
Government & Industry Outcomes
Department of Finance & Administration
19 October 1998

The House of Representatives Standing Committee on Communications, Transport and Microeconomic Reform Inquiry into the Role of Rail in the National Transport Network

Submission (No. 56) from the Department of Finance and Administration

October 1997

Executive Summary

- Over the last 20 years, the Commonwealth has spent a total of $3.8b (in 1996/97 prices) on Commonwealth rail entities and rail infrastructure. Commonwealth funding for rail is delivered annually through specific Rail Acts such *as Australian National Railways Commission Act 1983* and the *National Rail Corporation Agreement Act 1992*, as well as through specific projects such as the Alice Springs to Darwin Railway (from the Federation Fund)
- The position of rail, in the land freight transport industry, has been declining over the last 20 years as rail has failed to compete effectively with road. Rail has historically involved state government owned monopolies. However, the rail industry is now in a state of transition with good prospects of greater competition and increased private sector involvement.
- To facilitate a more competitive environment between modes of land transport, where rail and road can compete effectively against each other, factors such as access pricing, infrastructure provision and regulatory arrangements are important.
- On access pricing, the National Commission of Audit recommended that users of rail services be charged the full cost of the service. The recent Commonwealth/State agreement on rail access, opens the way for more consistent or transparent rail access prices across the States and Commonwealth.
- On infrastructure provision, a consistent approach to Benefit Cost Ratios is required to assist inter-modal investment decisions. The private sector is becoming increasingly involved in the provision of infrastructure.
- In terms of the regulatory framework, problems are caused by inconsistencies between states and the number of regulatory authorities. These problems are to be addressed through an agreement to be reached between the Commonwealth and the States, to establish a new entity to reform access and regulation, which will also harmonise different regulatory and operating arrangements.
- There are compelling reasons for further restructuring. Traditional arguments for a government presence in the rail industry hold less relevance in the modern transport industry where the private sector is clearly signalling a willingness to become more involved and to meet, on a commercial basis, the competition from road and sea. The rail industry can benefit from increased private sector participation.

1. Introduction

Thank you for this opportunity to present this submission to the Inquiry from the Department of Finance and Administration. The comments in this submission reflect an interest in shaping the broader level of policy direction, to build upon reforms already begun in the rail transport industry. To achieve the goal of an efficient transport industry, further reform is needed to increase private sector contribution, to improve the regulatory framework and to enhance competition. These policies to improve efficiency will lead to an environment which will enable Australia to achieve higher economic growth.

This submission primarily considers non-bulk land freight transportation. "Bulk commodities are essentially captive to a particular mode of transport as a result of their physical characteristics, location, need for specialised handling technologies and other factors."[1]

Over recent years there has been a shift in the pattern of freight transport usage in Australia. The amount of freight being transported has increased faster than the rate of growth of GDP.[1] Over the last two decades, rail has failed to compete effectively with road and its relative performance has deteriorated, leading to a shift from rail to road freight transportation. Operators have responded to the key variables of price, time and reliability factors, depending on the characteristics of the particular consignment and mode of transport. In a perfectly competitive economy this modal shift would result in improved efficiency in the transport sector. However, the transport sector is not a perfectly competitive market. Differences in access price regimes and regulatory requirements between the states create barriers to entry for new operators.

Historically, the transport sector in Australia has been developed with government assistance. This support occurs at all levels of government and in many forms (eg. operating subsidies, funding of infrastructure, and the formation and operation of regulatory authorities which create a framework for participants to operate within.)

For Australia to compete with other countries in our region, inefficiencies in the Australian economy need to be reduced. This requires limiting the distortionary effects of activities and structures that impinge on the transport industry becoming more competitive.

The role of the Commonwealth Government in the rail industry is being transformed. The Commonwealth Government is selling the Australian National Railways Commission (AN) and proposes to sell its shareholding in the National Rail Corporation. Opening rail monopolies up to competition will help to reduce inefficiencies. Competition is being reinforced through the National Competition Council (NCC) and Australian Competition and Consumer Commission (ACCC). Deregulation of the shipping transport sector is another Commonwealth reform intended to increase competition and reduce inefficiencies in the transport industry.

Increasing the role of the private sector can introduce many advantages to an industry based on public sector ownership such as access to international innovations, funding and lower costs.

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[1] BTCE, 1995, *Working Paper 14.6 Adequacy of transport infrastructure multimodal* p.1
[2] Australian Transport Council, 10 September 1997, *National Rail Summit Communique*, p.1

This paper presents:

- An overview of the Commonwealth Government's financial role in the rail industry, describing the level of funding and the mechanisms of funding;
- the reasons for recent reforms in the rail industry;
- an analysis of access pricing, infrastructure provision and regulatory arrangements from a cross-modal perspective; and
- the advantages of privates sector involvement in the rail industry.

2. Role of the Commonwealth Government

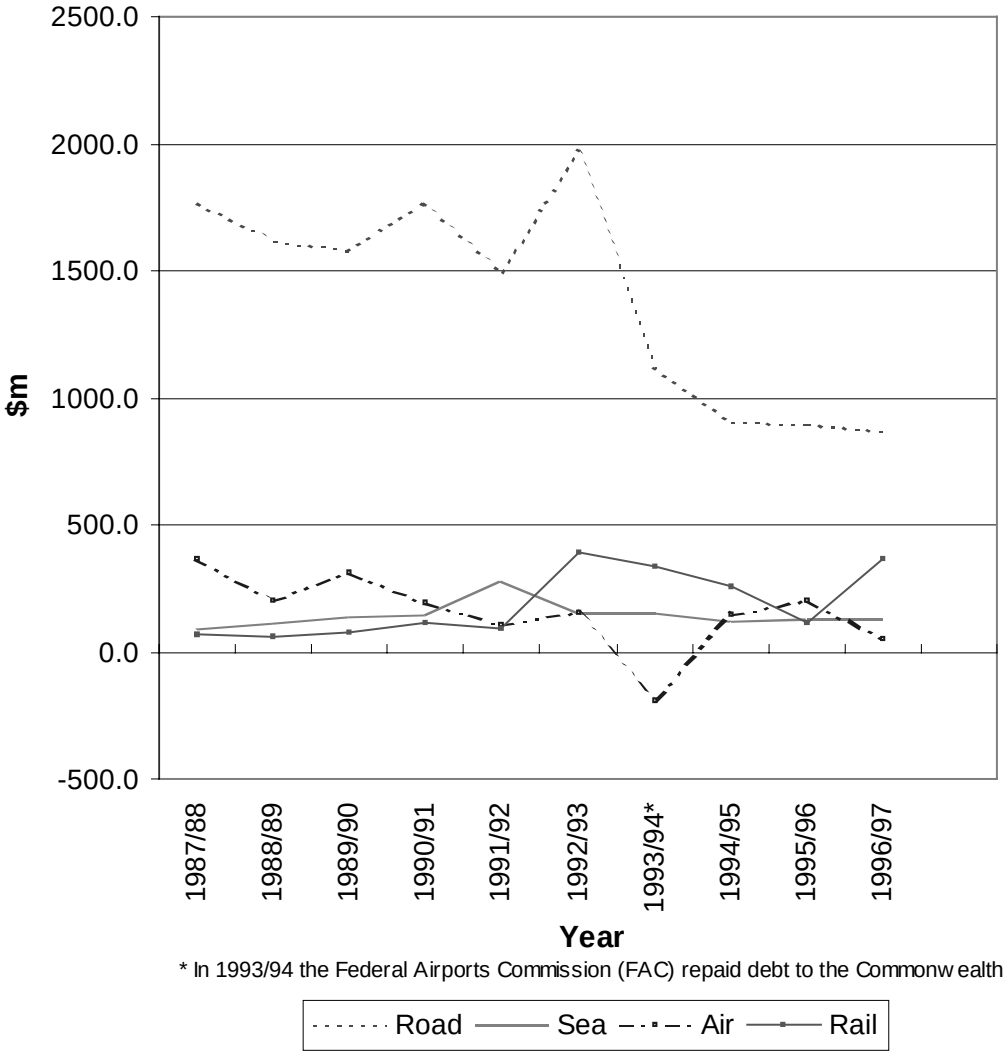
The Commonwealth Government has been a major provider of funding for the transport industry over the last 20 years. Below is a description of the levels of Commonwealth funding for railways, the funding mechanisms that have been used recently, and funding mechanisms that are to be used shortly to deliver funds for rail.

(a) Levels of Funding

Over the 20 year period from 1977-78 to 1996-97, the Commonwealth has spent a total of $3.86 billion in 1996-97 prices, on Commonwealth rail entities and infrastructure. Commonwealth funding to roads over the same period was $31.5 billion. Graph 1 shows absolute levels of funding between the different modes of transport over the 10 years between 1987/88 to 1996/97. Graph 2 shows total Commonwealth funding apportioned across the different modes of transport, over the 10 years between 1987/88 to 1996/97.

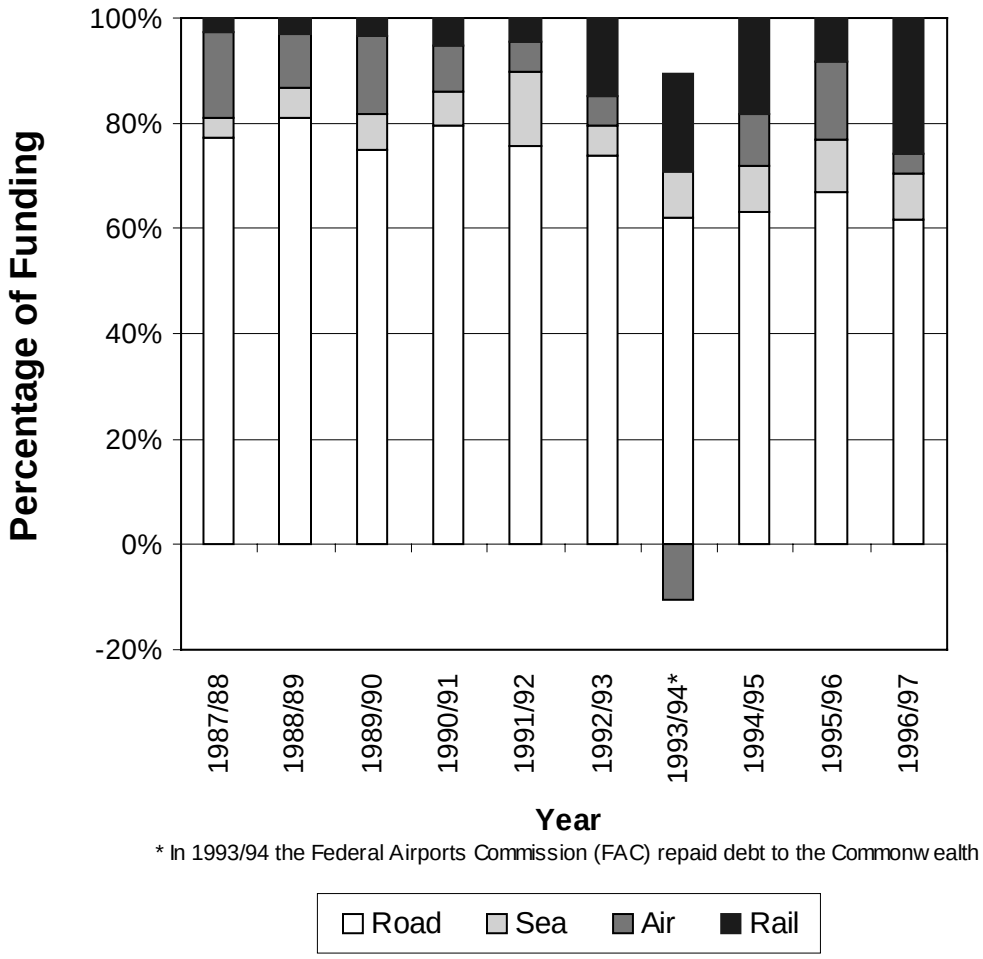
Commonwealth funding on roads over the last 20 years has been about 8 times the level of the Commonwealth funding of rail.

Graph 1. Commonwealth Funding for Transport $m (1996-97prices)



Source: Various Annual Budget Papers

Graph 2. Relative Commonwealth Funding for Transport Modes (%)



Source: Various Annual Budget Papers

(b) Funding Mechanisms

Commonwealth funding for rail occurs through the Annual Appropriation Acts. Funding or receipts are targeted towards specific rail entities or States through legislation such as *Australian National Railways Commission Act 1983* and the *National Rail Corporation Agreement Act 1992*. The Annual Appropriation Acts also include other funding mechanisms that benefit rail, such as, payment to Tasmanian Government for track upgrading.

Annual Appropriations relating to specific Rail legislation

Australian National Railways Commission Act 1983
The Australian National Railways Commission (AN) was established in 1983 under its own act. The Commonwealth has provided annual operating supplements and grants to AN through the Annual Appropriation Acts. Over the 5 years leading up to the decision to sell AN, the Commonwealth's supplements and grants to AN totalled almost $350m (1996-97 prices). Despite this level of support, AN still made a loss in 1995-96 of $210.5m

In the past, AN operated a range of track and rolling stock support operations as well as intrastate freight in SA and Tasmania. In 1993 AN's interstate freight operation, its most profitable business, was transferred to NR. This fundamentally changed AN's role in the rail industry. AN subsequently went through a period of significant downsizing to focus on each of its remaining core operations of track access and maintenance, SA freight, Tasrail and passenger operations.

In June 1997, legislation to sell AN was passed by the Senate. Sales of three core businesses, SA Freight, Tasrail and Passenger Rail, are due to be completed in 1997.

AN's major remaining business is the Track Access Unit, which is responsible for the maintenance of and controls access to AN's interstate track.

National Rail Corporation Agreement Act 1992
The Commonwealth's interest in National Rail Corporation (NR) is as the majority shareholder. The other two shareholders are the New South Wales and Victorian governments. NR was established in an attempt to stem the persistent operating deficits from the interstate freight operations of the State and Commonwealth rail authorities. All functions of interstate rail freight business operated by the rail authorities, if nominated by NR, were to be transferred within a three year 'transition period' from February 1993. The shareholders also agreed to contribute assets and equity funding, plus pay transitional subsidies during the five year 'establishment period'.

Since commencing operations NR has reduced losses on interstate freight, but not met the original expectations of financial performance. NR owns and leases wagons and locomotives, and operates terminals.

The Commonwealth Government is now engaged in the process of consultation with the Victorian and New South Wales State Governments, following its decision to sell the

Commonwealth's stake in the National Rail Corporation. The Office of Asset Sales is undertaking a scoping study for the sale of the Commonwealth's interest in NR.

Australian Land Transport Development Act 1988
As well as funding the National Highway System, Blackspots and Roads of National Importance, this act allows for funding for capital railway projects from the Australian Land Transport Development Trust Fund.

After the Minister for Department of Transport and Regional Development approves the details of a submitted project, funding may be provided for:

- capital railway projects to be undertaken by the State or an approved railway authority;
- urban transport projects to be undertaken by the State; and
- research relating to land transport to be arranged, assisted or carried out by an approved research organisation. (Funding for research is limited).

In regard to a capital railway project, the Minister is required to be satisfied that:

- the project is likely to result in improvements to the capacity of, or the quality or the efficiency of operations in relation to, interstate mainline railways
- the State or authority has taken such steps to improve its operational or commercial practices as will, in the Minister's opinion, be likely to ensure the early achievement of the benefits of those improvements; and
- in the case of a project submitted by a State - the undertaking of the project will be given priority by the State.

Other Annual Appropriations

One Nation (June 1992-June 1995)
A total of $443m was spent on rail through the *One Nation* program (from June 1992- June 1995). For the first time planning for rail was on a corridor-by-corridor rather than a state-by-state basis. Almost all the major work was carried out by contract after a tender process.[2]

National Rail assumed direct responsibility for some $356.6m of the *One Nation* Program funding.[3] This funding was directed through National Rail Corporation for:

- upgrading track and bridges;
- improving gradients;
- constructing more and longer passing or crossing loops;
- creating dedicated freight lines in heavily congested areas;
- upgrading freight terminals, in particular at South Dynon, Melbourne;
- improving rail-port links;

[2] National Rail Corporation Ltd, 1996, *One Nation Completion Report* p.5
[3] *ibid* p.2

- removing the last height restrictions for double-stack containers west of Adelaide.

Federation Fund: Alice Springs to Darwin Railway

In September 1996, the Commonwealth government undertook to contribute to the proposed Alice Springs to Darwin Railway, conditional on private sector funding. The Commonwealth commitment in relation to the Alice Springs to Darwin railway is to contribute $100m, in conjunction with NT and SA governments each also, contributing $100m. The source of the Commonwealth's funding is the Federation Fund. The Federation Fund was established to fund major projects of national significance and is established as a separate Trust Account within the Commonwealth Public Account.[4]

Upgrade to Tasmanian Rail

In 1997-98, $5 million from the proceeds of the sale of AN will be provided to Tasmania to upgrade track infrastructure.

Upgrade of Pinnaroo, South Australia

The Government has agreed to commit funds to upgrade the Pinnaroo Line in South Australia with the South Australian Government agreeing to make a contribution of around a third of the cost.

Infrastructure Borrowings Tax Rebate

The Infrastructure Borrowings Tax Rebate is administered through the Department of Transport and Regional Development. The scheme is to support private sector provision of public infrastructure, and replaces the Infrastructure Borrowings tax concession (IBs). The rebate will permit resident infrastructure financiers to apply for a tax rebate on interest received from infrastructure providers in return for infrastructure providers, forgoing the tax deductibility on that interest. This will benefit infrastructure providers because financiers will be able to offer lower rates of interest or other benefits. The cost to the budget will be capped at $75 million per annum, including running costs.

The eligible categories of new public infrastructure are:

- road and rail projects and their related facilities; and
- as a transitional measure, projects, that had applications of IBs pending at the time of the 14 February 1997 announcement to replace the IBs and extensions of projects that had previously been certified to use IBs.

Applications will be assessed against specific criteria.[5] Four projects which were certified after suspension of the IB programme are to receive assistance under the Rebate programme.

A New Commonwealth and State Agreed Structure for reforming access and regulation

The details of this structure are still under negotiation with the States. However, the States and the Commonwealth have agreed to:

- "designating, for the first time, a national rail highway linking capital cities and their ports;
- developing an investment strategy for the rail highway;

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[4] The Federation Fund will cease to be a 'Trust Account' under the *Audit Act 1901* and will become a component of the Reserved Money Fund, under the *Financial Management Act 1997*, when it replaces the Audit Act from 1998.

[5] Department of Finance, 1997, *Budget Measures 1997-98 Budget Paper No. 2* AGPS, p. 179-181

- establishing a national system for access by all operators, including private firms, to the entire network; and
- implementing consistent operating rules on that network."[6]

The Commonwealth will provide up to $250m over 4 years from 1998-99, for capital expenditure on the mainline track. The Commonwealth will make this funding available on the condition that satisfactory access arrangements and plans for investment and harmonisation of regulatory and operations requirements are in place.[7]

3. State of Play in the Land Transport Sector

The rail industry is in a state of transition. Rail transportation has historically been undertaken by government owned businesses, with each rail enterprise being a monopoly within their own state borders. However, recently several private rail freight operators have begun competing with those state monopolies. Rail operators also compete with road freight operators. Road transport operators participate within a highly competitive environment.

Any favourable treatment by government to one transport sector has implications for the other. Despite the reforms implemented to date in the rail sector, there is still room for progress to facilitate a more competitive environment in the land transportation sector. In meeting this objective three significant factors for consideration are access pricing, infrastructure provision, and regulatory arrangements.

Road and Rail Modal Shares

Over the last 20 years, the position of rail, in the land freight transport industry, has been declining.

> "Road freight's modal share of land freight on three corridors linking Melbourne, Sydney and Brisbane had risen from approximately 59% of modal share in 1974-75, to an estimates 67% in 1994-95." [8]

> "Rail's declining position in the land freight market is illustrated on the Melbourne/Sydney corridor, where its share of tonnes carried has fallen from 50% to 20% since 1970-71."[9]

Historically, the States have opted for incompatible communications systems, engineering standards and rolling-stock management systems. These have created barriers to entry, hindered competition, and complicated operations, thereby reducing national economic efficiency. [10]

The share of rail varies depending on the corridor.

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[6] Minister for Transport and Regional Development, 10 September 1997, *National Agreement on Interstate Rail Reform*, Minister's Office

[7] Australian Transport Council, 10 September 1997, *National Rail Summit Communique*, ATC Secretariat.

[8] Laird, John, 1996, *Working Paper 1996/6: Intercity land Freight Transport in Eastern Australia*, Centre for Resource and Environmental Studies, Australian National University, p.1

[9] Kaine, 1995, *op.cit*. p.ii

[10] Kaine, 1995, *op.cit*. p.i

> "Rail moves some 80% of the freight on the Adelaide- Perth corridor where the longer distance favours rail and the quality of the rail infrastructure is relatively good. Double stacking is possible. The road length between Melbourne and Brisbane is 1570km, a distance over which rail should be competitive. However, rail only carries only 21% of long distance freight. Rail traffic has to pass over more difficult terrain than road, through Sydney, and over a distance 24% longer than road. Road traffic travels along the Newell Highway, covering the door-to-door distance in 22 hours, compared with rail which requires 37 hours from terminal to terminal."[11]

Levels of and growth of road and rail freight transportation

On a national basis, rail carries about 385 million tonnes of freight[12], and around 40% of the interstate freight task.[13] By comparison, road carries about 1.26 billion tonnes of freight[14], and around 47% of interstate freight.[15]

Between 1971-72 and 1989-90, the domestic freight task of government rail transport grew annually at a rate of about 4% whilst road transport grew at about 7%. Private rail transport stayed relatively static. Sea transport maintained a stable average.[16]

4. Cross Modal Access Pricing

Creating consistent ground rules for all competitors through the application of competitive neutrality principles, is probably the most significant challenge facing government transport entities. One essential characteristic that operators (and modes) compete upon is price. Access prices are the prices charged by track owners or managers to operators for the use of the track. Access prices affect the cost base of rail operators, which in turn affects their capacity to compete on price against other operators and other modes.

Efficient pricing

Efficient pricing in a perfectly competitive environment sets price equal to marginal cost, that is, the price is set equal to the additional cost of running that incremental service. However, in an industry such as rail, which is characterised by increasing returns to scale, setting the price equal to short term marginal cost will result in the firm losing money because average cost is always higher than marginal cost in an industry with increasing returns to scale. In the long run the industry will go out of business.

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[11] National Transport Planning Taskforce, 1995, *Building for the Job: Commissioned Work Volume 1: BTCE Report*, AGPS, p.11
[12] Bureau of Industry Economics, 1995, *Rail Freight 1995: International Benchmarking*, AGPS, p.6
[13] Australian Transport Council, 10 September 1997, *National Rail Summit Communique*, ATC Secretariat.
[14] BIE, 1995, *op.cit*. p.6
[15] National Transport Planning Taskforce, 1995, *op. cit*. p8-10
[16] BIE, 1995, *op.cit*. p.6

The NCC observes that North American studies suggest that the natural monopoly in the rail industry is associated primarily with the track network.[17] This suggests that above rail operations could become a competitive industry if other barriers to competition are removed.

The NTPT considers that prices for transport services and facilities provided by governments and government agencies,

> "should be related to:
> - users' demand for the facilities;
> - the cost of the facilities; and
> - a recognition of the additional costs imposed on others by the use of those facilities for example, environmental and congestion costs."[18]

Setting access price equal to long run average cost will spread the fixed cost of infrastructure, as well as the variable costs such as fuel and labour, across all operators. The National Commission of Audit recommended a similar average cost pricing policy:

> "The Government should require appropriate pricing of infrastructure services. In particular, where users of services can be identified, pricing of services to reflect full resource costs (including an appropriate return on infrastructure investment) should be adopted."[19]

Under this pricing structure, the price charged to the customer is partly dependent on the number of users of the assets, the marginal cost of the service and the replacement cost of the assets. There are a variety of other pricing structures that could be adopted. However, where there are substitutes for the service, demand will be relatively elastic, and a monopolist will have little power to raise prices.

Both the existing access price regimes faced by rail and those faced by road, are subject to criticism on efficiency grounds.

Current Access Price Regime for Rail

In the case of rail, there is no consistent or transparent methodology applied to the calculation of rail access prices across the States and Commonwealth.

Issues of concern are:

- operators need to negotiate with several government entities in order to transport freight through several states, seriously increasing their transaction costs;
- lack of transparency, ie. are the same prices being charged to new private sector operators as to incumbent state operators;
- lack of performance requirements on all parties; and
- rail operators face inconsistent pricing regimes in different jurisdictions

Current Access Price Regime for Other Modes of Transport

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[17] National Competition Council, June 1997, *Specialized Container Transport Application for Declaration of a Rail Service Provided by Rail Access Corporation: Reasons for Decision* p.19

[18] NTPT, 1994, *op. cit*. p52

[19] National Commission of Audit, 1996, *Report to the Commonwealth Government*, AGPS, p.210

The road access pricing regime was described in the Department of Finance submission to this Committee, for the Review of Federal Road Funding Road.[20] Access to sea and air resources and facilities are priced differently again. Inconsistencies between access pricing for various modes of transport can result in sub-optimal allocation of transport tasks between modes.

Other Pricing Objectives

Apart from efficiency concerns, there may be other objectives that contribute to a pricing structure. Where a market is not perfectly competitive, such as when positive or negative externalities are produced by the service, the government may want to internalise the externality through some kind of additional charge or subsidy. For example, the number of accidents and the level of green house gas emissions on highways may be reasons for governments to intervene through taxes or subsidies. Equity concerns, such as community service obligations or regional assistance, may influence the competitive allocation of resources. It should be noted there is no economic principle that suggests that the access price ought to be targeted for subsequent expenditure on road or rail infrastructure.

Hypothecation

Fuel excise is based on a per litre charge. Some commentators have argued that fuel excise is partly hypothecated to the states for roads, and that the same funding mechanism should be available to rail. However, fuel excise is principally a revenue raising measure and the tax receipts are paid into the Consolidated Revenue Fund. The amount of Commonwealth funding for rail and other transport projects, is a matter for the Government to decide in the context of the budget processes.

Hypothecation of taxes is not often used by the Commonwealth. Hypothecation:

- reduces budget flexibility in manipulating fiscal policy to the needs of the economy at various points of time in the economic cycle; and
- locks the Commonwealth and States into long term commitments when situations change and those outcomes may not be efficient. Government policy priorities may change. There may be more pressing priorities for funding in a particular year.

Pricing and Investment

The NTPT has recommended that:

> "all governments develop mechanisms for pricing for the use of transport infrastructure which reflect the costs of efficient provision of that infrastructure and take into account congestion and environmental factors in a transparent way." [21]

Getting the pricing signals right is important for consideration of the level of infrastructure investment.

> "Appropriate pricing of infrastructure directly contributes to ensuring an adequate supply of infrastructure in good condition. Appropriate pricing will operate to reduce the pressure of demand relative to existing capacity." [22]

5. Infrastructure Provision

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[20] Department of Finance, Jan 1997, *House of Representative Standing Committee on Communications, Transport and Microeconomic Reform on federal road funding: Submission by the Department of Finance*, p.30-31

[21] *ibid*. p.53

[22] NCOA, 1996, *op. cit*. P.209

State of Rail Infrastructure

The state of rail infrastructure has improved, in places, through recent rail projects. The quality of infrastructure for competing modes of transport, affects their relative competitive advantage. For this reason investment decisions should be made on a network and intermodal basis. A recent development in the funding of infrastructure is the participation of the private sector.

Recent Rail Infrastructure Projects

Recent years have seen advances in Australia's rail infrastructure. In 1995 the Melbourne/Adelaide standard gauge railway was commissioned, completing intercity links on a standard gauge railway network. However, despite this major achievement, areas remain which have been identified as contributing to rail infrastructure inefficiencies, including gradients, loading gauge (clearance around track) and curve characteristics.[23]

One Nation funding was directed to the objective of completing a standard gauge rail network between Brisbane and Perth, with connections to ports and improving transit times.

Table 1. Major One Nation Rail Infrastructure Program

Line	Funding ($m)
Brisbane to Sydney	92.1
Sydney to Melbourne	39.6
Sydney Freight Access Area	44.8
Melbourne to Adelaide	166.7
Dynon, Melbourne	21.0
Parkeston Fuelling Facility (NRC)	0.8
Wolseley to Belair (AN)	27.5
Fishermans Island (Qrail)	30.0
Outer Harbour (AN)	8.0
Adelaide to Kalgoorlie (Westrail)	2
Kalgoorlie to Perth (Westrail)	10.3

Source: NR, 1996, *One Nation Rail Infrastructure June 92 - June 95 Completion*, Appendix 1.

Future Rail Infrastructure Requirements

> Bureau of Transport and Communications Economics (1995) suggests that "about $3b of investment in rail infrastructure is estimate to be warranted over the next 20 years… Maintenance costs are estimated to amount to around $3.5b over the 20 year study period if the infrastructure projects suggested as warranted in this study are implemented. If

[23] *ibid.* p.i-ii

> no investments in infrastructure are undertaken, maintenance costs are forecast to be some $1b higher over the period."[24]

The corridors identified as highest priority to upgrade are the Melbourne to Adelaide, the Sydney to Brisbane and Brisbane to Cairns corridors.

As states also own interstate track, they have the responsibility for upgrading their portions of the interstate track. Because of the poor quality of parts of the interstate rail track, speed restrictions are in place which further reduce the ability of rail to compete with road.

Cross Modal Competition

Rail's major cross modal competitors are roads and shipping. Competition between the modes involves matching the attributes of the mode with the requirements of the consignment. Each mode offers a package of service attributes, including cost, transit time, frequency, reliability and responsiveness. Road and rail are in direct competition for cargo competing on a balance of cost and time. Terminal performance is an important factor in cross-modal competition.[25] Depending on the characteristics of the freight market, the relationship between rail and shipping modes can be either competitive or complimentary. For domestic transport over long distances, under certain circumstances, shipping can offer lower unit costs and hence a package of price and service attributes that is competitive with rail transport.[26]

Increases in the level of infrastructure investment directly affects operating costs, and hence pricing, by reducing maintenance costs. Disparities in the level of investment between road and rail affect their relative competitiveness. For the purposes of an effective integrated land transport system in Australia, decisions on the level of infrastructure investment should be made in the context of a combined road and rail framework on a corridor basis. To achieve this, benefit-cost ratios (BCRs) should be calculated using consistent methodologies, to allow for direct comparison.

The BTCE argues that BCRs for road are considerably higher than for rail indicating that road investment should receive higher priority if the aim is to achieve greater economic efficiency.[27] The impact of changes in road vehicle technology such as the use of B-doubles will increase the competitiveness of road freight with respect to rail and further stimulate a modal shift to road.[28] Technological improvements such as double-stacking, are also available to rail transportation. Double-stacking is used on the Adelaide to Perth corridor and, if upgrading is undertaken such as adjustment of bridge heights, double-stacking could be extended to Melbourne.

These arguments must be considered in the context of consistent methodologies used for the calculation of BCRs between modes of transport and if BCRs are completely costed to include external costs. It should also be noted that relative BCRs are dependent on existing levels of infrastructure investment. Where past investment has been substantial, incremental investment can be relatively inexpensive.

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[24] NTPT,1995, *op.cit* p.11.
[25] BTCE, 1995, op.cit., p.3-4
[26] *ibid.* p.25
[27] *ibid.* p.9
[28] *ibid.* p. 17

While investment in road infrastructure has affected the level of demand for rail freight there is not necessarily a reciprocal effect. The BTCE suggested in 1995 that investment in rail would have little effect on the investment needs of roads because road traffic on major interstate corridors is dominated by local and regional traffic as well as passenger vehicles.[29] If rail captured the entire growth in the task freight beyond 1995, the result would be to delay timing of economically justifiable road projects by less than five years in the Sydney-Melbourne corridor, and by less than three years in other corridors. [30]

Recent Developments in Infrastructure Funding

A recent development in both rail and road infrastructure has been the provision of private sector funding in economically efficient infrastructure investments. Currently there are proposals for private sector investment in the Alice Springs to Darwin rail link, the proposed Canberra to Sydney fast train, and on inland rail route between Melbourne to Darwin.

The recent sale of AN businesses to the private sector includes commitments by the new owners to invest in capital expenditure. For example, SA Rail is being sold to Genesee and Wyoming Inc. which has undertaken to commit $62m capital expenditure on locomotives, rolling stock and track over the next 5 years. Tasrail is being sold to Australian Transport Network, which has committed to $20m capital expenditure on locomotives, rolling stock and track over the next 4 years.[31]

The Commonwealth has announced plans to sell its interests in the National Rail Corporation.

To ensure that infrastructure investment is considered in the context of an integrated intermodal network, which is necessary in order to achieve an efficient allocation of resources between modes, there needs to be effective communication between management bodies in all the relevant states. Governments should endorse the use of rigorous economic analysis, for all major transport investment decisions.

6. Regulatory Arrangements and Operational Practices

Unlike investment decisions, which should be evaluated using consistent methodology, regulatory requirements vary according to different regions and sections of rail track. Rather than aiming for uniformity in the regulatory framework for rail, the objective should be harmonisation of arrangements.

Regulatory Arrangements: Inconsistencies Between States

[29] BTCE, 1995, *op.cit* p.xi
[30] *ibid* p.16
[31] Minister for Finance and Minister for Department of Transport and Regional Development, 28 Aug 1997, *Joint Media Release: Australian National Sale Success*, Ministers' Offices

In the past, interstate rail has been managed as a discrete set of State based rail systems. Currently, track owning states and AN have control over access and investment on their track and impose regulations that rail operators must comply with. This creates a situation where trains travelling interstate have to accommodate different regulations. The inconsistencies in these regulations reduce efficiency achieved by the rail operators, as time and resources are devoted to ensuring the respective regulations are complied with.

A national set of rail regulations applying in all states is the logical solution to this problem.

The Intergovernmental Agreement on Rail Safety (IGA) between the States and the Commonwealth was signed to attempt to address this problem. The objective of the Agreement was to achieve harmonisation through mutual recognition. However, it is widely acknowledged that the IGA has not reduced the regulatory burden on operators as it was expected to do. In some cases structural separation has increased the number of different bodies in one state that operators need accreditation from.

The Commonwealth and State governments are trying a different approach to solving the problems in the regulatory framework, through the proposed establishment of a new State and Commonwealth agreed structure for reform to regulation and access. The proposed objective of the body is to facilitate and integrate access arrangements for rail in Australia. It is intended to work towards the harmonisation of different regulatory and operational requirements across the States.

> "Open access could significantly enhance rail's financial viability as effectively regulated competition is likely to improve service quality, innovation and overall usage of the rail system."[32]

Regulatory Arrangements: Number of Regulatory Authorities

Another barrier to market entry, which has caused a great deal of frustration to many rail operators, is the large number of regulatory authorities that are currently in existence. Presently,

> "there are 22 safeworking and 17 radio systems in use on the network. Some drivers on interstate routes need to be conversant with 11 different safeworking systems."[33]

This is considered excessive and reduces the efficiency of rail operations.

The establishment of an organisation along the lines of the proposed new Commonwealth and State access entity should allow operators to access the network through a single point of entry (that is, a 'one-stop-shop'). Operators would need to negotiate with only one organisation to gain access to the track, rather than a large number of different entities.

Thus the key improvements to efficiency to be made are reductions in inconsistencies in regulatory arrangements between states and a reduction in the number of agencies that an operator must deal with to be allowed to operate between states. The proposed new access entity will help to achieve

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[32] Kaine, 1995, op. cit. p. 29
[33] ATC Secretariat, 10 September 1997, *op.cit.* p.4

these outcomes with the provision of a 'one stop shop' for agencies. There is wide support from the private sector for such an organisation.

7. Restructuring the Rail Industry

There are many compelling reasons to continue restructuring of the rail industry. The role of Government and the state of the rail industry have evolved and the traditional arguments for public sector involvement in the rail industry have diminished in their relevance.

Reasons to Reform the Rail Transport Industry

Privatisation

As a loss making entity, AN has had important financial and economic consequences from a 'whole of government perspective' for the country. The rail deficit has been an ongoing financial cost to the tax-payer, which has resulted in diversion of resources from other uses. Over the five year period ending 1995/96, AN accumulated losses of $506.5m (in 1996/97 prices). Figures for AN's loss in 1996/97 are not expected to be available until later in the year. One of the causes of AN's debt, is it's operation of non-commercial services. Selling AN to the private sector will ensure that a commercial discipline is applied to rail services and activities.

The Victorian government has decided to privatise their intra-state rail freight systems.

Role of Government

One of the traditional arguments for government intervention is that an industry faces a decreasing cost structure, and thus increasing returns to scale, which lead to a monopoly enterprise. Established to protect the public from monopoly power, government rail entities themselves became monopolies within state boundaries. "Interstate rail freight transport business is conducted by organisations owned and heavily supported by their respective government owners. There is virtually no competition amongst the current six government owned freight rail authorities."[34]

However, the potential for monopoly power to be exerted, has been reduced by competition from the road freight industry, the application of competition policy principles and in the case of AN, the separation of ownership of track assets from the operating businesses. It is the cost of the track that characterises the rail industry as 'an increasing returns to scale' industry.

There may be circumstances where rail produces external benefits. For example a government might subsidise interstate freight rail services to reduce congestion and air pollution from traffic on roads.

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[34] Senate Rural and Regional Affairs and Transport Reference Committee, 1997, *Report on the Brew Report and on the Continuing Role of the Commonwealth in the Australian Rail Industry*, Department of Senate, p. 48

8. Role of the Private Sector

National and international experience suggests that significant efficiency gains may be achieved through appropriate involvement of the private sector. In order to achieve more private sector participation, barriers to entry need to be eliminated.

(a) Reduction of barriers to entry

The dominance of rail freight by government owned operators is beginning to be broken by competition from private operators. TNT, one of the major private sector competitors in the rail industry, has become a major competitor to NR on the East-West corridor. NR, which is the sole supplier of non-bulk rail freight services between Sydney and Perth, is likely to be at least partly sold to the private sector.

The competition policy framework is being used to open the market to new operators. Four applications have been made to the National Competition Council (NCC) with respect to rail facilities. The NCC manages a national regime under which access may be sought to nationally significant infrastructure to facilitate competition in upstream or downstream markets.

To date, rulings have been made on applications received from Queensland operated Carpentaria Transport Pty Ltd and New South Wales operated Specialised Container Transport.

- Carpentaria Transport Pty Ltd application failed to meet all of the relevant criteria under Part IIIA of the TPA ie it was found rolling stock, terminals etc could be economically duplicated and that access to all services sought may not promote competition in at least one market.

- Specialised Container Transport applied for track only facilities and the NCC agreed that the service sought by SCT in NSW should be declared. However, New South Wales elected not to make a formal decision and therefore the application was unsuccessful. SCT has the option of appealing NSW's action.

National Competition Council rulings are establishing a body of case-law. While the two applications seeking declaration of rail freight services in different states have been unsuccessful, expectations are that a workable access regime could be achieved and future applications may be successful if they are restricted to track facilities only.

State governments are progressively moving towards more contestable markets in planning and delivery of infrastructure and services. For example the Queensland Government has recently released a blueprint for implementing private sector partnership and contestability. [32]

(b) Advantages of private sector participation and funding

Efficiency Gains

[32] Financial Review, 3/10/97, *State Seeks Partnership rather than Privatisation*, p.64

It has been argued that increased private sector participation will promote competition and efficiency in the rail industry in Australia.[33] Over recent years, there has been some improvement in the efficiency of the rail industry, however, there is still need for continuing improvements, if rail is to compete with other forms of transport.

The Centre for International Economics (1994) projected macroeconomic effects on real GDP and consumption, of an assumed 10% increase in productivity of each transport industry. The results show that such an increase in the productivity of road freight transport would increase real GDP by $6b and consumption by $2b. Similar productivity increases in rail are estimated to increase real GDP by $2b and real consumption by $662m.[37]

Innovation

Access to international experience has the potential to introduce more innovative solutions to problems that the business units have been faced with. The purchaser of AN passenger operations, Great Southern Railways Passenger, will seek to use significant experience in rail systems around the world to turn the loss making passenger operations into a profitable business.

Lower costs

Competitive tendering may also result in lower costs for the government. Tenderers' quotes may be lower than what it would cost the government to complete the project, as a result of competitive pressures. In tendering for projects, investors may attempt to under-bid their competitors in order to gain the contract. Also, private investors may have different motivations in completing projects than many government entities. Private investors may be focussed on completing projects by a specified deadline, or earlier, if there are incentives to do so.

Contracting out to the private sector will benefit the government most if the industry is competitive. "If competition is limited, some portion of the efficiency gains may accrue to the private contractors rather than the government. Alternatively, if competition among contractors is keen, the gains are likely to accrue to the government."[38]

Access to a Larger Pool of Funds

Funding by governments of capital works on rail has to be considered in the context of competing budget priorities. Opening the industry up to private ownership provides incentives to the new owners to undertake investment and upgrading where it is commercially advantageous. It will be open to governments to provide a subsidy to encourage works which are perceived to have benefits to the wider community that the owner cannot capture commercially (eg. Alice Springs to Darwin railway proposal.)

Reduced Risk for Governments

The BOOT (Build, Own, Operate and Transfer) system has been used for the provision of private sector investment in roads, but it may be applicable in the future to rail. The system transfers the assets from the private sector back to the public sector after a specified length of time. These types of contracts shift substantial risk to the private sector. However, they are not ideal for promoting

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[33] BIE, 1995, *op.cit*. p. 12

[37] NTPT, 1994, *op.cit*. p.7

[38] *ibid*. p. 25

competition because "BOOT contracts tend to protect against competition from other routes". [39] Private sector ownership also reduced the risk of ongoing financial leakage through continuous subsidisation of loss making entities.

9. Conclusion

This submission has described some of the existing problems with the rail industry. Further reforms need to be introduced to improve competition in the industry and to encourage and allow the industry to compete with other modes of transport. Private sector participation can be increased to harness the advantages that the sector can bring into the industry especially in increasing the level of infrastructure investment. There are structural problems in the number of rail entities and their regulatory regimes and access pricing.

Recent and imminent reforms to the industry will be instrumental in addressing many of these problems. The sale of AN, as well as the upcoming sale of the Commonwealth shareholding in NR, will allow more involvement in the industry by the private sector. The proposed new entity to reform access and regulation, will help State and the Commonwealth rail entities to integrate the regulatory and access arrangements.

[39] *ibid.* p. 11

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