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## **TERMS OF REFERENCE**

This paper is written in response to the Productivity Commission Inquiry into the progress of rail reform in Australia. Key issues it addresses are

- ARTC – background, role and functions
- Current status and structure of interstate access to rail
- Developments in Industry structure and competition
- Private sector participation and investment & impediments to the industry

The views expressed are those of ARTC as a provider of interstate access to the national rail network.

## **ARTC –BACKGROUND, ROLE AND FUNCTIONS**

### **OWNERSHIP**

Australian Rail Track Corporation (ARTC) was incorporated in February 1998 commencing operations on July 1 1998. It is fully owned by the Commonwealth Government through shareholder representatives of the Departments of Transport and Regional Development and Finance and Administration.

Its formation was an integral part of the rail reform process and sought to establish an organisation that could provide a ‘one-stop-shop’ service to interstate rail users between Perth and Brisbane. Its stated objectives are to:

- *Significantly expand the rail industry through improved efficiency and competitiveness*
- *Increase rail’s share of the interstate freight market*
- *Encourage investment and improve rail infrastructure*

As a corporation ARTC also has a responsibility to operate on commercially sound principles to ensure a realistic rate of return to its shareholders.

## **EXTENT OF ARTC RESPONSIBILITIES**

The Interstate Network comprises the standard gauge rail network connecting the mainland State capital cities between Perth and Brisbane and the connecting lines to Whyalla, Port Kembla, Newcastle, Alice Springs, Westernport and Kwinana.

ARTC has responsibility for management of access and infrastructure maintenance in South Australia as track owner and in Victoria as track manager via a lease agreement. In other jurisdictions its function is restricted to interstate access issues.

Access includes marketing and sale of paths, scheduling, and access contract negotiations; maintenance includes all activities required to maintain the track and associated facilities such as signals and communications. Network management is the responsibility of the network manager.

## **CURRENT STATUS AND STRUCTURE OF INTERSTATE ACCESS TO RAIL**

Where ARTC is not track owner or manager ie Western Australia, New South Wales and Queensland, ARTC is required to enter into commercial arrangements in order to provide the “one-stop-shop” service. The nature and framework for these arrangements are contained within the Inter-Governmental Agreement<sup>1</sup> of November 1997.

These negotiations are currently underway. In these jurisdictions ARTC’s function will be limited to the access components.

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<sup>1</sup> Signed 14<sup>th</sup> Nov. 1997 between The Commonwealth & States of NSW, Vic, SA, Q’ld, & WA.

Currently, traversing the national rail network requires four separate access agreements (- each with different pricing and terms and conditions based on varying philosophies), as well as the need to gain accreditation in each of the individual states.

These inconsistencies and duplication of effort are considered a significant impediment to the overall efficiency of rail; thus ARTC’s ability to offer a one-stop-shop service to increase efficiency as contemplated by the IGA will be contingent on its ability to negotiate satisfactory arrangements with the track-owners in these other jurisdictions eliminating the need for extraneous negotiations and agreements.

## **DEVELOPMENTS IN INDUSTRY STRUCTURE AND COMPETITION**

Since it commenced operations in 1993 National Rail Corporation Ltd. has been the dominant force in the interstate movement of freight by rail. The formation of Track Access (TA) (an independent business unit of Australian National) in 1995 was instrumental in encouraging new competitors to contest the interstate freight market on the Melbourne-Adelaide-Perth route.

This corridor was selected for two primary reasons:

- i. The distance offered natural economies of scale for rail
- ii. The Track Access pricing regime offered equity and consistency

The greater distance of the ‘line-haul’ component on this corridor allows rail to compete more effectively with road than on the shorter corridors of Brisbane/Sydney/Melbourne.

More importantly, the philosophy of transparent and equitable pricing of TA allowed new entrants to compete effectively for specific market segments of the freight industry.

Data collected by Track Access over the Commonwealth network since 1995 show a steady increase in Gross Tonne Kilometre (GTK) market share captured by the new entrants.

Over the same period, access reliability over the Commonwealth network has shown a marked improvement in performance with ‘on-time exit’ of ‘healthy’<sup>2</sup> trains increasing from below 90 % to approximately 95 %, and all train on-time exits improving from around 55 % to approximately 75%.

This increase in reliability also coincides with introduction by NR of its new fleet of locomotives; this is supported by TA data analysis which reflects a reduction in the proportion of delays attributable to locomotive failure.

At the same time, anecdotal evidence from operators suggests there has been a substantial reduction in the freight rates, in the order of 20 – 25 %, charged to end-users

Whilst it would be presumptuous to attribute specific causality for the improvements, it does demonstrate the importance of both above and below rail activities in contributing to an overall efficient interstate rail system.

In essence, the separation of above and below rail activities combined with the introduction of an open and robust access pricing regime has encouraged competition on the East West corridor; the consequence of this has been some segmentation of the market, a fall in prices and an increase in quality of service. The evidence would therefore suggest that the reforms introduced to date have been successful in altering the fundamental dynamics of the industry.

Outside of the Commonwealth jurisdiction on the North South corridor, the same changes do not appear to have eventuated, despite this being a far greater market in terms of total (road/rail/sea) freight opportunity. New entrants have not to date been able to break into the market, which is still served almost exclusively by National Rail

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<sup>2</sup> A ‘Healthy’ train is one which enters the network within  $\pm 15$ mins of its scheduled path allocation and is not subject to any above rail delays.

This region offers the greatest opportunities for rail, but are we only now beginning to see interest from operators in trying to compete for business over these corridors. The market clearly comprises a range of segments (including passenger v freight) yet the current system fails to recognise the conflicting needs these markets have or to provide an environment that facilitates new entrants.

The difficulty of rail congestion throughout the Sydney metropolitan area continues to be a major impediment to the efficient movement of freight on the North-South corridor (Brisbane-Sydney-Melbourne) and the lack of competition or segmentation has failed to encourage market driven developments reflective of market needs.

## **ACCESS REGULATORY AND SAFETY REGIMES**

The rail industry is characterised by the historical independent development of rail on a state by state basis. The result has been a disjointed approach to all facets of rail and a lack of consistency in standards and practices in an industry dominated by state based government entities. This imposes additional resource consumption on rail users through having to negotiate and meet the requirements of a range of entities rather than with a single body one time only.

Whilst the creation of ARTC may go some way to addressing this issue, gaining access is still an expensive and complex process.

## **SAFETY**

In comparison to road, rail has an exceptionally good safety record. However, as stated above, the systems and processes used to achieve this are excessively costly and time consuming with requirements varying between states. Standard safety levels should apply on a national basis with an operator required to demonstrate adequacy to a single body much like the Civil Aviation Safety Authority (CASA) in the aviation industry.

The existence of multiple entities is not only inefficient and costly to users, it is also a waste of resources by the providers, adding to the total national cost of transport services.

Moreover, lack of consistency in practices increases total overall risk in the industry. If rail is to be competitive then safety must be approached on a commercial basis and ways sought to mitigate risk. ARTC should not be, nor be seen to be, the “policeman” of rail.

## **PRIVATE SECTOR PARTICIPATION AND INVESTMENT**

In assessing the attractiveness of an industry for investment, the private sector will consider a range of factors including structure of the industry, competitive environment, future market opportunities and developments, risk profile and the regulatory environment or role of Government.

### **Risk probability Profile**

In assessing the attractiveness of an industry the investment community seeks a measure of risk versus return. The amount of risk associated with an industry will be related to a range of factors including type of industry, perceived demand patterns, technological change, etc all of which can be factored into a required rate of return. However, more difficult to assess is the impact of ‘uncertainty’ associated with an industry.

Uncertainty creates risk; therefore high uncertainty creates high risk. High risk demands a higher rate of return to compensate for the increased risk. Uncertainty then, becomes a disincentive for investors seeking lower risk investment.

Within the rail industry there is considerable uncertainty surrounding the impending privatisation of a number of government owned organisations (especially NR given it is the dominant player in the industry); the limited five year ‘life’ of ARTC itself creates additional uncertainty.

The early completion of sales of NR, V/Line, and Westrail should provide the investment community with short-term support in developing confidence in investing in rail infrastructure, especially if the purchasers are separate entities.



The net consequence of these factors is to create a higher probability for downside risk than upside risk for potential industry investors. In return for this higher risk investors will apply a higher cost of capital in assessing rail investment opportunities decreasing the likelihood of investment.

Potential investors may choose to temporarily withhold investment, or even avoid the industry altogether seeking more stable environments with lower downside risk.

### **Barriers to Entry**

Entry into the industry presents its own unique set of difficulties. Dominance by a single entity gives that entity some natural advantages. Ability to compete effectively is impacted by the quality of capital equipment available since this has a strong relationship with quality of service and reliability.

Lack of physical facilities- rolling stock, terminals etc are also making it difficult for new entrants to compete on equal terms. Rolling stock and terminals would be suitable for packaging into specific opportunities for the private sector, however the uncertainty outlined above is likely to make the realistic achievable rates of return unacceptable against the current risk profile.

Terminals in particular are presenting difficulties with shortages of suitable terminal space forcing operators to use the main lines for the building of trains prior to departure. Naturally, this is unacceptable since it has the potential to impinge on the timeliness of interstate traffic. Separation of terminals to allow a rail “highway” free of impediments is critical to the reliability of interstate rail movements.

Serious consideration should be given to separately selling terminal facilities in Sydney, Melbourne, and Adelaide in any sale of NR. These terminals should be sold to independent third parties rather than train operator participants.

Communications equipment also presents a barrier. In Victoria in particular, the fact that the base communications system is a proprietary system is affecting new entrants ability to compete in that market. New system components necessary for new operators to comply with safeworking are generally unavailable and yet a requirement for Accreditation.

### **Competitive Neutrality**

The principles of microeconomic management require that all industries compete evenly and equitably for scarce resources. If this is allowed to occur then the theory of comparative advantage and market forces will ensure that each industry operates at its most efficient in meeting the needs of that sector in which it has a natural advantage.

However, in order for this to eventuate, all costs associated with the provision of a service must be included in the pricing mechanism. In addition, no industry should be given an advantage, or disadvantaged, through discriminatory direct or indirect taxes or subsidies.

It can be argued that historically, the disparate investment between road and rail brought about by imperfect and inconsistent project cost benefit analysis and evaluation, and inappropriate pricing, has resulted in additional expenditure on road infrastructure.

Specific anomalies have occurred due to:

#### **i. Lack of full cost recovery**

In order to maintain neutrality, the full cost of infrastructure maintenance must be reflected in the pricing mechanism borne by users.

Since there is no specific cost for access to road infrastructure or direct link between revenues raised through road taxes/licenses (or similar revenue mechanisms) and expenditure on highways, the pricing mechanism is not required to make a commercial return in relation to its capital cost. Moreover, since road transport is effectively subsidised, its very cheapness encourages additional use. This has created congestion that has resulted in an outcry for further infrastructure improvement to maintain service levels; additional funding has been made available to road

perpetuating the problem, and giving road an unfair competitive advantage over rail.

**ii. Inequitable contribution to infrastructure costs**

The above problem of lack of effective recovery is exacerbated by the hypothecation (or lack of) between funds raised and expenditure on infrastructure.

Fuel excise, it is commonly argued is a tax on infrastructure in relation to road and rail. Governments argue that there is no link between funds raised through this duty and expenditure on relative infrastructures; that expenditure is on an independent needs evaluation basis. This may well be the case, but such a lack of a consistent relationship should be clearly understood, as it gives an effective subsidy to road – thereby further perpetuating the issue raised in i) above.

**iii. Externalities**

Related to the above, this issue concerns the definition of “full cost”.

Over and above the direct costs associated with maintaining an infrastructure, there are “externalities” or hidden costs associated with operation of businesses and industries. In the case of the transport industry these relate in particular to pollution management, environmental damage reparation, cost of resources consumed by accidents, plus the cost of noise and congestion.

The direct cost of some of these externalities is easily measured, for example repair to environmental damage, and the cost of attending accidents. However the more significant costs are not necessarily overt and by their nature difficult to measure.

Congestion of traffic leads to increased pollution emissions, wasted fuel and increased expense in resource consumption. Pollution itself has some direct costs (potential for future fines) which if they are to be avoided must be eradicated at source (R & D) or as a consequence. Either of these courses of action will involve costs that will not be directly attributed to road transport.

Some of the other hidden costs are more difficult to evaluate, eg emissions as a cause

of sickness (asthma, stress) leading to decreased productivity and increased health costs borne by the nation.

If these externalities were taken into account and reflected in the real cost of road usage then the higher costs would result in lower usage enabling a more efficient distribution of resources.

## **SUMMARY**

The reforms of the past three years have had a significant positive impact on the fundamental structure of the rail industry reflected in the entrance of SCT and Toll Rail into the industry. At the current time, the high level of interest in rail is encouraging with several participants, as well new entrants, seeking to establish new or expand existing operations and invest in the industry. However, if this interest is to be translated into increased share of the freight market, capital investment by the private sector and a more efficient rail industry, then Government and industry must continue to strive to overcome the remaining barriers.

The continued inconsistencies within the structure of the industry and the existence of a number of access and pricing regimes leads to increased direct and indirect costs for rail users, further disadvantaging rail against other industry modes.

For investors, the high level of uncertainty surrounding the industry increases the risks and therefore discourages investment. The benefits to be gained from current potential market opportunities, especially on the North-South lines, have not been sufficiently quantified to enable fair evaluation of relative project benefits vis-à-vis other project proposals; however the obvious market sizes served would support possible investment in these areas over and above Government subsidised investments in rail infrastructure to non-existent markets or markets of limited capacity.

Finally, the lack of a coherent and cohesive plan for the industry makes investor planning difficult since the industry cannot effectively ‘market’ its future to the private sector investment community.

## **SUGGESTIONS**

In order to improve the attractiveness of rail as an investment opportunity and encourage an efficient and profitable rail industry, Government can take a number of actions:

- 1) Remove uncertainty from the industry by progressing the sales of NR, V/Line and Westrail**
  
- 2) Address discriminatory practices to ensure competitive neutrality**
  
- 3) Ensure complete and consistent evaluation of investment opportunities within a whole market context**
  
- 4) Make access and pricing seamless to users**
  
- 5) Undertake a holistic approach to industry development**

