



AUSTRALASIAN RAILWAY ASSOCIATION

# Road and Rail Freight Infrastructure Pricing

*Productivity Commission Discussion Draft*



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### Box 1.1: Key Points

- There is general agreement that the future freight task is likely to double over the next twenty years, and that the regulatory structure for road and rail freight infrastructure needs to be capable of providing the incentives necessary to efficiently meet this anticipated freight growth.
- The PC's review provides the opportunity to further develop the framework for meeting this task. For this to occur the PC should consider:
  - how to best provide effective incentives for efficient future investment in road and rail infrastructure;
  - undertaking further work to understand the economic costs of road and rail infrastructure provision, and, in so doing, provide the informational basis for efficient investment decisions; and
  - providing a reform framework that contemplates an integrated approach to infrastructure reform, and identify the necessary elements of the reform path.
- Incentives for efficient road and rail infrastructure investment requires:
  - a functioning pricing mechanism that provides a direct link between the demand for, and supply of, infrastructure and allows infrastructure providers to respond to demand needs;
  - a forward looking economic, rather than financial, cost model; and
  - the specification of high-level pricing principles combined with an over-arching regulatory efficiency objective.
- Improving the economic cost information basis for both road and rail has the potential to allow the design of more effective regulatory structures and lead to more transparent investment decisions.
- Further work on economic costs should focus on improving the understanding of the total economic costs of road and rail infrastructure provision, the extent of marginal and common costs, and the appropriate methodology for cost allocation between users.
- The ARA suggests that a nationally integrated future road and rail infrastructure reform framework should include:
  - the development of a national freight transport policy;
  - the application of consistent pricing principles between road and rail infrastructure;
  - an incentive package for inter-modal infrastructure investment, in recognition of the future impact increased freight transport is likely to have on road congestion; and
  - the development of a specific strategy for regional freight and port shuttles.
- The ARA asks the PC to consider these proposals, and its other final recommendations, in the context of providing a framework for addressing Australia's future freight transport needs.

## 1. Introduction

Productivity improvement in the freight transport sector is fundamental to Australia's ability to handle the doubling of freight volumes over the next 20 years that was projected by the Productivity Commission (PC).

The PC's Discussion Draft on Road and Rail Freight Infrastructure Pricing is an important addition to the strategic policy thinking required to underpin this national effort.

The PC has demonstrated clearly that further work is required to clarify the problems in the current pricing frameworks for both road and rail. It has also identified opportunities for reform and importantly, signalled areas of potential productivity improvement for both modes.

The PC's terms of reference provided it with a significant opportunity to shape the future development of the freight infrastructure industry as a whole. The approach in the Discussion Draft has been to consider road funding in isolation. The Australasian Railway Association (ARA) is concerned that this would inevitably lead to the funding outcomes of the last several decades with the consequence that the country's rail networks will be starved of investment. Rather than taking this approach, the ARA believes that the process outlined in AusLink for a more nationally consistent, integrated framework for investment and the pricing of both road and rail freight infrastructure will better serve the nation. The ARA in its submission to the inquiry highlighted a number of areas where reforms are needed. These were:

- depoliticising the decision-making process for road pricing and investment;
- establishing a nationally consistent pricing and access framework for both modes;
- reducing the regulatory burden in rail by reducing the incidence of duplication;
- reviewing vertical separation on some parts of the rail network; and
- instituting a clear relationship between pricing, revenue and investment.

A nationally consistent approach would require road to move away from the 'inefficient' cost recovery model and to adopt a similar framework to that used in rail, where the cost of providing and maintaining an optimal network are taken into account. While this may be viewed as a 'formidable task' the alternative of maintaining the cost recovery system under the guise of a new 'national road fund' will continue to result in distortions in investment and usage decisions between rail and road infrastructure.

Even if distinct regulatory approaches are to be maintained across the two modes of freight transport, it is imperative that pricing regimes and government subsidies are competitively neutral, transparent and provide the correct signals to ensure efficiency in the use and operation of freight infrastructure assets. This requires greater emphasis to be placed on ensuring that:

- the costs incurred in the provision of road and rail freight infrastructure are measured with a greater degree of accuracy;

- costs are recovered in a similar manner between each mode, with a similar transparent approach to subsidies;
- costs are allocated in a manner that reflects usage; and
- any distortions arising from differences in regulatory frameworks and objectives across and within the two modes are removed.

While the PC has sought to examine each of these issues, its overall findings and recommendations do not adequately reflect their importance. The PC's comparison between road and rail has involved an effort to compare the Depreciated Optimised Replacement Cost (DORC) value of rail to attributable financial costs of road. However, it is not clear how useful this comparison is because attributable road costs are an incremental cost concept, while DORC is the cost of replacing the rail network. An accurate valuation of key road network corridors is needed for suitable comparison.

Translating the PC's analysis of road freight pricing to the rail "floor and ceiling" model, road freight is paying above the floor, i.e. its directly attributable costs,<sup>1</sup> but on any assessment is not paying the ceiling, i.e. the stand alone cost to provide the road network required by freight. This is exactly the position that rail freight is in. The difference between the two is that on road there is another user class, passenger vehicles, that does cover the stand alone costs of its road network and therefore cost recovery from road overall does meet the full economic costs.

The rail industry believes that the PC should use the considerable work completed for the draft to develop a model national framework to improve investment incentives in land transport. The productivity opportunities identified by the PC should form part of a priority action package agreed to nationally by governments in consultation with industry. In this submission, the rail industry proposes additional reforms which would strengthen the package outlined by the PC.

In this submission, the ARA explores some key issues with the PC's draft analysis, including the degree of economic cost recovery between road and rail infrastructure and the insufficient recognition of the importance good information and transparency can play in improving efficiency incentives. The ARA's views on each of the recommendations made in the Draft Discussion Report are outlined in Appendix A.

In addition, the PC has also sought further information in relation to a number of issues relevant to the rail industry. These include:

- the potential costs and benefits of reintegration on specific rail networks;
- the feasibility of establishing a national road fund, particularly how inter-jurisdictional issues might be resolved; and
- the appropriateness of current access regulation.

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<sup>1</sup> Accepting for the moment that the attribution of costs is accurate and putting aside arguments that some particular vehicle types might not be covering their direct costs.

The ARA has sought to comment on each of these issues. The remainder of this submission sets out the ARA's views in detail focusing on the themes of:

- the need to provide improved incentives for efficient investment in road and rail infrastructure provision;
- the benefits for efficiency arising from undertaking a close examination of the economic costs of road infrastructure provision; and
- the way forward to integrated infrastructure reform.

## 2. The importance of providing incentives for efficient infrastructure provision

If the freight task in Australia is to double over the next twenty years then it is imperative that investment in the underlying infrastructure is undertaken in an efficient manner across all modes. That is, resources must be allocated across and within modes in a manner that ensures the optimal use of available resources and encourages the pursuit of productive and dynamic efficiency.

In industries such as road and rail infrastructure, the pursuit of efficiency must be underpinned by a regulatory framework that is autonomous, transparent, and encourages consistency in regulatory decisions and incorporates:

- a functional pricing mechanism that provides a direct connection between the demand for, and supply of, infrastructure services and enables an infrastructure provider to ascertain the optimal investment opportunities for a given level of demand;
- a forward looking economic cost model; and
- pricing principles and objective efficiency criteria which encourage investment to be undertaken at the lowest sustainable cost.

The structural and regulatory reforms undertaken in the rail industry over the last fifteen years have drawn directly on these principles and as a consequence, rail has derived significant technical efficiency and labour productivity gains over the period. Over the same period, road infrastructure assets have been managed by a number of agencies operating with little or no autonomy and with no prospect of being able to eliminate the distortions in the pricing mechanism and investment decision framework within the industry.

The divergence between these two approaches and the effect upon efficiency can most clearly be seen in Figure 2.11 of the Discussion Draft which is replicated below.

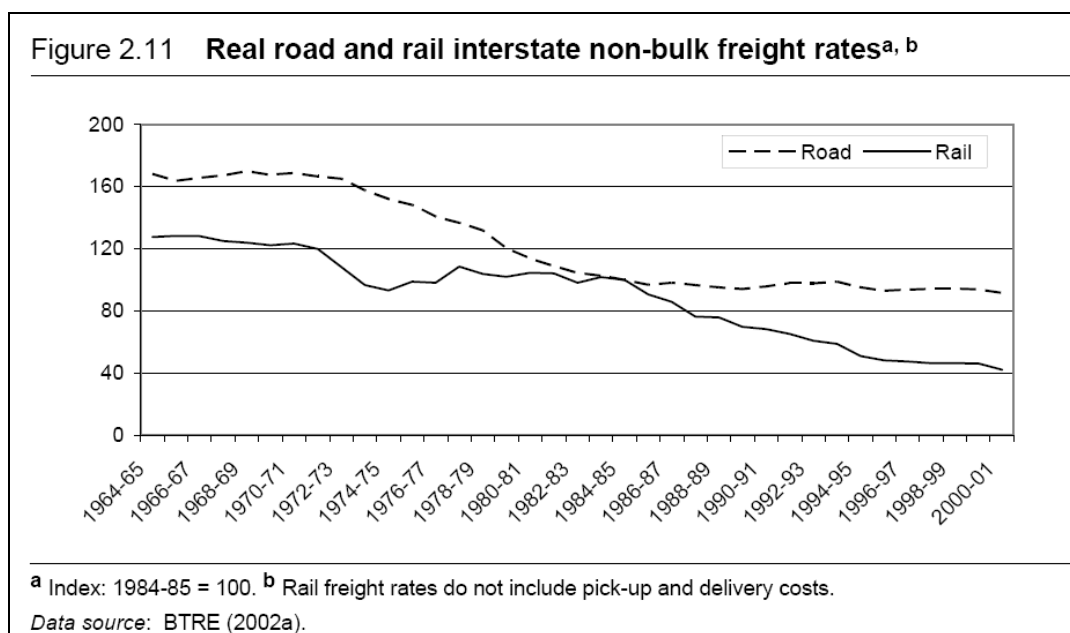


Figure 2.11 along with other findings contained within the Discussion Draft suggest that considerable efficiency gains could flow if the reform of the road infrastructure regulatory framework were to draw on the same principles underpinning the rail regulatory framework. These gains would not be limited to the road infrastructure industry, rather they would also flow to rail and the broader economy as distortions in the use of, and investment in, road infrastructure assets are eliminated.

The Discussion Draft appears to acknowledge the considerable benefits that could flow from such reforms; however, the proposed reforms appear to simply target the institutional arrangements rather than the underlying pricing mechanism. In rejecting the need to address the underlying pricing mechanism and cost recovery model, the PC has stated that the task is too ‘formidable’ and the transactions costs may be too high, and concludes that ‘the status quo may be ‘efficient’, in the sense of being the best achievable given the constraints’.<sup>2</sup>

These conclusions have been made without regard to the implications for the rail industry. It is clear from the report that the PC has used its modelling to conclude that pricing decisions in road will have very little influence on rail; however, these conclusions are at odds with other findings made within the Discussion Draft and a 1999 report, as can be seen in the following quotes:

If prices are distorted, investment decisions also are likely to be distorted, thus perpetuating and possibly exacerbating inefficient outcomes over time. For example, if some heavy vehicle charges are below their efficient levels (because of inaccurate road infrastructure cost allocation or a failure to account appropriately for externalities), then use of road freight will be greater than otherwise. This additional use of roads may encourage investment in additional road capacity and, conversely, discourage use of, and investment in, rail infrastructure.<sup>3</sup>

<sup>2</sup> Page 3.3, PC Discussion Draft Report

<sup>3</sup> Section 3.4, PC Discussion Draft Report



Increased investment in roads may have encouraged modal substitution.<sup>4</sup>

The failure to recognise the symbiotic nature of the two industries in this inquiry has tainted many of the PC's Draft Recommendations and thus the proposed reforms for road. In the ARA's view, the recommendations fall well short of providing the framework necessary to ensure that future investment decisions in this industry are made in an efficient manner. The ARA is also disappointed with the scope of the recommendations made in relation to further reform of the rail infrastructure regulatory and investment framework.

The remainder of this section sets out the further areas of reform that the ARA considers are necessary to ensure investment in the freight industry as a whole is undertaken in an efficient manner in the future.

## 2.1. Proposals for Road

The emphasis of the PC's reform agenda for road appears to be the development of the Road Fund, which would be autonomous and make decisions in a transparent manner with stakeholder involvement. The ARA broadly endorses the adoption of an autonomous road infrastructure body and notes that significant benefits should flow from removing the political influence on price setting and investment decisions. While changing the institutional framework will go some way to eliminating the distortions that have emerged in pricing and investment decisions, it is important to recognise that, unless the underlying cost recovery model and pricing mechanism are also addressed, investment decisions within this industry will continue to be distorted.

Given the potential flow on effects of these inefficiencies to the rail industry and the broader economy it is imperative that:

- the investment decision making framework is improved through the adoption of common pricing principles and investment criteria across the road and rail infrastructure industries; and
- the distortions that currently prevail in the heavy vehicle cost recovery model and pricing mechanism are unwound with an emphasis placed on:
  - establishing a clear relationship between expenditure and revenues (either through charges or other sources of government funding); and
  - ensuring that road charges reflect actual cost impacts.

Whilst acknowledging the importance of these incentives, the PC's Discussion Draft does not propose a pricing and regulatory framework that will provide these incentives into the future.

Additionally, as part of the necessary framework for investment, it is important to take into consideration the costs that would be imposed on the alternative mode if a specific modal investment option was not undertaken. This highlights the need for an integrated forward looking freight infrastructure investment framework, rather than individual, mode specific investment evaluations.

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<sup>4</sup> Pg. 235, PC Progress in Rail Reform Inquiry Report 1999

Consider for example, a proposed upgrade to the rail network to meet anticipated increased freight volumes. The appropriate economic evaluation would consider both the costs and benefits of the proposed rail network, and also the benefits associated with avoiding increased costs for roads that would be necessary to meet the expected increase in freight demand if the proposed rail network upgrade was not undertaken. The current framework would not allow consideration of the benefits from avoiding the additional costs for roads, thereby distorting the efficient modal investment decision. In considering the consequences of under-investment in rail, it is thus important to also consider the long term costs of replacing and expanding the road network.

### **2.1.1. Common pricing and investment criteria**

The adoption of common pricing principles and investment criteria across road and rail infrastructure is of fundamental importance to ensuring efficient investment across the modes over time. The Australian Transport Council (ATC) guidelines on investment evaluation will go some way to achieving this consistency however, more can be done to ensure that the regulatory framework within both industries have the same efficiency focus. This could be achieved by adopting common pricing principles and an overarching efficiency objects clause similar to that proposed by the PC for Part IIIA of the *Trade Practices Act 1974*.

This form of consistency would, over time, ensure that investment decisions across the two modes are made by reference to the same objectives rather than the current situation in which road investments are considered on the basis of a broader cost-benefit analysis (which makes reference to a range of costs and benefits including social costs and benefits) and rail infrastructure investments are made by reference to economic efficiency and profitability criteria.

While consistent and objective investment criteria and pricing principles will pave the way for efficient investment decisions in the future they must be underpinned by a functional pricing mechanism which enables decision makers to align investment decisions with patterns of forecast usage. This requires the distortions that currently exist within the heavy vehicle cost recovery model and pricing mechanisms to be eliminated.

### **2.1.2. Eliminating the distortions in the cost recovery model and pricing mechanism**

Throughout the Discussion Draft the PC appears to acknowledge the poor investment incentives currently provided by heavy vehicle road charges and the significant benefits that would flow if road charges were based on forward looking efficient costs rather than the current backward looking cost recovery model which imposes no discipline on the manner in which costs are incurred.

...an efficient road pricing regime would provide signals to infrastructure users about the optimal use of, and to providers about the optimal investment in, the road network, rather than merely recover historical costs.<sup>5</sup>

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<sup>5</sup> Page 4.2, PC Draft Discussion Report

Heavy vehicle road-user charges, as currently determined and applied... offer, at best, weak signals to decision-makers about the desirable level and pattern of future road spending and, combined with funding arrangements for road spending, create incentives for road managers to preserve existing road assets rather than facilitating their optimal use.<sup>6</sup>

The principal advantage of adopting a forward-looking, life-cycle costing and pricing methodology for roads would be a much closer link between road charges and services consumed and provided.<sup>7</sup>

Ideally, prices should be set to reflect the economic rather than financial costs of providing infrastructure services, so that prices reflect the costs of efficiently providing services into the future, rather than actual capital costs already incurred.<sup>8</sup>

Furthermore, the PC has made assertions on the extent of heavy vehicle cost recovery (in total and by class) based on the NTC approach despite acknowledged weaknesses in the cost allocation process (such as national averaging, averaging within vehicle class) and the PC's inability to assess the validity of historic engineering paradigms.

Notwithstanding these acknowledgments the PC appears to have dismissed the need to undertake any further reform of the pricing structures and underlying cost recovery model by concluding that:<sup>9</sup>

...the 'transaction costs' of gathering information, monitoring use and other related tasks, may simply outweigh the benefits of more cost-reflective pricing — in this event, the status quo may be 'efficient', in the sense of being the best achievable given the constraints.

The PC's decision to dismiss this area of reform on the basis that the transaction costs 'may' outweigh the benefits appears to the ARA to be unsubstantiated and therefore unwarranted. That is, while the ARA acknowledges that the transaction costs incurred in reforming this aspect may be high at the outset these costs must be considered against the benefits that will flow, not only to road but to other freight modes and the broader economy. It is against this backdrop that changes must be considered. Given the importance of the road infrastructure industry the ARA is calling on the PC to give further consideration to this aspect.

### 2.1.3. Feasibility of a Road Fund

The report has sought feedback regarding the feasibility of setting up a road fund. In its description of the fund, the PC said the key requirement would be autonomy, requiring significant devolution of responsibility and decision making away from direct government involvement. While the ARA agrees with the underlying objectives of setting up an independent entity, in that it recognises the need to disaggregate a political agenda, the ARA believes that this is not enough. As will be discussed in the sections below, the problems within the current pricing regime would not be addressed with this suggestion alone.

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<sup>6</sup> Draft Finding 9.2

<sup>7</sup> Page 8.1, PC Draft Discussion Report

<sup>8</sup> Draft Finding 8.6

<sup>9</sup> Page 3.3, PC Draft Discussion Report

This is consistent with the ARA's proposal for a national regime that applies to both road and rail promoting the same objectives and promotes efficient pricing and investment for the benefit of land transport services. It appears, however, that the reluctance to propose a unified framework has been hampered by ignoring any potential gains to rail.<sup>10</sup>

Clearly, there are deficiencies in current road infrastructure pricing arrangements. Yet the implications of this for the competitive position of road relative to rail appear not to be significant, given the available evidence about the magnitude of road pricing distortions for major corridors, as well as the limited effects road infrastructure prices appear to have on modal choice.

The statement above highlights a significant theme of the draft report, that since modal shares are unlikely to be largely affected by road pricing reform, it is therefore not urgent.

Additionally, conclusions regarding modal choice disregard the potential for competitive neutrality to provide incentives to increase efficiency in rail. Furthermore, as rail provides a competitive constraint to road operators on inter-state corridors, adopting a revised pricing mechanism may be able to increase efficiency across both modes.

#### **2.1.4. Providing incentives to implement a Road Fund**

The PC has sought feedback on how to best address the problem of providing incentives for road agencies to undertake road investments in an efficient manner, given the dichotomy of revenue being collected by both the Federal and State jurisdictions.

In the ARA's view, this is not a unique problem to the road industry. Inter-jurisdictional incentives can be achieved through a model similar to that used to drive the National Competition Policy (NCP). Significant reforms were achieved through the provision of payments to states based on the achievement of a mutually agreed reform program. A similar approach could be used to provide incentives for the efficient provision of road infrastructure. By developing a nationally agreed framework by the states for the evaluation of road investment decisions, federal funding of state road projects could be based on the extent of implementation of the agreed evaluation framework. Unlike the current situation where states receive funds on the basis of recovering all actual historical costs, this would provide some incentives to ensure that those funds were spent in accordance with a national road investment framework.

The difficulty with this approach would be in providing sufficient incentives for the states to be involved. Additional funding through sources such as the AusLink program might also be linked to the extent by which specific investment projects conform to the agreed road investment evaluation framework.

While the details of such a framework would require further development, this approach, in combination with reforms to the institutional framework for road pricing, could go some way to achieving the efficiency improvements necessary to the industry.

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<sup>10</sup> Page 11.2, PC Draft Discussion Report

More importantly there should be a common methodology for determining overall investment profiles across all transport projects, not just road in isolation. Getting the economic cost methodology correct and utilising a national investment evaluation framework through institutionalised reform through a body similar to an NTAC that provides overall policy directives through an Auslink program would be a better policy outcome.

## **2.2. Further reforms for the rail infrastructure industry**

The structural and regulatory reforms implemented in the rail infrastructure industry over the last fifteen years have delivered significant technical efficiency and labour productivity gains in the rail industry. While there have been considerable efficiency gains to date, further reforms of the regulatory regime can be made to ensure that any obstacles to efficient investment are removed.

One such obstacle currently plaguing the rail infrastructure industry is the level of regulatory duplication that persists in the industry. The rail infrastructure industry is currently overseen by six jurisdictional regulators each operating under alternative access regimes which differ in:

- the manner by which access is established;
- the stated objectives and principles of the regime;
- the roles and responsibilities accorded to the regulator; and
- the scope of the pricing principles used to establish the price of access.

The elimination of this regulatory duplication would reduce the regulatory burden faced by rail infrastructure providers and in turn ensure some consistency in regulatory decisions across networks. This consistency would provide infrastructure owners with some level of regulatory certainty and in so doing facilitate further investment in the industry.

While national consistency is desirable, the ARA is not proposing a “one size fits all” form of regulation. It is clear that various rail traffics require different approaches in a number of areas, both economic and functional. For example train path allocation mechanisms that suit intermodal trains are anathema to heavy haul bulk traffics as the basis of operation is fundamentally different. This can be accommodated by a single regulator as long as such differences are recognised.

Another obstacle that is faced by the non-bulk rail freight infrastructure industry relates to poor historic investment decisions which have limited the efficiency, reliability and flexibility attainable in this part of the industry relative to road. These issues need to be addressed if non-bulk rail services are to be able to reach their full potential rather than being constrained by historic investment decisions. To enable this to occur, a better balance must be struck between road and rail infrastructure funding.

## **2.3. Unlocking investment for expansion**

Finally, the PC should take into consideration the need to provide pricing reform to address the need for new investment to meet the anticipated freight service expansion.

The AusLink White Paper revealed the size of the challenge facing Australia. The Department of Transport and Regional Services (DOTARS) analysis concluded that it was not possible, or desirable, for road to shoulder the total growth burden as freight volumes grow. Clearly, if all growth was diverted to road, congestion costs would escalate as bottlenecks developed on our roads, response to customer delivery needs would be compromised, and Australia's international competitiveness would be affected. The social, economic, and environmental costs of adding new road capacity are prohibitively high in some areas. For some port shuttle road movements in metropolitan areas, it is not only too expensive, but logistically impossible to build new road capacity to hold off congestion problems.

The road industry and road authorities are valiantly attempting to implement reforms to enable the creaking road network to take on the increased load. Work is underway to head off a looming shortage in drivers, while proposals have been put forward for heavier and longer trucks. However, politicians realise that the battle to convince Australians to share highways with B-Triples will be a difficult one. In the USA, nine out of ten Americans are opposed to B-Triples,<sup>11</sup> and it seems unlikely that results of a similar survey in Australia would be dramatically different. The recent increase in Australian road fatalities involving articulated trucks would not have helped this situation.<sup>12</sup>

The logical answer to this series of dilemmas is a greater role for intermodalism, where certain segments of the freight task can be delivered via a combination of road and rail. While it still has its improvement opportunities, the Australian rail industry has been revitalised over the last 15 years, with substantial structural change. Privatisations and corporatisations have given it a commercial focus. In coal, rail has shown that it can invest for growth and drive significant productivity improvements which deliver bottom line results for transport customers. For example, between 1999 and 2005 Queensland Rail (QR) invested a total of \$1.4 billion in rolling stock and track to drive productivity improvements in the Queensland coal transport system. This investment has resulted in a:

- 16 per cent increase in locomotive productivity;
- 30 per cent increase in wagon productivity; and
- 25 per cent increase in gross tonnes per track kilometre.

In the Hunter Valley, the coal supply chain participants have focussed on improving productivity of the transport chain by improving the efficiency and coordination between various elements of the chain to deliver increased throughput from an estimated 65mTpa 3 to 4 years ago to 80 to 85mTpa. However, substantial investment in transport infrastructure (rail, rollingstock and ports) is now needed to deliver the step change capacity improvements to meet forecasted growth in coal demand in the Hunter Valley. To date, the development of investment programs has been undertaken on a consultative basis involving all elements of the transport chain.

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<sup>11</sup> Coalition Against Bigger Trucks, [www.cabt.org](http://www.cabt.org)

<sup>12</sup> Australian Transport Safety Bureau, Road Deaths Monthly Bulletin, July 2006

There are also examples of step change investment in the inter-capital city rail freight sector. A number of reforms, including the establishment of National Rail (NR) and the Australian Rail Track Corporation (ARTC), led to productivity gains. We saw the completion of the standard gauge network, infrastructure improvements to allow longer trains, and the introduction of the highly-efficient NR class locomotives. Rail increased its share of the East-West market considerably.

Innovation in rail was substantial for the first few years following the reforms. Freight on rail increased with innovative new wagon designs (most notably, wagons to transport new cars between capital cities). New entrants like SCT developed innovative business models and established successful niches in the market. Smaller operators like CRT and Lachlan Valley challenged the traditional model for running port shuttle operations.

Strong investment continues in the East-West sector, and in the booming coal and mineral traffic network. For grain networks, and East Coast general rail freight, the picture is less impressive. Rail has been losing share, locomotive and wagon replacement programs are overdue, and major terminal investments have been lagging. Rail port shuttle operations are becoming increasingly less viable, despite clear Government policy commitments to rail.

The problem for rail, and ultimately for Australia, given the freight growth predicted, is the erosion of rail's offer in this segment of the marketplace. As the PC has found, while price is important, the just-in-time approach to manufacturing has increased the importance of rail availability (the ability to offer market-desired pick-up and delivery times) and reliability (arrival at the scheduled time). Rail's prospects for playing its full part in dealing with the freight task growth, depend on investments which will improve reliability and availability.

Service quality can be improved by transit times on particular corridors. An excellent example of this is Melbourne to Brisbane, where rail is currently unable to offer a reliable next day plus one service to customers because transit times are typically around 35 hours. Under the Far Western corridor route identified in the North-South Rail Corridor study, rail's transit time will drop sufficiently to allow rail to offer a late pickup in Melbourne (say 9 pm on a Monday) with freight available to the customer at 6 am on a Wednesday in Brisbane.

The current investment program being undertaken by ARTC on the existing Melbourne–Sydney–Brisbane rail corridor is aimed at significantly improving reliability and transit time. At the completion of the more than \$1.6 billion investment program, transit time is planned to decrease to 11.5 hours Melbourne-Sydney, 15.5 hours Sydney-Brisbane and 27.0 hours Melbourne-Brisbane. These transit times will therefore meet the threshold requirements for rail competitiveness (matching the Far Western corridor route performance described above) and a planned outcome of this is a significant increase in intermodal traffic to and from Melbourne-Sydney, Melbourne-Brisbane and Sydney-Brisbane.

The other crucial element in unlocking this potential however, is complementary and timely above rail investment, as identified by DOTARS in its submission. These investments in terminals and rolling stock are also crucial to improving rail's service quality, and allowing rail to make a real difference in preventing widespread national road congestion.

Overall, rail's investment record continues to be strong, with more than \$1 billion invested in 2004/05 alone. This investment however, other than for booming coal and minerals traffic, is

designed to deliver a steady-state market outcome, which at best holds rail's market share at current levels. On the PC's analysis, even this target is not being met with rail continuing to lose market share to road operators.

The critical issue for Australia's future is addressing the lack of incentives for step change investments which will relieve the pressure on our overburdened highways. The difficulty is that step change rail investments (track, rollingstock and terminals) are extremely capital-intensive, largely immovable, and lumpy. In the current uncertain land transport environment, with no clear national policy direction, important above and below rail investments are proving difficult to sell to commercially-focussed Boards of Directors. A national transport pricing and investment framework to address these incentives is required.

### 3. A definitive answer on economic costs is required

#### 3.1. An examination of the PC's approach

As the ARA pointed out in its earlier submission, the development of an infrastructure pricing regime that provides incentives for efficient investment in, and use of, transport infrastructure is important to ensuring that the future freight transport task can be effectively met.

A pricing regime that provides such incentives requires:

- an estimate of the total economic costs of infrastructure provision;
- an understanding of the marginal costs and common costs associated with infrastructure use by operators with different use characteristics; and
- a methodology for allocating common costs between different users that minimises distortions in the use of the infrastructure.

A related area is how subsidies are provided for each of the two forms of freight infrastructure. The interaction between subsidies and the road and rail pricing regimes is therefore the final area which needs critical reform.

The PC's approach to each of these issues in the Draft Discussion Report is considered in detail below.

##### 3.1.1. Total economic costs in infrastructure pricing

The significant reforms undertaken by the rail industry in the early 1980's sought to address each of these pricing regime elements, to provide better incentives for efficiency improvements. As part of these reforms, the economic costs of rail infrastructure were calculated. Given that rail businesses were predominately government owned and, at that time, only recently vertically separated, calculating the economic costs was a difficult task. In particular, information was scarce and difficult to verify, in part because many of the below rail assets were taxpayer funded and government built.

The entire rail pricing regime was reformed through the application of access regulation, within the floor-ceiling price regime. This was to ensure that rail operators efficiently paid at



least the incremental costs associated with using rail infrastructure, and contributed to common costs to the extent feasible given competition between freight transport modes.

Allocation of common costs was therefore undertaken on a negotiated basis, reflecting the ability of freight operators to pay, which is in turn bound by competition with other modes of freight transport.

Although it was acknowledged by the PC that rail is still dependent on subsidies, it can be said that considerable progress has been made relative to road over the same period of time. The reforms in the rail sector can be characterised as delivering improved incentives for the efficient provision of infrastructure services into the future, and were a necessary step for the industry to have taken to ensure improved competitiveness into the future.

For road however, the story is yet to unfold. While the PC acknowledges in Draft Finding 8.6 that “prices should be set to reflect the economic rather than financial costs of providing infrastructure services”, the PC dismisses concerns regarding the current level of economic cost recovery of road infrastructure costs by concluding that:<sup>13</sup>

Based on the most recent data available, road user charge revenues from heavy vehicles more than cover their attributable infrastructure costs and just cover their fully allocated costs.

The PC acknowledges that an understanding of the economic costs incurred in the provision of road and rail infrastructure is a critical ingredient for any pricing framework, however they concur with the views expressed by the (NTC) by stating that:<sup>14</sup>

the informational requirements for assessing economic costs for the network as a whole are likely to be formidable.

This seems to imply that the PC believes there is little benefit from examining the *economic costs* of road infrastructure provision, or at best, the benefits arising from estimating the *economic costs* are unlikely to outweigh the ‘formidable’ costs. This conclusion appears to be based on the modelling undertaken by the PC that indicates that increases in road charges are not likely to result in significant shifts in freight transport to rail.

This view however fails to acknowledge three issues:

- First, while the PC’s modelling indicates that increases in the price of road is unlikely to result in a significant shift in freight from road to rail transport, it ignores the competitive incentives that are created at the margin as road and rail operators compete for new freight demand. The importance of competitive pressures between road and rail demonstrates why the rail industry is so concerned with road pricing, as indicated in its submissions throughout this inquiry;
- Second, the important role economic costs play in providing incentives for efficient infrastructure provision into the future. It is impossible with a financial cost methodology

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<sup>13</sup> Draft Finding 4.1

<sup>14</sup> Page 8.15, PC Draft Discussion Report

to know whether infrastructure investment is necessary or efficiently being provided. Similarly it is impossible to know whether the ‘right’ costs are being allocated to vehicle types on the basis of the cost drivers for infrastructure provision; and

- Third, how the price elasticity might be affected by current planned rail track investments designed to improve the service quality of rail freight operators.

The intuition on these issues is further compelling when the efficiency benefits achieved in rail are considered, in part due to the competitive pressures the industry has faced, as it seeks to competitively capture part of the growing freight task.

It is these competitive pressures that motivate the rail industry to be so concerned about the road charging regime. In the absence of concern about these competitive pressures, there would be no reason for the rail industry to be concerned about road infrastructure charging. This impacts on the incentives faced by rail operators to provide services at least cost to maintain market share, and also detrimentally on the incentives for investment because it does not allow for sufficient recovery of common costs.

As outlined by the PC, the financial cost methodology is likely to approximate an economic cost approach, assuming that the road network is not growing through time. Since the PAYGO approach approximates the economic costs, the PC does not appear too concerned with its ongoing application. There are however some additional issues that need further investigation:

- problems with the data used to calculate PAYGO. There are currently no effective incentives for the proper estimation of the costs associated with road investment by state jurisdictions. Presumably, each state is likely to estimate road expenditure differently, and without some form of review process, it would be difficult to conclude that the current approach will approximate an independent evaluation of the economic costs; and
- whether PAYGO provides sufficient incentives for efficient road infrastructure investment. Since the methodology simply passes the actual historical infrastructure costs onto road users, there are no incentives for road infrastructure agencies to consider more efficient methods of providing infrastructure to meet road needs. Similarly, there is no incentive to properly understand the cost drivers – further affecting the evidence that road users are properly having road infrastructure costs attributed to them.

Given there is so much uncertainty underlying the data used by the NTC to calculate the attributable costs to heavy vehicles, it appears very premature for the PC to conclude that there is no ‘inherent subsidy’ for road relative to rail. In reality, at this time and based on the available evidence, no one really knows. It will be important to provide an information basis for the future reforms through recommending that a detailed economic cost study be undertaken.

The final area that has been considered as part of its examination of the total costs of road and rail infrastructure provision is the costs associated with the external impacts of road and rail infrastructure use. The PC correctly acknowledges that many of these costs are already internalised into operating costs, for example through costs associated with safety regulation, insurance, legal liability, etc.

For any outstanding external costs, these should be quantified by a future study of the economic costs of road and rail infrastructure provision. Importantly, the current costs should be compared against the benefits associated with each external issue, to ensure that an appropriate amount of cost is being set aside to account for the external impact.

### **3.1.2. Allocating total costs between marginal and common costs**

The NTC has undertaken a number of studies to determine the proper allocation of total road costs between marginal and common costs. This issue is however still unclear, and needs further independent reviewing. This is particularly because the studies are traditionally based on engineering assessments, rather than through road agencies seeking to understand the actual cost drivers for specific infrastructure investment decisions.

This suggests that there is a significant amount of further work required before a better understanding of marginal versus common costs can be achieved. As acknowledged by the PC, there are likely to be significant benefits arising from such work. This suggests that this should be an area of particular priority to support the future pricing reforms.

### **3.1.3. Methodology for allocating common costs**

The final step following an understanding of the appropriate split between marginal and common costs is to determine the appropriate methodology for allocating common costs amongst users.

For rail, this is undertaken through negotiation between rail operators and infrastructure providers on the basis of ability to pay. In effect, this is analogous to what would be expected from a 'Ramsey pricing' approach, where prices are based on the minimum distortions to the use of rail infrastructure. This results in bulk commodities such as coal and iron-ore paying the entire common costs, while for other freight forms, including bulk grain, not all common costs are recovered from users. Negotiation thereby delivers a good approximation of the efficient allocation of common costs.

For road however, the NTC methodology is used to allocate common costs amongst vehicle types. As pointed out by the PC this does not necessarily ensure that the vehicle types are paying an appropriate amount of the common costs:<sup>15</sup>

The current road user charging system results in significant cross-subsidies within some vehicle classes. Vehicles travelling longer than average distances and/or carrying heavier than average loads are, all else equal, cross-subsidised by other vehicles within the class. Similarly, vehicles that travel more than average on higher unit cost roads (such as local roads) are, all else equal, cross-subsidised by those using lower cost parts of the network.

The Discussion Draft recognises that the allocation of these costs is problematic, particularly the difficulties of adopting a Ramsey pricing approach. Putting the difficulties of ascribing different values to different truck types aside, heavy vehicles are allocated 7.6 per cent of the \$3.9b of common costs. Unfortunately, the PC does not ultimately provide any rationale for the adoption of the current allocation of common costs between passenger and freight

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<sup>15</sup> Draft Finding 4.10

vehicles. However the report does conclude that road user charges are insignificant in determining modal share. It therefore raises the question as to whether this allocation of common costs is appropriate under Ramsey pricing principles. One would expect the low demand elasticity would allow for heavy vehicles to absorb a significantly higher proportion of common costs without an effect on market share.

Given the importance of these issues it would be appropriate in the Final Report for the PC to recommend an approach to resolving these problems as a matter of priority into the future.

### **3.1.4. Subsidies for road and rail**

The last area that requires further focus in the future reforms is an understanding of the relative subsidy between road and rail infrastructure provision. The PC indicates that:<sup>16</sup>

The evidence to support the contention that road freight is subsidised *relative* to rail on either the inter-capital corridors or in regional areas (externalities aside) is neither conclusive nor compelling.

As outlined earlier, it is difficult to substantiate such a statement given that the economic costs of road infrastructure are not known. However irrespective of the validity of the evidence on relative subsidies, the importance of understanding the relative subsidy is two-fold as it allows for:

- transparency in the allocation of public funds between road and rail infrastructure; and
- the proper economic assessment of future freight infrastructure assessment.

It is therefore important for the PC to determine the size of the relative subsidy, even if it is small, as it will allow the PC's recommendations on the extension of the AusLink programme funding principles to be effectively implemented.

The key message of this section is that there have been considerable efficiency benefits in the rail industry arising from the calculation of the economic costs of rail infrastructure provision, the determination of marginal cost/common costs for specific rail routes and the determination of a methodology for allocating common costs. The reforms were indeed 'formidable', however the benefits of this work have clearly outweighed the costs.

The road infrastructure sector in contrast, is awaiting its reform opportunity. The PC's draft report, while acknowledging many of these issues, seems to downplay their importance for providing incentives for ongoing efficiency improvements. It is our hope that the final report will make a number of recommendations to provide a reform path in regards to road efficiency incentives.

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<sup>16</sup> Page 7.8, PC Draft Discussion Report

In the remainder of this section the ARA provides its views on the PC's approach to the question of economic costs before making a number of specific recommendations for consideration in the finalisation of the review.

### **3.2. Economic costs in the new road pricing reforms**

As outlined in brief above, the ARA believes that there are four areas that should be focused on by the PC in relation to the costs of road infrastructure. By focusing on these areas, there are likely to be significant benefits to the road freight sector, in addition to the competitive benefits for rail. These areas are:

- calculating the economic costs of road infrastructure provision;
- reviewing the methodology used to allocate road costs between passenger and heavy vehicles, and as between different types of heavy vehicles;
- developing road prices that provide appropriate infrastructure usage signals by focusing on the use of marginal cost pricing and allocating common economic costs to minimise usage distortions, particularly between freight modes; and
- moving toward a more cost reflective platform such as mass-distance charging.

The ARA's recommendations on each of these areas are provided below.

#### **3.2.1. Calculating the economic costs of road infrastructure**

Given the PC's acknowledgement of the importance of calculating the economic costs of road infrastructure provision to provide appropriate incentives for efficiency, there are a number of 'next steps' that the ARA suggests should be recommended in the Final Report, in the absence of the PC being able to undertake these assessments itself. These are:

- a review of the data provided by each jurisdiction, including an independent verification and audit process, and the development of common cost categories and definitions. This will ensure that all of the relevant road infrastructure costs are considered within each jurisdiction;
- a review of the operating costs allocated to road infrastructure, including how these costs are incurred as a result of different vehicle users; and
- an assessment of the relative efficiency of road infrastructure investment in each jurisdiction.

All of these recommended 'next steps' are designed to ensure that an assessment is made of whether current data on road infrastructure provision are accurate, and represents the efficient costs of road infrastructure provision. This is a critical first stage to developing the 'right' efficiency incentives for the road industry going forward.

Indeed, this approach is also likely to have additional benefits as it will go some way to aligning the cost recovery approach between road and rail infrastructure, with associated likely competitive incentive benefits.

Importantly, such recommendations would logically lead the PC to the conclusion that the available evidence is sufficiently uncertain to conclude whether road, or indeed rail, operators are meeting their full economic costs. This would allow a transparent basis for assessing the relative subsidisation between road and rail infrastructure, the economic case for subsidising road or rail infrastructure in the future, and support the development of effective cost-benefit analysis for implementation of the AusLink program investments.

In addition, as the PC identifies:<sup>17</sup>

A benefit of using DORC (or GRV) valuations is that the replacement cost of assets is most relevant to determining whether full economic costs are being met. If infrastructure providers are not covering their full economic costs – even though they may be profitable based on the book value of their assets – they may not be viable in the long-run.

While this statement was made in the context of the PC's review of the costs of rail infrastructure, the principle is sufficiently generalised that it should also be applied to road infrastructure. For this reason the ARA recommends that:

- a full economic cost assessment of road be undertaken, including an estimate of the replacement costs of road infrastructure, to allow a proper assessment of the viability of road infrastructure provision given the current charging regimes.

### **3.2.2. Reviewing the methodology for allocation of total economic costs between marginal and common costs, and the subsequent allocation of common costs between vehicle types**

Following an assessment of the economic costs, the second critical issue on the path to future road reform is to reassess the methodology for cost allocation between different users of the road network. The ARA acknowledges that there are different views on the appropriate bases for cost allocation and that this issue has been studied at length in the past; however it is a sufficiently important issue to justify further review and debate as part of the new road pricing reform agenda.

In principle, the common costs associated with the provision of road and rail infrastructure should be allocated in a way so as to minimise the potential for distortions in the use of each form of infrastructure.

The common cost issue has two parts. First, the proportion of costs that should be allocated to common costs, compared with directly to classes of users. Second, how the determined common costs should be appropriately allocated between different users.

It is unfortunate that the PC has been unable to provide further guidance on either of these issues, other than simply acknowledging the debate. As the PC recognises in the context of an examination of relative subsidies between road and rail infrastructure that:<sup>18</sup>

even though heavy vehicles are currently allocated a *relatively low share* of common costs (7 per cent) this does not imply a subsidy.

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<sup>17</sup> Page 5.9, PC Draft Discussion Report

<sup>18</sup> Page 4.22, PC Draft Discussion Report, emphasis added.

Without a proper assessment, it is difficult to believe that only 7 per cent of common costs should be attributed to heavy vehicles particularly given that many roads are built to a sufficient condition to withstand the loads required by heavy vehicles.

It is therefore important for the PC to recommend in the final report that two further reviews be undertaken. The first into the proportion of costs allocated to common costs. Ideally this review should take into consideration a number of issues in reaching its conclusions including:

- costs that are directly attributable to each vehicle type;
- efficiency in the use and provision of, road and **rail** infrastructure; and
- minimising distortions in the use of infrastructure by each vehicle type.

The second is a study into the allocation of costs between vehicle types. This is to ensure that classes of vehicles are paying the ‘right’ amount, in accordance with their use of infrastructure. Whilst acknowledging that B-Doubles as a class do not cover their network-wide costs, the PC fails to consider how to address this issue going forward. This is a further critical area in the ongoing reforms into road infrastructure pricing.

### **3.2.3. Review of relative subsidies**

The final area that the PC should acknowledge in the final report is the relative subsidy between road and rail infrastructure provision.

As outlined earlier, the ARA believes that it is important to quantify these differences as a ‘first step’ to developing pricing reforms that seek to improve incentives for ongoing efficiency improvements.

The PC should therefore:

- recommend that a study be undertaken to quantify the relative subsidies between road and rail infrastructure provision, particularly for the major interstate freight routes.

### **3.2.4. Toward more cost-reflective pricing**

The PC found that the introduction of more cost-reflective pricing is feasible, given the introduction of new technology. The ARA supports the finding that location-based charging on major freight corridors has the potential to bring significant efficiency benefits. In the first instance, the adoption of mass-distance charges could serve as a platform for location-based charges. It needs to be recognised however that simple distance based charging alone is very much a ‘second best’ solution and unlikely to deliver substantially more accuracy in pricing than existing arrangements. Furthermore, if applied without reforming the current NTC cost allocation methodology, it could lead to worse outcomes. Care should therefore be exercised when implementing mass-distance charges for roads.

It was noted in the Discussion Draft that the potential benefits from the introduction of new charging systems will be limited by the institutional environment in which they lie. It is in this regard that the ARA stresses the importance of integrated land transport reform.

## 4. The Way Forward to Integrated Infrastructure Reform

The genesis of the PC's review into road and rail infrastructure pricing was an acknowledgement by the Council of Australian Governments (COAG 2006) that there are important reforms needed in the freight transport sector to ensure that Australia's future transport task is met both efficiently and effectively.

The PC acknowledges that there is a need for change, especially in the incentives provided for investment in road infrastructure given "the lack of commercial discipline and market signals under current institutional arrangements [which] may detract from the efficiency of road provision".<sup>19</sup> It will be important for the PC to develop an effective reform framework to provide this commercial discipline in road infrastructure provision.

In some sense, this is the natural progression of the significant reforms that have occurred in many monopoly industries over the last 10 years. As noted in our earlier submission, "road infrastructure is the only monopoly infrastructure that has its pricing determined through a popular vote".<sup>20</sup> While reforms are often 'formidable', this should not absolve those tasked with driving reform from pursuing the reform challenge.

In the ARA's view, the road industry is in need of significant pricing reform, and there are ongoing improvements that can be made in the rail industry. The PC's draft report however continues to examine these industries in isolation, without focusing on how to maximise efficiency in the entire freight task. While improvements in each industry separately will deliver benefits, a competitively neutral pricing regime has the potential to jointly deliver even greater benefits. The ARA encourages the PC to provide some discussion in the final report of the scope to improve the joint efficiency of freight transport provision through pricing reform.

Given that the need for investment and pricing reform was discussed in the previous sections, the particular framework in which to integrate and implement change for both modes is outlined below.

Firstly though, this section examines in greater detail the issue of competitive neutrality, and the benefits that may arise from examining this issue further. In addition, we examine the PC's conclusions on the likelihood of modal shift arising from relative price changes. This is an area of particular focus because it appears that the PC's main justification for not focusing on competitive neutrality issues is a view that price changes are unlikely to lead to shifts in the proportion of freight carried by each mode. In the ARA's view, this is a particularly strong conclusion from the evidence, and is examined in further detail below.

### 4.1. Benefits from more competitively neutral pricing

As indicated earlier, the ARA believes that the PC has currently focussed too heavily on the need to reform both road and rail pricing separately, without due regard to the potential

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<sup>19</sup> Page 3.10, PC Draft Discussion Report

<sup>20</sup> ARA Submission, section 3



benefits that are likely to arise from a consideration of the two sectors together. In the ARA's view these benefits are:

- improved incentives for ongoing efficiency improvement, both amongst operators directly and indirectly to infrastructure providers; and
- efficiency in the share of freight undertaken by road and rail infrastructure.

The PC has predominately focussed on the latter, and through its analysis of likely changes in freight shares arising from changes in road prices, concluded that competitive neutrality is not likely to deliver improved efficiency.

Nevertheless, competitively neutral prices can improve the incentives that both road and rail operators have for improved efficiency, particularly at the margin as each mode competes to win a share of the growing freight task. Rail freight operators continuously seek to lower the cost of providing freight services, as they seek to capture the marginal freight task and improve market share and profitability. This delivers benefits across the entire rail freight operations, including for the provision of bulk freight rail services.

A pricing system for road that also provides competitively neutral price signals can improve these marginal competitive benefits to road operators. Therefore, the benefits associated with improving competition for the marginal freight task should not be so lightly dismissed by the PC, and requires further examination in the final report.

To achieve improved signals for competitiveness between road and rail operators, the ARA recommends that the PC consider the following:

- the enunciation of 'core pricing principles' in line with the terms of reference, that necessarily apply to both road and rail pricing and can be used as the basis for future pricing approaches to achieve COAG's transport reform vision;
- identifying the differences in the current pricing approaches between road and rail, to quantify the potential distortions in the competitive incentives between each mode, with a view to recommending approaches to removing these distortions; and
- that improvements in road pricing, in line with any recommended 'core pricing principles' can continue to drive efficiency improvements in the rail industry as competition is enhanced.

Finally, the ARA feels that the scope of the contestable market, particularly as it relates to competition for the growing freight task, has not been adequately addressed in the Draft Discussion Report. The disparity between the two pricing regimes is overlooked on account of road being found to cost recover and any price change having at best a small impact on modal shares. This conclusion however is discussed in further detail below. Despite that though, there still remains potential for increased efficiency, even if for road alone. It was noted that "[i]f productivity increased by 10% in road then GDP expected to increase by \$5.2

billion.”<sup>21</sup> This suggests there are considerable benefits likely to arise by tackling the ‘formidable’ road reform task.

## 4.2. Impact on road freight transport demand

The PC undertook a detailed independent analysis of the likely impact of changes in road prices would have on rail freight demand.<sup>22</sup> This study was, in part, used to examine the likely benefits arising from improving competitive neutrality in pricing between the road and rail industries.

Importantly, the conclusion that minimal modal substitution would occur given any increase in road pricing, is based on elasticity assumptions that should be treated with some caution as noted by the PC:<sup>23</sup>

...there are, however, three factors that limit the applicability of the results presented...First, the data are aggregated across corridors and commodities...Second, the data are based on historical trends over approximately the past 35 years...Finally, the data, especially the price series, may be overly influenced by non-market factors.

The limitations of these elasticity estimates therefore reduce the conclusions that should be drawn from the modelling. At best, the results may indicate little modal substitution resulting from changes in road prices; however this says little about the competitive incentives that may be created from improving competitive neutrality, particularly on the inter-state corridors. It is likely that there is significant competitive pressure both in terms of price and service quality on the inter-state rail corridors that has implications for incentives for efficiency improvements for both road and rail freight operators.

The PC’s elasticity estimates also reflect the current service quality levels provided between road and rail freight operators. With the substantial investment currently underway on the North-South rail corridor, the cross-price elasticity is likely to increase, as rail operators are able to provide a rail freight service that is more substitutable for road freight transport.

The PC’s elasticity modelling should therefore be treated with some caution because it does not allow any assessment of the incentives created by competitive pressures to increase market share particularly amongst the growing freight task. Improving the competitive neutrality is very likely to improve incentives for improved operational efficiency by rail operators.

This conclusion on the benefit of improving the competitive incentives between road and rail infrastructure operation and provision is consistent with the ARA’s long standing view that road freight transport provides a competitive constraint on rail operators, particularly on inter-state corridors. Resolving any differences in infrastructure pricing arrangements between road and rail can therefore only improve the competitive incentives on both sectors.

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<sup>21</sup> Page G.1, PC Draft Discussion Report

<sup>22</sup> Appendix G, PC Draft Discussion Report

<sup>23</sup> Page F.23, PC Draft Discussion Report.

Therefore, what is needed is a broader policy framework in order to achieve the aforementioned benefits of integrated reform.

### 4.3. Framework for Reform

The PC Draft Discussion Report provides a starting point for necessary reform in the freight transport sector. It is however essential that this opportunity be seized and an integrated national reform agenda be adopted. As discussed throughout this submission, the essential objectives of this package are to promote efficient investment and use of land freight infrastructure and to ensure that a competitively neutral environment exists to encourage optimal modal share for the greater benefit of the community.

An integrated national reform package should contain the following elements: the policy framework, consistent pricing, and public policy driven improvements.

#### 4.3.1. Policy Framework

Australia is still without a clear national policy in relation to freight transport. The National Transport Advisory Council (NTAC), whose establishment was foreshadowed in the original AusLink White Paper, has yet to be formed. At the time, NTAC was viewed as the crucial policy component of the AusLink structure. In a number of submissions, reference to this need is made:

The PC should recommend to the Council of Australian Governments (COAG) that there is a need to gain agreement across jurisdictions, industry and the public for a national set of transport and freight policy objectives.<sup>24</sup>

In the absence of NTAC or a similar mechanism, the objective of meeting strategic policy gaps through *AusLink* will continue to be hindered.<sup>25</sup>

The ARA believes a similar body should be established to guide development of the national effort to provide transport capacity for the future. Moreover, the ARA supports using Community Service Obligations (CSOs) that are part of a clear mandate that addresses industry wide productivity benefits. As discussed in section 2, these could be awarded in a similar manner to the NCP payments but under an AusLink framework, whereby NTAC establishes a full directive. It is imperative that a framework encompassing the entire industry is established.

Furthermore, with the PC considering the use of a road fund, it is obvious that independence in transport policy must be established. However, a road fund alone cannot achieve what is necessary for an efficient land freight sector. The current inefficient pricing mechanisms must also be addressed.

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<sup>24</sup> Page 3, Queensland Government Submission, May 2006

<sup>25</sup> Page.8, NSW Government Submission, June 2006

### **4.3.2. Consistent Pricing**

The PC has found significant complexity and difference in the pricing systems for road and rail. As noted in our discussion of costs in section 3, the PC has been unable to assess the full economic and social costs for both modes. This problem results in an inability to correctly assess whether there are any competitive neutrality implications inherent in the current pricing structure. The way forward, as discussed earlier, should involve a more focussed attempt to resolve some key analytical questions.

The goal however, should be to deliver a simple, consistent pricing approach that establishes competitive neutrality between roads and rail. This will allow the sector to capitalise on the benefits from increased competition between and within each mode. There are many options available, including a transitional path to full economic cost recovery for both modes, or marginal cost pricing for both modes (as implemented in Sweden). The important task is to achieve maximum consistency that provides incentives for efficient investment.

In respect of the former option, full economic cost could be achieved in the long run through the substantial growth and infrastructure utilisation forecasted without relying on pricing. If left to compete neutrally, the most efficient mode to meet a particular transport task will gain the volume, improve cost recovery and attract investment. The less competitive mode will phase out of the market over time. Where intermodalism delivers the most efficient outcome for transport in a market, the optimal mix of road and rail infrastructure will result and become sustainable.

Moreover the government must present its role in providing subsidies in a clear and directed manner.

### **4.3.3. Public Policy Driven Improvements**

In its Draft Discussion Report, the PC included a list of key productivity improvements for both road and rail:

- achieving higher mass limits for trucks;
- extension of performance based standards allow for greater flexibility to designers and operators of road vehicles to meet objectives in the most cost-effective way;
- improving coordination between above and below rail operators;
- synchronising investments in track, terminals and rollingstock;
- promotion of more responsive signalling and communication systems to better enable access to train paths and thus increase track capacity; and
- determining the optimal rail design standards to achieve increased productivity, for example higher axle load limits and greater clearance to enable increased use of double-stacking.

Government decisions to facilitate mode-specific productivity improvements must be aligned with an overall policy framework designed to ease the burden on national highways, as well

as use them most effectively. In line with this goal, the rail industry believes the PC package is a good foundation for us to build upon. The ARA proposes that specific and targeted measures be articulated for the land freight industry.

#### 4.3.3.1. Incentive package for Intermodal Investment

The rejection of the NTC's Third Determination reflects the reluctance to have larger freight vehicles on the road when shared with passenger vehicles. Thus the charges were determined so as to not exceed those of road trains. As this has a competitive effect on the contestable market by reducing costs to B-Doubles, a similar policy should consider how rail can effectively reduce congestion on the nation's roads.

An integrated national approach to transport productivity would consider pricing, investment subsidies and other incentives to reduce congestion on roads such as new generation locomotives and more efficient intermodal terminal operations.

For example, in the U.S.A a bi-partisan Bill was presented to the Senate that would provide for a 25 per cent tax credit. The credit would be for any business investing in new rail track, intermodal facilities, rail yards, locomotives or other rail infrastructure expansion projects. Railroads, ports, shippers, trucking companies and other transportation-related businesses would be eligible for the credit.

#### 4.3.3.2. Specific Strategy for Regional Freight and Port Shuttles

There is reason to believe that, given the level of uncertainty regarding subsidies and known cross-subsidisation between users on local roads, competitive neutrality may be a particular concern in regional areas. Although it is noted that both road and rail receive subsidies, the combined impacts of the NTC's averaging approach and the lower quality of these roads result in an extremely low level of cost recovery for certain classes of road operator. The NTC found that highly utilised high-mass vehicles using rural and regional roads "incur a greater cost than the average, yet recover a little less than a third of that cost."<sup>26</sup>

All levels of government are currently paying for this under-recovery. Governments and industry need to agree on a regional transport strategy which addresses these concerns transparently. No incentive currently exists for rail companies to continue existing port shuttle operations, or attempt to build new services. Despite government policy commitments to rail, the operational costs for rail are significantly higher than the road equivalent. From a cost perspective it may be simple to conclude that all traffic should shift to road. Yet all agree that a road-only port shuttle operation would be disastrous for congestion, safety and the environment. Addressing this problem will require more than setting modal targets.

A long-term integrated approach to infrastructure pricing and subsidisation is the necessary action to meet growing transport demand.

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<sup>26</sup> Page 67, NTC Submission

## 5. Additional information sought by the PC

Whilst the rail industry has undergone significant change over the last ten years, the PC's draft report puts forth some constructive suggestions for further improvement. It was noted that there is sizable regulatory fragmentation: "considerable scope for greater national consistency and coordination in rail access regimes, pricing and other regulatory frameworks including operational practices and technical standards".<sup>27</sup> Thus, the PC acknowledges that the current form of access regulation provides the same pricing principles, but there are a number of differences in the way the access regimes operate, creating inconsistencies across jurisdictions.

The PC has sought specific feedback on a range of rail related issues. Two particular issues that the ARA wishes to provide comments are:

- the potential costs and benefits of reintegration on specific rail networks; and
- the appropriateness of current access regulation.

The ARA's views on each of these issues are presented below.

### **5.1. Costs and benefits of re-integration of above and below rail segments**

The ARA believes there may be some merit in considering the re-integration of above and below rail segments in a number of areas where each segment is unlikely to be commercially viable on its own.

This means that the scope for re-integration may be limited to regional rail networks, dominated by the transportation of bulk grain. Even on these networks, which operate under both vertically integrated and separate structures in each state, there is not strong evidence of differentials in investment.

In recent years, above rail competition has emerged particularly in the North-South and East-West interstate rail corridors. In combination with other rail industry reforms, this has delivered some benefits in terms of operational efficiency improvements on these routes. Importantly, vertical separation has not impeded continued rail infrastructure investment by the ARTC.

### **5.2. Appropriateness of access regulation**

The ARA is strongly supportive of reducing the level and complexity of regulation where it is appropriate and specifically in areas, such as the interstate rail network, where there is effective market competition.

Importantly, this does not necessarily mean that access regulation should be entirely revoked. Rather, the ARA supports a consistent approach to the regulation of rail infrastructure access that delivers predictable decisions in a simplified regime. The intensity of regulation should

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<sup>27</sup> Draft Finding 10.4

reflect the existence of substantial market power (where price control is needed), and any incentives to prevent or constrain access, such as may exist in a vertically integrated structure (where mechanisms to prevent preferential self dealing are needed).

To this end, the ARA supports a review of the current framework for delivering rail access regulation in Australia with a view to reducing the regulatory costs associated with its duplication and implementation and creating stronger incentives for efficient investment.

## 6. Concluding remarks

The PC review has addressed a highly complex area under an unrealistic time constraint. This has necessarily restricted the PC's ability to research the subject of the inquiry and also has made it difficult for participants to provide the PC with detailed evidence. Ideally, the PC would have had the time and resources to progress the debate in many of the areas where there is still much uncertainty. As the PC has identified in the Discussion Draft Report, there is a clear need for additional work to be undertaken in order to inform future land transport policy development. The ARA supports the PC in recommending that such work be undertaken as a matter of urgency.

The ARA suggests the key features for the ongoing review tasks that can best contribute to the overall policy goal of providing greater incentives for improved efficiency in the road and rail infrastructure service provision industries are:

- development of common pricing and investment criteria applicable to both road and rail infrastructure;
- greater focus on providing incentives for efficient freight infrastructure investment;
- reviewing current regulatory arrangements for the rail industry and examining the benefits and scope for eliminating regulatory duplication;
- reviewing the data used within the current PAYGO methodology and whether it provides sufficient incentives for infrastructure investment;
- an assessment of the full economic costs of road infrastructure provision;
- a review of the allocation of common costs between vehicle types; and
- a study to estimate the relative subsidies between road and rail infrastructure provision.

Each of the recommendations will improve the information base underlying road and rail infrastructure provision. From an improved information base a new transport infrastructure reform agenda can be developed in more detail.

## Appendix A: Response to Draft Recommendations

Draft Recommendation	ARA's comments
<p>11.1: The corporatisation model should be more strictly applied to government-owned railways in order to improve industry performance. Particular priorities include greater clarity of objectives, improved transparency of the external governance role of ministers, and a general strengthening of accountability.</p> <p>Greater transparency of funding of Community Service Obligations — including enunciation of objectives, and demonstration of how contributions will achieve stated objectives at least cost — should be introduced as soon as possible, among other things, to facilitate fully commercial provision of rail freight operations.</p>	<p>The ARA supports improving the application of corporatisation within the rail sector. In practice however, the rail industry has effectively embraced corporate principles in its operations and management and as outlined in our submission, this has led to significant improvements since reforms were implemented. The marginal benefits from further improving its application are likely to be small.</p> <p>Greater transparency of CSO payments within a nationally consistent infrastructure investment framework is likely to deliver greater benefits than simply improving the transparency of CSO payments in the rail industry alone.</p>
<p>11.2: National consistency and coordination in rail regulatory frameworks — including of safety, operational and technical standards — should be expedited.</p>	<p>The ARA supports improving the national consistency and coordination of rail regulatory frameworks, as this will result in lower cost regulation, with associated benefits for the competitiveness of the rail industry into the future.</p>
<p>11.3: Progress in implementing the February 2006 COAG agreement to adopt a nationally-consistent approach to regulation of all nationally significant infrastructure, should be monitored in relation to rail to determine whether there are likely to be additional benefits in moving to a single national regulatory regime and regulator. The objects clause, declaration thresholds and pricing principles (which, among other things, allow for multi-part pricing and price discrimination when they aid efficiency) now embodied in Part IIIA of the Trade Practices Act should be incorporated in all rail access regimes.</p>	<p>The ARA supports any further review of the need for improved consistency and the costs and benefits arising from a single national regulatory regime. Given the increasing cross jurisdictional operation of many rail operators, this is likely to deliver significant benefits. Any national regime would need to recognise difference in networks, market power and industry structure.</p>
<p>11.4: There appears to be scope to moderate or even revoke access regulation where pricing by vertically-separated below-rail operators is significantly constrained by competition from road and sea freight transport operators. Building on COAG's agreement to promote nationally-consistent access regulation of major infrastructure, a process should be established for reviewing the need for access regulation of vertically-separated rail networks.</p>	<p>Due to differences in the points of view of the various ARA members on this issue, there is no industry agreed position on this recommendation. Each individual business will provide further views in the context of their own submission to the PC.</p>
<p>11.5: Given the mixed success of vertical separation in encouraging above-rail competition, whether allowing vertical reintegration of particular rail lines or networks would promote their commercial viability should be subject to detailed independent</p>	<p>The ARA believes that there may be scope for allowing vertical reintegration in regional rail networks, where there is unlikely to be competitive benefits from vertical separation.</p>



Concluding remarks

<p>examination.</p>	
<p>11.6: Prescriptive regulations that restrict particular types or configurations of heavy vehicles from using all or some roads, should be replaced, where possible, with performance-based regulations to promote flexibility, innovation and greater productivity in the road freight sector. The proposed package of Performance Based Standards to be agreed upon and implemented by all jurisdictions by end 2007 is a major step forward and it is important that the announced timetable is met.</p>	<p>In principle, the ARA supports performance-based regulations compared with prescriptive regulations.</p>
<p>11.7: Regulations applied to the road transport sector should be rigorously evaluated in accordance with regulatory impact criteria, to identify least-cost approaches and demonstrate net benefits. The appropriateness and cost-effectiveness of existing regulations in the sector also should be systematically reviewed, consistent with COAG's commitment that all governments undertake targeted annual public reviews of existing regulations.</p>	<p>In principle, the ARA supports the evaluation of any regulations to ensure that the costs do not outweigh the benefits. It is for this reason that the ARA supports the re-evaluation of rail regulations on a similar basis.</p>
<p>11.8: To improve existing investment decision-making frameworks, road infrastructure funding mechanisms should include a clear project selection process, stakeholder involvement and public transparency, including formal procedures for public consultation. These principles have been broadly adopted as part of the AusLink Framework for investing in the national highway system and endorsed by COAG. They should be applied across all jurisdictions as soon as possible.</p>	<p>The ARA supports a road infrastructure investment evaluation approach that improves the incentives for efficient investment in infrastructure. As outlined in the submission, the ARA has made a number of recommendations as to how such a framework might be implemented.</p>