AUSTRALASIAN
RAILWAY
ASSOCIATION INC

Review of Economic Costs of Freight Infrastructure and Efficient Approaches to Transport Pricing

Submission to the Productivity Commission

May 2006

Submission prepared by the:
Australasian Railway Association
PO Box 4864
Kingston ACT 2604

Contact Details:
Mr Bryan Nye
Chief Executive Officer
02 6270 4500

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Attachments

1. Introduction

The Australasian Railway Association has considered the terms of reference given to the Productivity Commission, and offers the following submission as a contribution to the development of a competitively neutral infrastructure access pricing regime, for road and rail, for the contestable freight market.

It is clear in considering the disparity between the current road and rail access pricing regimes that both short and longer term objectives need to be set. Furthermore, these pricing objectives need to be aligned with governments transport policy objectives, and investment policy and practices.

There are serious anomalies between the current approach and institutional arrangements for the determination of rail access pricing compared to road access pricing. The rail industry argues that this pricing disparity mitigates against effective investment strategies, undermines Auslink, distorts competition between modes, and results in suboptimal use of the road and rail infrastructure. There is also a range of variations between the different rail access pricing regimes, although with the exception of Victoria, they have a similar philosophical framework.

The report "Comparative assessment of road and rail infrastructure charging regimes in Australia" prepared for the ARA by NERA Economic Consulting outlines the different rail and road pricing frameworks, in particular focussing on the areas of inconsistency. The report also discussed key aspects of the reform of the energy industry as this offers some lessons that could be helpful in changing the land transport pricing regimes. The report is at Attachment A.

The rail industry proposes that a single nationally consistent access pricing framework should be developed for land transport.

In the medium to long term pricing should be based on recovery of marginal costs, social costs plus historical costs. It the short term pricing on competitive corridors (both interstate and regional) should be based on marginal and social costs plus a comparable percentage of historical costs. This should aim to minimise taxpayer subsidy of the freight transport industry. A report prepared for the ARA by NERA Economic Consulting "Principles for an efficient road and rail infrastructure charging regime" sets out the principles for a new pricing regime and the supporting institutional arrangements. The report is at Attachment B.

The objective of the rail industry is to:

- Increase modal share through an improved competitive environment and investment;

- Work with governments to reduce the regulatory burden; and
- Continue to improve productivity through increased efficiency.

A number of supporting activities will be required to achieve this. Competitive neutrality in pricing is a key component but also required is a long term planning and investment strategy that supports the projected growth in freight demand, a reduction of the regulatory duplication, and workplace reform.

2. Background

The general provisions of the National Competition Policy have influenced the direction of reform in the rail industry over the last 10 years; including the introduction of above rail competition, competitive neutrality within the rail industry and commercialisation / privatisation of the both above and below rail operations. While rail did not benefit from a specific reform program with associated competition payments much has been achieved. There is however, a number of areas that warrant further reform, the quantum of which would justify a clearer rail reform agenda under a new competition policy framework.

The broad range of outstanding reform matters are:

- Introduction of competitive neutrality in pricing between transport modes to foster competition;
- Below rail infrastructure planning for freight corridors both inter and intrastate and urban passenger interfaces;
- Reduced regulatory burden particularly that imposed by duplicated regulatory arrangements across jurisdictions;
- Review of vertical separation where above rail competition does not improve market efficiency or outcomes; and
- Ongoing improvement to internal rail efficiency and customer services.

A new reform agenda is required to improve competition allowing for better infrastructure asset utilisation and to create greater certainty in the investment market. Due to the current distorting impacts of pricing and the deteriorating competitive environment this creates for rail, the first priority has to be establishing an efficient pricing regime.

The Productivity Commission in its review of National Competition Policy Reforms outlined as a general principle *"the pricing arrangements for such*

infrastructure should ensure that the freight task flows to the transport mode which in the long run will deliver the transport services concerned at the lowest overall cost to the community. Further, prices should desirably reflect not only the financial cost of providing these services, but also any externalities associated with their provision and use."[1]

The ARA report "The Future for Freight" specifically considered what the rail industry could achieve given competitive neutrality on the inter-capital city intermodal freight routes. It is clear from this report that in a competitively neutral environment rail offers the mode of transport at the lowest overall cost to the community. For all inter-capital city freight corridors it is calculated that *"efficient rail"* operating in a competitively neutral environment can deliver 30% lower costs on the north south corridors and 50% on the east west corridor than road freight.[2]

The question therefore arises, do governments want transport services that delivery the lowest overall cost to the community and if so how can the requisite reforms be implemented.

It is clear that the continued political nature of road infrastructure investment mitigates against good public policy. Auslink, while theoretically a valuable paradigm shift, has to date failed to guide and determine investment for road. For example, recent budget announcements for road and rail infrastructure investment, while being made under the Auslink banner, were not subject to the Auslink methodology for determining investments. This obvious failure of Auslink raises questions as to its future viability.

2.1. Freight growth and infrastructure investment

Freight is projected to double in the next 20 years. Rail freight grew by 8.9%[3] in the twelve months to 30 June 2005. This growth is being supported by a significant infrastructure investment program for both above and below rail, estimated at over $1 billion for 2004-05 financial year[4].

However rail track continues to be of varying standard across the freight network. The standard is highest where it has been constructed to specifically support mining operations, is generally good across the inter-capital city network (taking into account proposed ARTC and Auslink investments), but is in many cases generally a significantly poorer quality on regional freight lines. This often reflects past under investment.

[1] *Review of National Competition Policy Reforms,* Productivity Commission Inquiry Report No 33 p 213/4
[2] *The Future for Freight,* ARA 2005 p3
[3] ARA Annual Survey (results yet to be published)
[4] ARA Annual Survey (results yet to be published)

While Auslink theoretically is an improvement in providing an integrated national infrastructure plan for the inter-capital city and some regional rail lines it does not provide for a fully integrated national infrastructure plan. To do this a much greater level of cooperation would be required between the three levels of government and with the private owners of infrastructure.

2.2. Regional and remote freight movements

There are significant difficulties in moving small and/or seasonal freight volumes in some regional communities; in particular the movement of grain for export demonstrates the need for the development of dedicated regional freight policies.

The reason for considering a different policy framework is due to some regional industries not historically being able to pay full costs for the infrastructure, plus the impact of past policies in frustrating the development of an efficient transport chain. The transport component however needs to be considered in conjunction with the broader supply chain as handling/storing inefficiencies flow through to the efficiency of the transport chain.

The only way the chain as a whole will become sustainable in the long term is through policy and regulatory change to encourage participants to work more cooperatively together. If this does not occur, each participant can only improve their individual activity within the chain at the margin.

For regional rail it needs to be acknowledged that rail is a volume driven industry in large part. Many grain lines suffer from lack of sufficient rail volume density; almost all suffer from deferred maintenance.

An approach that focuses on optimising the broader transport chain would help to address the sustainability of the total transport network, including the typically overlooked impact of road investment and maintenance costs for regional roads.

2.3. Role of the three levels of government

The current misalignment of charges and costs for road and rail transport between multiple levels of government appears to contribute to sub-optimal transport policy, investment, and pricing practices. A new road pricing regime must align cost recovery with investment. This will require a change to the current Commonwealth State funding arrangement. Clearly there is a greater role for local government through integrating transport planning investment and pricing into a nationally consistent framework.

The relationship between State/Territory based access pricing for trucks less than 4.5 tonne and the NTC road pricing framework for over 4.5 tonnes also needs to be reviewed. The currently artificially contrived pricing for trucks over

4.5 tonnes to align with State based regimes adds an additional distortion to the heavy vehicle charging determination process.

2.4. Pricing and competitive neutrality

While some bulk commodities are solely transported by rail and significant urban freight moved solely by road due to the relative advantages of each mode there is a significant and growing percentage of freight that is modally contestable. While competition between modes is helpful in focussing on quality of service to shippers and keeping downward pressure on price, the current distortion caused by road transport operators not paying a comparable percentage of the full cost of their activities impedes the rail industry's capacity to compete.

The obvious distortion in infrastructure access charging between road and rail is a significant contributor to the failure of rail to compete with road in what are natural rail corridors[5].

In addition, rail has in the past lost share to the road industry due to limited availability of service, lack of reliability and lengthy transit times. These issues are progressively being addressed through targeted track investments on most networks.

It will not be easy to restore competitive neutrality after decades of pricing distortions. Some countries have sought to redress this through assisting industries with a large dependence on transport with "switching costs"[6]. Other options may also need to be considered particularly in respect of past underinvestment.

2.5. Investment in infrastructure bottlenecks

The issue of providing infrastructure investment to address bottlenecks has recently been profiled with a marked increase in overseas demand for Australian commodities. The capacity to meet infrastructure investment requirements of above rail operators, and those industries dependent on the infrastructure, has found to be constrained by price ceilings and regulatory returns, where the balance of regulatory setting is weighted towards efficiency vis-à-vis sustainability. This raises some significant questions about the appropriateness of the current rail pricing regime that denies the market the capacity to meet and fund their own investment requirements. This is further compounded by the need to peg rail pricing to road charges to stay competitive.

[5] Natural rail freight corridors are defined as those over 500 kilometres were the underlying economic cost of providing road and rail services gives rail a natural advantage.
[6] Switching costs are those costs that a company faces to change their infrastructure and operating practices to move from road transport to rail transport. The subsidies are not paid to the transport operator.

3. Pricing Framework

In recent times we have seen the unravelling of the current road pricing system. The National Transport Commission has been rendered impotent in light of the decision by Transport Ministers to vote against the implementation of the 3rd Heavy Vehicle Charges Determination. The system has been further undermined by the decision of the Australian Government to walk away from the 2001 vote for annual adjustments to heavy vehicle charges by not passing the adjustment on to trucks registered under the Federal Interstate Registration Scheme (FIRS). It is possible that the unravelling of the current pricing framework is due to its underlying flaws, and shortcomings in the relationship of cost recovery to infrastructure investment.

Road infrastructure is the only monopoly infrastructure that has its pricing determined through a popular vote, all other infrastructure pricing is determined through a rigorous process. We have seen progressively in other industries, eg water, and electricity a move away from individual Ministers setting pricing. It is now time to do likewise for the road industry. Failure to do so results in lobbying capability being the determinate for investment policy rather than asset efficiency. Australia's taxpayers are ultimately the losers in this arrangement.

The governments' policy reforms for rail have been predicated on the rail industry fully funding its own infrastructure renewals. However where there is direct competition from the trucking industry, the rail industry cannot price in a manner that will allow a sufficient revenue stream to meet all investment needs. This results in a revenue shortfall that is currently met through ad hoc government investments.

While the quantum of subsidy to the trucking industry through the under recovery of road infrastructure costs is not exactly known, it is known that the trucking industry does not have to pay for sunk capital costs, rate of return on investment nor does it pay dividends to either governments or private entities, as is the case for rail. In addition, with the failure of the 3rd Heavy Vehicle Charges Determination it no longer meets even by conservative measures the basic operating costs of providing the road infrastructure.

In addition to these subsidises the transport industry does not accept full responsibility for its social costs including, the impacts on air quality, noise pollution, congestion costs, accident costs, and climate change. This further distorts investment in the transport sector.

3.1. Road and Rail: Key differences

There are two important areas of difference between the current road and rail pricing models. Firstly the rail model is based on a negotiate / arbitrate

regulatory arrangement. With a limited number of operators this is a viable model. Road is reliant on a regulated set price model, the only viable option given the very large number of operators.

Secondly the pricing principles are very different. The NTC road pricing principles as approved by the Australian Transport Council place significant constraints on the application of infrastructure efficiency. The road pricing principles do not focus on investment efficiency.

In terms of the application of the pricing principles the key area of difference is the treatment of capital costs. Some recovery of capital costs is necessary to provide incentives for new infrastructure investments. This therefore creates an environment where an infrastructure investor will seek to recover their investment plus a rate of return commensurate with the risks involved; if this can be achieved. Currently for road there is no recovery of historical capital infrastructure investments, and for new investment only actual costs incurred are recovered under a limited short term approach (PAYGO). This excludes financing costs associated with the investment.

For rail the ceiling price represents both historical costs based generally on a depreciated optimised replacement cost methodology and full recovery of new investment including a rate of return (excluding government funded investments). While the ceiling rate is an appropriate charging level on high density bulk lines it would not support cross modal competition on the intermodal and grain lines where intermodal competition does not meet full costs on the same basis. Therefore a price is set below the ceiling. The result being that rail on those corridors pays only a percentage of the full economic cost of the infrastructure.

There is also significant expenditure not paid by road users that are paid for by rail users. For example, rail is required to meet at least partial cost and in many cases the full cost of items including, boundary fencing, pedestrian crossings and footbridges, rail crossings and noise walls. Under a competitively neutral framework, road users would also pay for these items in a proportional manner.

3.2. A new pricing framework

The primary objective in a new road rail pricing regime has to be the promotion of efficiency. In developing a new approach the need to deliver an efficient freight transport service has to be clear, as does the need to ensure competitive neutrality between charging regimes where there could be modal competition.

The absence of competitive neutrality has long term detrimental implications for users of freight services.

To ensure no impact on competition between road and rail freight operators there are a number of issues that need to be addressed in a new pricing regime. They include:

- Developing a common approach to the recovery of capital costs for both historical and new, road and rail infrastructure investments, including accounting for the financing costs associated with road infrastructure investment;
- Calculating a historical road asset value, preferably using the Depreciated Optimised Replacement Cost methodology, identical to that used for most rail assets, with an equivalent treatment of land and easements; and
- Addressing the equivalence of government contributions between road and rail infrastructure, to ensure there are no distortions in the mix of road and rail infrastructure use, and to provide appropriate incentives for ongoing efficient infrastructure investment.

A new pricing regime should therefore consider the total cost on a common basis of providing both road and rail infrastructure in the calculation of charges. It is proposed that this be done through a two part tariff with variable charges covering the marginal costs (usage charge) and fixed charges covering capital costs (access charge). In practice this may need to be adjusted to not pose a barrier to entry to the transport industry.

Achieving commonality of approach requires standardisation of the approach to recovering capital costs and the treatment of government capital contributions. In addition, it will also require the same methodology for including costs in the variable and fixed charges for road and rail infrastructure, and the same government proportion of the total cost of providing road or rail infrastructure services.

3.3. Individual pricing

The rail industry applies individual pricing through mass distance charging. This should be extended to the road industry, if only in the first instance where it directly competes against rail. Mass distance charging, using a variety of increasingly sophisticated technologies, is currently used in other countries. In fact some companies within Australia use mass and location technology for internal management processes. The long held arguments that it can't be done are no longer true. New Zealand has used a form of individual distance charging with averaged mass for over thirty years with a high level of compliance using simple technology; this would be an improvement on what currently occurs within Australia.

Individual pricing is essential to establish equity within the road sector and between modes if competition within the trucking industry and between road and rail is to be achieved.

The drive for individual road charging will also assist in addressing the longer term inequities associated with using energy taxation as part of an access pricing arrangements. It is recognised that there will need to be an established timeframe for the introduction of mass distance charging, in the short term diesel pricing could act as a substitute for a distance charge and an averaging system used for mass. Acknowledging that this is a sub-optimal approach but an interim alternative until mass distance charging is implemented.

3.4. Pricing and investment

The current link between charges and infrastructure investment costs is not sufficiently clear to provide appropriate incentives to infrastructure investors to invest optimally in road and rail infrastructure.

In order to provide appropriate incentives for efficient infrastructure investment not only are changes to the existing pricing framework required, but also there is a need to align institutional arrangements for road and rail particularly in respect of pricing and investment policies.

Theoretically Auslink offers a common analytical approach for road and rail infrastructure investment, including assessing investment across modes. However in practice political decisions on investment have been made under the Auslink banner without reference to the common Auslink methodology. In any event, the current charging methodology differences between road and rail are such that it is almost impossible for Auslink to effectively make efficient investment decisions between road and rail infrastructure.

The integrity of Auslink requires that it be administered at arms length from the political process to allow for application of the investment methodology. Auslink can be improved by incorporating valuation of the road infrastructure so that consistent infrastructure investment assessments can be made. Where subsidy is required to meet social objectives, this should be delivered on an equitable, transparent and competitive basis.

The clear relationship in rail between pricing and investment has shown a significant improvement in the approach to investment decisions. This includes a consultative arrangement between the infrastructure provider and the operators. A similar model would constitute best practice in the road industry.

Finally, before making any changes to the existing rail infrastructure charging, it will be necessary to consider the impact of changes on private sector investors in

rail infrastructure. This is because private sector buyers invested in rail infrastructure based on a given regulatory environment. This will ensure that further investment is not affected by any changes to rail pricing.

3.5. Pricing and government transport policies

While revision of the pricing framework would address current distorted competition policy, it would not of itself necessarily deliver an optimised transport chain. Pricing reform will need to be followed by transport planning and investment policy reform.

The key question for governments is: Do Governments want a rail network, and if so what role do they want it to play in the freight market? Clarity and consistency around government transport objectives is urgently needed.

The application of valuation of historical costs will need to take into account desired policy objectives, for example, depreciated optimised replacement costs values to be adjusted for projected volumes rather than current actual volumes assuming a change in volume is the policy objective. Such a reason may be to ensure sufficient asset utilisation to warrant future investment, or to meet modal share targets such as those currently set for port movements in Victoria and NSW.

While governments may choose to subsidise freight operations to adjust outcomes this should be done in a transparent and competitive way.

3.6. Remote and regional options

It is recognised that there are specific issues relating to the movement of goods in remote and regional areas. Direct government intervention may be justified for public good reasons. This should be done in a way that does not distort or impede competition. A range of options are available including targeted industry rebates, capital infusion, accelerated tax depreciation, and/or investment tax credits. Recent US experience has shown tax credits for rail movements have assisted in maintaining the viability of grain networks.

3.7. Externalities

It is recognised that freight transport has a range of impacts on the community, including:

- Its land take, in some areas transport operations are now located on potentially high value residential land;
- Impact on the environment ranging from reduced air quality, waste management, disruption to natural water flows;

- Contribution to congestion and the costs this imposes on business and the community;
- Disruption to social amenity, eg noise;
- Social and health costs through for example, accident costs, air quality impacts on health; and
- Property damage caused by accident or misuse, not already internalised.

Currently these impacts are treated differently between road and rail, rail is directly charged for many of these impacts through the current pricing regime, for example weed management, fire protection barriers, and noise reduction measures. Some impacts are regulated, for example truck emissions.

Further consideration is needed on quantifying the extent of impacts and determining the best options for management. This may include a range of infrastructure manager responses and regulatory options.

It is important that differences in the treatment of external issues between modes removes any distorting impact on pricing.

3.8. Lessons from energy reforms

Reform in the energy sector is specifically aimed at addressing concerns about regulatory inconsistency in the implementation of the national electricity and gas codes. There are some lessons that could be learnt from these reforms were there is substitutability between energy forms not dissimilar to the substitutability between road and rail in part for a segment of the freight market.

The need to eliminate inconsistencies and establish certainty is critical to fostering a positive investment environment.

The adoption of a single efficiency objective in the energy sector is also relevant to road and rail where the benefits to customers and the broader economy of maximising the efficiency of each individual mode will have clear benefits.

4. Institutional arrangements

The current problems with establishing a reputable road access pricing framework and implementing Auslink point clearly to the need to de-politicise road management. Also efficient investment in infrastructure will depend on establishing a clear relationship between pricing and investment. Furthermore

new institutional arrangements need to have a clear charter to address competitive neutrality across modes. This does not exist at present.

4.1. Short term

In the short term a nationally consistent economic regulatory framework for road and rail access and pricing is required. Given the relationship between access and pricing, road access issues should also reside within this framework, particularly if after the introduction of mass distance charges an incremental charging regime is to be considered.

The other key urgent institutional reform relates to the management of the governments' investment programs, including the Australian Government's Auslink program. A nationally consistent arrangement that allows for national infrastructure planning and investment strategies for the development of efficient freight corridors is required.

Given that in the short term, the pricing regime is not going to provide the revenue stream for freight corridor investment the shortfall needs to be considered under an agreed rational methodology that does not add further distortions to competition. Freight road and rail should be priced so as to recover the same proportion of full infrastructure cost and minimise distorting taxpayer subsidy to the freight transport industry.

There are a range of issues to be addressed relating to other users of the road infrastructure such as, cost recovery methodology and investment decisions to support this broader infrastructure use.

4.2. Long term

There is scope in the longer term for more innovative approaches to the management of land transport infrastructure. Corporatisation and privatisation in the rail sector has delivered a range of benefits including improved efficiency of the network, focussed investment strategies and reduced costs to the taxpayer.

A similar approach should be considered for road. Corporatisation of the inter-capital city road network for example in a way comparable to the ARTC model could substantially assist with the much needed de-politicisation of the current road funding and pricing arrangements, offering an overall benefit to the economy through improved management.

5. Summary

There are three broad areas of reform that are being sought by the rail industry through the Productivity Commission's review. They are:

1. Clarity in the governments' policy on the role of rail in the freight market;

2. The establishment of competitive neutrality through a nationally consistent pricing and access framework; and

3. Establishment of a clear relationship between pricing and investment.

The rail industry is proposing that competitive neutrality in pricing can be achieved through establishing efficiency as the single objective for determining pricing. Road and rail charging regimes should have regard to the impact on competition in the freight transport market. It is also proposing that the charging arrangements comprise a two part tariff reflecting fixed and variable costs balanced against the need for new market entry and competition, and collected through an individual pricing mechanism, such as mass distance charging.

There should be a strengthening of the link between pricing and investment, where in the short term, freight road and rail pricing should seek to recover comparable proportions of full economic cost, whilst minimising the requirement for taxpayer subsidy of the industry. In the long term, pricing should seek to recover the full marginal, social and historical cost of infrastructure. By this, the rail industry is not advocating the need to substantially increase pricing in the long term. With the projected increase in road and rail infrastructure utilisation, a significant part of achieving full economic and social cost recovery could be achieved through higher utilisation, rather than higher pricing.

The rail industry recognises that specific policies may be required for remote and regional freight movements and suggests that under the principles of competitive neutrality and transparency, where a clear public good case can be demonstrated, a range of policy levers could be used including, targeted industry rebates, capital injection to improve infrastructure, and taxation arrangements.

Institutional reform will be needed to deliver these reforms if a long term sustainable process to drive efficiency in the freight market is to be achieved.