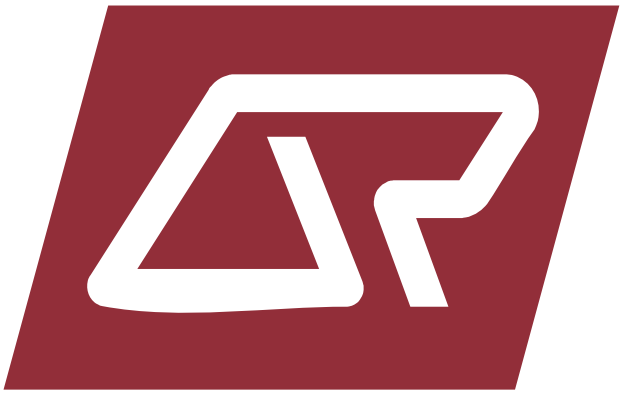

QR Submission to

Productivity Commission

Response to Discussion Draft
Road and Rail Infrastructure Pricing

November 2006

QR engaged Synergies Economic Consulting Pty Ltd to assist with the preparation of this submission.

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Introduction

The purpose of this submission is to provide the Commission with additional information it sought in its Discussion Draft on Road and Rail Freight Infrastructure Pricing. QR does not seek to provide extensive comment and debate on the Discussion Draft, although we disagree with several of the Commission's findings in relation to road pricing and believe the Commission's report does not sufficiently emphasise the need for fundamental pricing reform.

As stated in our initial submission, this Review should produce a set of recommendations which will maximise efficiency in the provision and use of Australia's road and rail freight infrastructure. It seems to QR that the Commission's recommendations will lead to the preservation of the current inefficient system of road pricing rather than providing a catalyst for fundamental reform. QR believes this is unfortunate given the Commission also found that "mass-distance location charges have the potential to bring substantial efficiency benefits" and current arrangements "offer, at best weak signals to decision-makers about the desirable level and pattern of future road spending".

QR agrees that institutional reform is the cornerstone of future reform but believes the Commission has erred in its assessment of the usefulness of the current road pricing arrangements. The Heavy Vehicle Pricing Determination is clearly past its use by date and will not unlock the economic efficiency gains identified by the Commission. Under the current institutional arrangements, QR has no confidence that road pricing will advance beyond its present lack of sophistication.

The Commission's findings also fail to put modal neutrality in an appropriate context. The Commission has assessed that a more efficient approach to road pricing is unlikely to result in a significant modal shift to rail. QR's position, as stated in our initial submission, is that the road pricing debate cannot solely focus on modal share. QR would not expect there to be a sudden shift of freight to rail once more efficient pricing systems are implemented. The appropriate allocation of the freight task will emerge over time as the new systems stimulate different investment patterns and gradually create changes in the market offer to freight transport customers. Continued under-pricing of heavy vehicle road use will stifle productivity-enhancing investment by rail and perpetuate economy-wide inefficient consumption and production decisions.

The real issue is the performance of infrastructure; its efficient operation and development, which is about setting infrastructure prices correctly. QR believes that there is now wide recognition that the current system administered by the National Transport Commission (NTC), with its emphasis on cost recovery, is not an efficient pricing system. It would seem that the Commission agrees with this point and yet judges the adequacy of the current system on the basis of cost recovery rather than economic efficiency.

This submission is structured as follows:

- Response to the Commission's conclusions on heavy vehicle charging;
- Single or national regulator;
- Coverage criteria for rail access regimes;
- Impacts of vertical integration;
- Costs and benefits of reintegration; and
- Commercial orientation of major freight routes.

Response to the Commission's conclusions on heavy vehicle charging

QR wishes to briefly comment on two of the Commission's findings:

- Road user charge revenues from heavy vehicles more than cover their attributable infrastructure costs and just cover their fully allocated costs.
- Under a PAYGO approach, heavy vehicles as a group will pay their way over time, although inter-temporal cross-subsidies could arise if expenditure fluctuates.

Avoidable cost of heavy vehicle road use

QR agrees with the test the Commission considers necessary to assess if heavy vehicles are meeting all the costs they impose on the network, namely that truck classes overall pay their attributable costs, and each truck at least its avoidable costs. However, in reaching its conclusions the Commission appears to rely on the NTC's model of cost allocation. This model is a fully distributed cost model which allocates cost based on engineering and equity principles rather than an economic approach. From an efficiency perspective an economic approach like Ramsey pricing will produce better outcomes than the NTC's pricing model.

In our submission we proposed that the costs attributable to heavy vehicles should be determined by assessing the costs of a road network with and without heavy vehicles. This method assesses the true incremental cost that heavy vehicles impose on the road system (or alternatively could be avoided if the relevant vehicle types were not in use).

An assessment of the total incremental cost of heavy vehicles for two representative sections of road undertaken by the ARRB Group for QR clearly indicates that the current allocation of costs to heavy vehicles is considerably less than the costs they

impose on the road network.[1] These assessments found that incremental cost of heavy vehicles for the representative sections of road were in the order of $0.35/ESAL-km. [2]

This estimate of the incremental cost of heavy vehicles can be compared with cost allocation data provided by the NTC in their Technical report. [3] This comparison showed that for a six axle articulated rig the total allocated cost per ESAL-km was in the order of $0.07. While our analysis has not determined precisely what cost this type of vehicle should bear, it is clear that they are currently bearing significantly less than the incremental cost they impose on the road network. It is important to note that the incremental costs determined by our study ignore any allocation of common costs to heavy vehicles while the NTC 'price' is inclusive of common or non-attributed costs.

PAYGO

The Commission's findings on PAYGO demonstrate that in principle the net present values of investments under a PAYGO and lifecycle approach are identical. The Commission also helpfully lists in Box 4.2, p 4.4, the assumptions that must hold for this result to hold:

- the network is neither expanding nor contracting, nor is the pavement or bridge condition changing significantly;
- network wide expenditure does not fluctuate markedly over time; and
- traffic growth is relatively steady.

The Commission has not adequately tested the reasonableness of all of these assumptions and their implications for PAYGO.

The first assumption is that the network is in a steady-state, that is, investment is equal to the consumption of capital (economic depreciation). The Commission has not presented any evidence to demonstrate this assumption holds; it has assumed the assumption holds.

If investment has not kept pace with depreciation then road users are not faced by the full costs of their road use. If investment exceeds the consumption of capital then PAYGO overcharges road users, a point acknowledged by the Commission in its report. PAYGO can only be cost reflective in very limited circumstances, which QR believes will seldom hold.

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1 The ARRB Group (formerly ARRB Transport Research) is the leading provider of value-added research, consulting and technology addressing transport problems.

2 Equivalent Standard Axle Load

3 NTC (2005), Third Heavy Vehicle Road Pricing Determination: Draft technical Report. Pages 44 and 97.

The second assumption concerns intertemporal issues which were considered by the Commission. We note however, that the Commission's conclusion that lumpiness in expenditure over time is not an issue is based on only four years of expenditure data (see Table 2.3 of the Discussion Draft). QR would have expected the Commission to analyse a longer time-series before reaching this conclusion.

Finally the Commission reports that "although future growth is projected to be slightly lower than in recent years, the freight task is projected to double between 2000 and 2020". This has important implications for the current rate of capital consumption as heavy vehicle load is the major cause of pavement deterioration. To accommodate the projected growth, the Commission notes that "infrastructure requirements will be substantial". In the light of this, there must be considerable doubt about the validity of any of the PAYGO assumptions.

Table 1 is an assessment of the PAYGO assumptions QR provided to the NTC as part of the Third Determination process.

Table 1 PAYGO assumptions assessment

Condition	QR's assessment	Comment
Network is reasonably mature and is neither expanding nor contracting significantly	×	Table 22 of the NTC's Draft Technical Report from the Third Determination shows a 23 percent real increase in road expenditure since the Second Determination
Across the network there is no overall deterioration in pavement or bridge condition	?	No systematic information available to QR to assess. The Roads and Traffic Authority (NSW) *Annual Report* 2003-04 makes reference to a "slight decline in the ride quality on the Sydney to Newcastle Freeway and the Cumberland and Newell highway". It further notes that these roads are key components of the State's freight infrastructure and their declining conditions highlights the need for federal funding to replace aging infrastructure.
Lumpiness in investment is limited so that across the network the amount spent on each type of road work does not fluctuate	×	Defining characteristic of road investments
Traffic growth is relatively small and steady	x	Depends on how traffic growth is defined. Road freight is expected to grow faster than economic growth.
The roadwork undertaken, and the road network itself, should be optimal (that is, road investment that is not economically justified does not occur, and investments that are worthwhile are not deferred)	×	Unlikely given that road funding is allocated through budgetary processes rather than as a result of commercial decisions. There are numerous examples of road projects delayed through funding disputes between Commonwealth and State governments.

The PAYGO assumption is convenient as it vastly simplifies the treatment of capital in the current fully distributed cost model. However, if prices are to provide signals to decision-makers about the desirable level and pattern of future road spending they must be cost-reflective. A better model of the consumption of capital is needed.

Single national regulator or regulatory regime for rail infrastructure

The PC has raised the issue of whether a single national regulator or regulatory regime for rail infrastructure would facilitate national consistency, potentially allowing significant economic benefits to be achieved.

QR supports moves to develop more nationally consistent regulatory arrangements, provided they are sufficiently flexible to accommodate differences in market and operating circumstances of individual businesses. QR believes that a regulatory regime which delivers greater accountability and transparency and which reduces the risk of regulatory error occurring is more critical than the question of whether there should be a single national regulator.

QR believes that it is possible to achieve greater consistency in rail regulation and a more effective regulatory framework without moving to a single national regulator.

The goal of nationally consistent arrangements can be achieved by implementing a range of reforms to existing state-based regimes. The recent amendments to the National Access Regime and the reforms agreed to in the COAG Competition and Infrastructure Reform Agreement provide a good starting point.

Consistent with these national developments, QR believes that the necessary reforms to access regimes should cover the following key areas: greater regulatory accountability; the need for a more light handed form of regulation; and the need for a regulatory framework that provides incentives for efficient whole of supply chain management. QR's comments on each of these matters are outlined below.

Regulatory accountability

One of the key underlying themes in the recent COAG agreement on greater national consistency for infrastructure regulation is the need for enhanced regulatory accountability. This is reflected in a number of proposed measures, namely, the inclusion in access regimes of an objects clause, the inclusion of consistent principles for determining access prices and the adoption of merits review.

Objects clause and pricing principles

Consistent with recent amendments to the National Access Regime, QR strongly supports the inclusion of an over-arching objects clause and pricing principles in state access regimes. These measures will serve to provide greater certainty for all stakeholders regarding regulatory decisions. In particular, it will provide the regulator with guidance as to how to exercise its discretion and, in turn, this will give infrastructure owners and users greater certainty. This greater level of certainty will be a key factor in minimising regulatory risk and, therefore, creating a regulatory environment that is conducive to efficient investment in infrastructure.

As such, QR endorses the inclusion of an over-arching objects clause that recognises the importance of the efficient investment in, and utilisation of, essential infrastructure. Such a clause should assist the regulator in resolving actual or perceived conflicts which often arise from the competing objectives of market participants.

Similarly, QR generally agrees with the pricing principles provided for under the COAG Infrastructure Agreement. In particular, QR supports the inclusion in access regimes of pricing principles which allow for multi-part pricing and price discrimination as this will promote the adoption of efficient pricing signals in rail access.

The pricing principles in the COAG Infrastructure Agreement provide, amongst other things, that revenue should '*…include a return on investment commensurate with the regulatory and commercial risks involved.*" QR would like to make the following observations on this:

- currently, regulatory risk is given no recognition in the context of the rate of return. QR considers that regulatory risk can exacerbate the risks a business is exposed to by providing limited, if any, exposure to upside and unlimited exposure to downside risk. Further, the ability of the regulator to exercise discretion, and the risk of regulatory error, exposes the business to adverse outcomes, including increased costs;
- pricing principles should give due regard to the risks and consequences of regulatory error when estimating parameters that input into pricing; and
- pricing principles should include recognition of intangible assets, such as human capital and necessary IT systems.

Reasonableness test

The nature of the regulatory decision-making framework may also have an impact on the scope for regulatory error. Where a regulator has considerable discretion in regard to elements of its decisions, there is a risk of regulatory error. The consequences of regulatory error can be significant, particularly where it results in a failure to invest in otherwise economically efficient infrastructure.

QR considers that this regulatory risk may be mitigated by a decision-making framework that ensures that an infrastructure owner's proposal is accepted by the regulator provided it meets a test of reasonableness. Such a 'reasonableness' test within the regulatory framework would allow for regulatory objects to be achieved while minimising the costs of regulatory error. This will, in turn, minimise the risk that economic regulation will stifle or delay socially desirable investment.

A reasonableness test would be reflected in a 'propose-respond' framework which required the regulator to accept a proposal submitted by a regulated business provided that individual values lie within a reasonable range. QR considers that, in an

environment where there is uncertainty, information asymmetry and often simply no one 'correct' answer, but rather a range of plausible values, a propose-respond model incorporating a reasonableness test is likely to be less contentious and, ultimately, less costly to the community in the long run. This is particularly important where there are potentially significant social welfare losses arising from regulatory error.

In essence a reasonableness test recognises that a key source of regulatory risk arises in relation to the "fine judgments" that regulators interpret regulatory tests as requiring them to make. Accordingly, more careful definition of the circumstances in which regulators are able to overturn a position submitted by a regulated entity will reduce regulatory risk and improve regulatory decision making. As such, a key strength of the reasonableness test is that it addresses an inherent weakness of regulatory decision making.

Therefore, a reasonableness test in the decision-making framework would assist in providing a regulatory environment supportive of efficient investment by minimising the risk of ex post optimisation of investment by the regulator. This is because it would provide an effective constraint on the ability of the regulator to undertake ex post optimisation of investment that was undertaken on the basis of reasonable commercial assessments made at the time. Such regulatory decisions can undermine future investment in essential infrastructure by raising the regulatory risk associated with undertaking such investment.

Merits review

COAG noted the possibility of merits review in access regimes, stating that, where it is in place, it should be limited to the information available to the regulator in the first place.

QR supports the adoption of merits review in all state-based access regimes. Access to review of a regulatory decision that is genuinely believed to be made in error is a fundamental element of a robust and effective regulatory regime and correspondingly reduces the likelihood of errors being made in the first place. Regulatory risk is a real issue for a regulated business, particularly where it is undertaking investment in capacity expansions. The perception of this risk has the potential to add to the cost of making such investments. It is therefore essential that a regulatory regime that seeks to facilitate efficient investment in infrastructure provides scope to correct a regulatory decision that is made in error.

Regulators have considerable discretion in decision-making. QR believes that access to merits review introduces a discipline on this decision making process and places some constraints on the extent of discretion that can be applied. Merits review may improve regulatory decision making in a number of ways. It will provide an efficient mechanism for testing the reasonableness of decisions. Regulatory decision making is complex and, as such, merits review provides regulated businesses with a means of ensuring that an appropriate balance of considerations is applied to decision making.

In addition, it brings an independent perspective to issues involving fundamental points of difference between the regulator and the infrastructure provider. Accordingly, it provides an important check against regulatory error and a means of ensuring balance in decision making.

QR believes that access to merits review will increase the confidence of the market, investors and the public in regulatory decision making as regulators will be required to ensure that decision making is of the highest possible quality. This in turn will reduce regulatory risk and the potential for errors in decision making to persist. QR considers that this is an essential element of a regulatory framework that encourages appropriate investment.

Whole of supply chain issues

Rail related infrastructure is often part of a supply chain that covers more than one piece of infrastructure and more than one owner.

For example, the Queensland coal export supply chain consists of:

- the coal mines;
- below rail infrastructure;
- above rail infrastructure;
- port infrastructure; and
- shipping.

The efficiency of this supply chain is fundamental to the competitiveness of the Queensland export coal industry. This efficiency is driven by the efficiency of each of these five components of the supply chain in combination (rather than in isolation), as well as the efficiency of the interfaces between each component. A number of these elements are naturally interdependent, which is particularly important in being able to extract maximum efficiencies from this supply chain (eg. above rail and below rail, rail capacity and port capacity).

The tendency of regulatory regimes to focus on individual segments of a supply chain can work against the creation of incentives that maximise the efficiency of the supply chain as a whole. For example, two critical aspects of the Goonyella System on QR's coal network, namely below rail infrastructure and port infrastructure, are subject to access regulation. However, the current approach to regulation tends to consider each in isolation. In QR's view, these two components should not be addressed in isolation. Not only is there a degree of interdependency from the perspective of whole of supply chain efficiency, but decisions in one network can have significant spillover effects on the other.

In developing its 2006 Coal Master Plan, QR has identified a need to operate its regulated rail network services taking into account activities traditionally viewed as

falling outside the parameters of its regulated business. QR, its customers and its stakeholders are focussing more on efficient supply chain management and the role played by each element in deriving the least cost optimal supply chain outcome.

This contrasts with the traditional regulatory view of simply focusing on providing an efficient below rail service. Under this competitive model, the interrelationships between above and below rail are not adequately recognised. By establishing pricing signals under the regulatory framework which focus solely on promoting an efficient below rail service, this model does not promote co-ordination between above and below rail, which may provide the least cost, most efficient path from a whole of supply chain perspective.

Similarly such interdependencies can also exist in other rail transport supply chains, such as the movement of intermodal freight. The intermodal freight supply chain consists of:

- road freight goods/products from the supplier to freight terminal;
- assembling the consignment of freight for railing;
- rail transportation task which requires above and below rail infrastructure;
- freight terminal infrastructure; and
- road freight from terminal to end customer destination.

As greater understanding of supply chain management issues evolves, QR suggests that:

- the regulation of each network needs to give appropriate regard to whole-of-supply chain issues (that is, they cannot be examined in isolation); and
- the regulatory framework must be flexible enough to respond to market challenges that can often require a whole-of-supply chain response.

Coverage criteria of access regimes for rail infrastructure

QR supports state access regimes being amended to align with developments in the National Access Regime in regard to both coverage and revocation decisions. This is desirable from both a national consistency point of view and also to help ensure that regulation is not applied in circumstances where there is no economic justification for it.

While QR accepts that differences in access regimes between jurisdictions may be justified in some instances, there will be benefits to aligning state-based regimes with national regime in certain key areas, such as the coverage criteria. This would benefit both access providers and access seekers by:

- removing doubt and uncertainty in the minds of investors about possible differing outcomes under different regimes;
- enabling Court and Tribunal precedents in relation to the interpretation and application of the National Access Regime to serve as precedents to the QCA Act; and
- removing the possibility of forum shopping by parties seeking declaration between state-based access regimes and the National Access Regime, where it might be open to them to apply for declaration under either.

Specifically, QR considers that the coverage criteria in state regimes should be amended so that a service should only be declared for access where access would lead to a *material* increase in competition. This will help ensure that declaration only occurs where the benefits of access regulation have been demonstrated to be substantial.

In terms of revocation, QR believes all access regimes should establish revocation provisions that have sufficient flexibility to be able to accommodate changing market circumstances that occur over time. In particular, access regimes should provide a 'sunset clause' for all declarations made under those regimes. For example, the need for declaration of a particular service should be revisited every 10 years to ensure that the service still meets the threshold test for declaration.

In addition, within the 10 year period, access regimes should permit infrastructure owners to seek revocation of declaration of their infrastructure (or parts of it).

A process for revocation of declaration is critical in ensuring that access regimes remain an appropriate regulatory response over time. As the ongoing costs of coverage are generally accepted to be considerable, it is desirable to limit the extent of declaration to infrastructure that continues to meet the declaration criteria.

QR's entire network is declared for third party access under the QCA Act. We believe that this extent of coverage is too broad given the existence of intermodal competition QR faces and the limited market power that rail has in most parts of the network. This 'over regulation' has an adverse impact on the incentives of rail infrastructure providers in terms of its ability to recover the costs of providing the network. This is because, under a price regulation access model, there is an incentive to standardise pricing at the lowest common denominator, being the amount that the more marginal traffics can afford to pay, as this is less likely to cause a potential price dispute and, hence, the risk that the regulator will take a different view. It also provides a disincentive to invest in the market in order to meet customer demand.

QR recognises that certain obligations will continue to apply, such as an obligation to treat operators consistently and not to prevent or hinder access. These obligations should apply to both vertically integrated networks as well as vertically separated networks.

The impacts of vertical separation or integration of the interstate track and major regional coal lines

QR is a vertically integrated railway. It is subject to a prescriptive third party access regulation including detailed ring-fencing requirements to separate its above rail and below rail businesses.

Implicit in these arrangements is the assumption that the benefits of downstream competition (that is above-rail services) will exceed the costs of forgoing some benefits of an unfettered vertically integrated structure.

In QR's view, railways have particular coordination problems for which vertical integration is the most effective solution:

- there is an extremely complex coordination problem that must be resolved to safely and efficiently operate below-rail infrastructure. A market solution requires contracts that specify the rights of all parties in every operational problem; something that is costly and extremely difficult to specify ex ante. Contracts generally do not allow for sufficient real time flexibility to resolve problems. Vertical integration is a more effective way to minimise transaction costs associated with coordination. Within QR's operations the greatest need to co-ordinate above and below rail resources to maximise system performance exists for Citytrain and the coal network;

- investment coordination is complex in logistic chains and what is optimal from an individual operator's perspective may not be optimal for the supply chain. QR has recently completed its first coal systems master plan which has focussed on what is required to improve the capability of the coal supply chain in central Queensland and in doing so has highlighted the interdependencies between above and below rail from a resource planning and investment perspective. For example, to maximise the efficiency of the coal supply chain, QR has identified that the component of the supply chain that is required to operate at maximum utilisation is the unloading pits at the port. To practically achieve this there needs to be some additional capacity in other elements of the supply chain, including below rail capacity, above rail (rollingstock) capacity and port loading capacity. However the incentive for an above rail market operator may be to maximise rollingstock utilisation rather than invest in additional rollingstock. A vertically integrated operation is able to balance competing incentives in order to deliver an optimal investment strategy;

- vertical integration is also an effective means of minimising certain types of risk. The incentives to minimise system failure due to operational practices is stronger for an integrated railway. This is because the integrated operator faces all costs whereas individual operators may not.

Maximising the efficiency of the coal supply chain requires close co-ordination and flexibility between above and below rail in order to achieve the outcomes required by the end users. Vertical separation makes this more difficult to achieve.

Also a vertically integrated entity is closer to the customer and therefore more responsive to customer needs. The benefits from a more responsive operator arise because the incentives of the below-rail manager are more closely aligned to the above –rail operator in a vertically integrated structure.

Where vertical integration is the most efficient means of minimising coordination costs and dealing with risk, competition concerns can be addressed by monopoly price regulation rather than third party access regulation. In some cases, the need for regulation is questionable, particularly where rail faces strong intermodal competition.

The potential costs and benefits of reintegration of specific rail networks

The activities a firm conducts internally and what activities it contracts in a market, are usually assessed in relation to the following factors:

- economies of scale and scope;
- relationship-specific investments;
- internalising externalities (including service quality, double marginalisation, regulatory externalities and coordinating investments); and
- risk management.

Many of these are relevant in the context of rail integration. QR believes the benefits from vertical integration in a rail context largely concern:

- opportunity to price more effectively;
- operational efficiency (relationship specific investments, internalising externalities and risk management); and
- removal of invasive access regulation (internalising externalities).

QR's experience confirms the view expressed by the PC and the OECD that vertical separation makes the application of more economically efficient tariff regimes more difficult. Separation effectively removes information from the below-rail operator on which it could assess differences in the elasticity of demand. A vertically integrated provider is better placed to implement more economically efficient tariff regimes, if permitted by regulation.

Vertical integration can reduce operating costs by:

- minimising the transaction costs associated with maintaining, negotiating and monitoring contracts with above rail operators; and
- better management and assignment of risks.

Sometimes below rail operators are able to significantly enhance above-rail productivity. For example, QR now operates the world's heaviest narrow gauge coal wagons and has achieved higher loads and reduced cycle times. The combination of increased axle load, faster running speeds and increased train movements imposes considerably greater dynamic forces on the track than has previously been the case. It would be impossible for QRNA to safely accommodate 26 tonne axle loads if it had not invested in rail grinding technology. The incentives to make these complementary below rail investments are stronger in an integrated railway.

QR has been able to achieve above rail improvements without substantial below rail investment.

The costs of reintegration would need to consider the complexity of the supply chain. The complexity of the investment coordination task is a key driver of the benefits of vertical integration.

Any remaining regulatory restrictions on freight movement, in particular, are there any remaining regulations that effectively restrict particular commodities to rail or road

QR believes that proposals to reduce the regulation of mass limits must be subjected to a thorough, rigorous and independent regulatory impact assessment, which includes social cost benefit analysis.

This is particularly important as increases in road productivity must be considered against the social costs of the external impacts on other road users. A particular concern with respect to heavier vehicles is safety. However, other external impacts such as increased travel times caused by slower heavy vehicles needs to be considered. Currently transport regulation is the instrument through which these externalities are addressed.

QR has concerns about the concept of incremental pricing which was considered by the NTC as a means to increase the flexibility of road transport regulation. Incremental pricing would allow vehicles to carry loads in excess of current regulated load limits and impose an additional charge equal to the incremental costs from the extra load.

QR believes the case for incremental pricing has not been demonstrated. The NTC's net benefit analysis of incremental pricing assumed the starting point for the incremental assessment is a situation where individual road users face the economic cost of their road use. QR believes this is not the case and the Commission's report provides some support for this position in that individual heavy vehicle users are not facing the cost

of their use of the roads. QR maintains that the costs are higher than suggested by the Commission's analysis.

Grafting a form of marginal pricing on an existing average pricing scheme does little to progress pricing reform and is more likely to do more harm than good. The marginal pricing signals will only operate properly where the relevant economic impacts are fully incorporated.

Any intermodal issues affecting the efficient transport of freight and appropriate strategies

The projected significant growth in freight, both for short and long haul, presents a central policy challenge for Governments, and a major potential congestion headache.

- In 2004 Sydney Ports Corporation tipped total container volumes through Sydney to rise from the then 1.1 million TEU per year to 2.5 – 3 million per year by 2025 (NSW Import Export Container Mapping Study, 2004).
- Victoria's international container trade is expected to rise from the current 1.4 million containers to 7 million containers by 2035 (Melbourne Port@l Strategy Consultation Draft 2006). 77 percent of Victoria's international containers are dealt with in Melbourne.
- The BTRE has projected an approximate doubling of the total national freight task between 2000 and 2020 (AusLink White Paper 2004).

A key element in the policy response to this looming congestion problem is the promotion of intermodalism. QR believes that Australian Governments have a unique collective opportunity to create the policy environment for intermodal growth to take the pressure off metropolitan, regional and inter-city road networks. The first step has already been taken, with greater use of intermodal freight transport recognised by all Australian governments as a priority. Some State Governments have gone further, setting specific rail modal targets for port shuttle activity.

Australia has, however, fallen short of an integrated national freight plan which can effectively deal with congestion and maximise the use of the intermodal alternative. There is no national freight transport policy to drive this outcome. In fact, far from assisting intermodalism, a number of current policy settings and structural issues create barriers for an efficient multi-modal system. These include:

- Over-regulation of rail operations;
- Ongoing conflict between passenger and freight rail networks;
- The lack of a specific package to ensure viability of rail port shuttles; and
- Inadequate and poorly located intermodal terminal and terminal arrangements to get best economic outcomes.

Over-regulation

It is widely acknowledged that rail operators face an excessive regulatory burden. An area of major concern to above-rail operators is safety regulation. A national rail operator deals with seven safety regulators, seven accreditation systems and multiple accident investigation units.

In practice, this leads to inconsistency, delays and unnecessary cost. For example, in 2006, QRNational undertook an exhaustive process to amend its accreditation in New South Wales to allow the use of the 2800 locomotive class and two additional wagon classes. The work included:

- Risk assessment and management plans for all aspects of rollingstock operation;
- Modification of the consolidated audit program;
- Development of a series of safety interface agreements with stakeholders; and
- An operational risk assessment.

A comprehensive series of train operation tests were completed, despite the fact that the 2800 class has been operating for many years in Queensland. The testing schedule included:

- Static rolling stock outline test;
- Static vehicle weigh test;
- Static vehicle twist test;
- Vehicle/bogie swing test;
- Vehicle/vehicle swing test;
- Static brake test;
- Brake performance test;
- Ride performance test;
- Kinematic rolling stock outline test;
- Traction performance test;
- Rock & roll test;
- Environmental tests;
- Signal visibility test;
- Electrical safety inspection;
- Signal compatibility test; and

- Signal interference test.

A number of these tests were performed twice, for both the ARTC and RailCorp. While the personnel of both track providers have been cooperative and helpful, the fact remains that the multiple-regime process is costly and unnecessary.

The current system of rail safety regulation involves both direct and indirect costs for the rail operator. Significant employee resources are devoted to the compliance effort in multiple jurisdictions, while direct compliance costs for a national operator like QRNational are several million dollars per year. Costs have increased significantly year on year, with more than one hundred new safety regulator employees appointed across the various jurisdictions over the last three years. Compare this regime with road, where a single national safety compliance system is provided at public expense.

QR supports the move to create nationally-consistent rail safety legislation by July 2007, but is concerned that the continuation of seven separate State and Territory safety regulators will potentially lead to different interpretations of this legislation.

The passenger/freight conflict

The priority given to passenger train services over freight services reduces rail's competitive position in relation to road. QR understands that State Governments must have a commitment to an efficient commuter service within their capital cities. Nonetheless, the unilateral imposition of the passenger first priority severely inhibits freight rail operator service levels. This occurs in a number of ways, most notably:

- Freight services are required to compete directly for paths on a network of congested lines that also carry the full commuter schedule;
- Currently freight services are inhibited by curfews during peak passenger activity periods. In practical terms, this means that freight rail operators have just a six-hour daily window to move through cities like Sydney, compared to road operators who enjoy round-the-clock access. The "Sydney problem" increases transit times and reduces rail's reliability and availability, making it a major factor in rail's lack of competitiveness on the East Coast.

Separate passenger and freight rail infrastructure in metropolitan areas like Sydney and Brisbane is a clear national priority for Australia's transport policy-makers.

Port Shuttles

Although rail is better known for its advantages over long hauls, it is also used for short-haul port shuttle services. In fact, for congested port-to-city corridors, rail is shaping as a real alternative to the introduction of heavier and longer trucks and prohibitively expensive road expansion. QR believes that continually-cycled rail port services from inland terminals can be commercially-sustainable, given efficient asset

utilisation. However, the viability of these services is currently constrained by, among other factors:

- Higher stevedoring charges for rail compared with road – rail's stevedoring charge is considerably higher than the slot booking fee charged for road operators entering ports; and
- Infrastructure requirements - there is currently a backlog of infrastructure improvements which would enhance rail's efficiency in metropolitan areas. While some key projects, like the linking of Patrick's and P&O's rail sidings in Melbourne, are being progressed, there would be benefit in a more transparent, nationally-agreed package of port shuttle-related investments under AusLink.

Pathing issues

As port rail usage and interstate domestic demand grows, QRNational's capacity to provide a competitive option for national transport customers is hampered by the current approach to train pathing. There are only a limited number of prime intermodal pathing slots into the majority of ports and interstate destinations. Many of these are already assigned to existing operators, making it difficult for a new entrant to gain a market foothold unless investment in new capacity at peak periods is made by the track provider.

QR supports greater flexibility in the allocation of train paths, but a system of auctioning may not be the answer. This has the potential to favour large incumbent operators with economies of scale. Auctioning may also complicate the already difficult pathing position faced by current low-priority traffics like port shuttles.

Improved terminal provision and access

The design of an improved intermodal freight network is also reliant on efficient and equitable terminal access. These terminals need to support efficient train-running lengths.

Efforts to grow the rail market are currently being hampered by terminal limitations. In key cities like Sydney, there is a scarcity of terminal-friendly land in central locations, and access to appropriate existing terminal facilities by new market entrants like QR is difficult to achieve. As part of a focussed national freight strategy, QR believes that governments can play a facilitation role to ensure that key parcels of land are earmarked for future terminal purposes as growth eventuates over the medium to long term. The cooperation between the Australian and New South Wales Governments in relation to the Moorebank site in Sydney is an excellent example of this required foresight.

The feasibility of introducing more commercially-oriented management for the major [road] freight routes, the potential benefits and costs, and how pricing, network 'boundary' and other implementation issues could be resolved

QR believes that a consensus view is emerging that individual user charging is the long-term future for road pricing. Policy work to ensure that individual user pricing is introduced into Australia suggests issues such as design, scope, technology, should commence today as implementation might take several years to complete.

Implementation issues need to be directed by policy advisors from all jurisdictions. In this regard, a working group of officials should undertake assessments which inform the development of an individual user charging system, which could include:

- choice of technology;
- pricing principles;
- institutional arrangements (public sector, private sector, statutory authority, public sector commercial entity etc);
- regulation;
- initial scope and subsequent roll-out;
- transitional arrangements (including need and number of trials);
- equity effects; and
- intergovernmental financial reforms.

With respect to initial scope, the vast majority of freight travels along a relatively small section of the national network. This would seem to QR to be the logical starting point for the feasibility assessment.

QR believes that based on the experience of other utility businesses, particularly rail and water which were less commercially orientated utilities prior to commercial reform, introducing commercial reforms to road authorities is certainly achievable and desirable.

Some parts of government owned road services already operate according to commercial principles. For example, in Queensland the Department of Main Roads has three commercial units RoadTek, Queensland Motorways Limited and Transmax Pty Ltd.

The key issue is the feasibility of charging all traffics on a network. QR believes that economics of mixed traffics on freight corridors do not present a significant problem as the incremental costs are largely load determined until capacity constraints are reached. Passenger cars could continue to pay a fixed charge for access with increasingly sophisticated pricing arrangements developed over time.

The key issue for the Commission should be to identify the infrastructure pricing arrangements which are in the long term economic interests of Australia and to recommend these to government. Only then can work commence on designing the new system; work which is likely to span several years.

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