



## **Road and Rail Freight Infrastructure Pricing**

**NSW Government Submission to the  
Productivity Commission Discussion Paper**

**November 2006**

**PRODUCTIVITY COMMISSION**  
**DISCUSSION DRAFT ON ROAD AND RAIL FREIGHT INFRASTRUCTURE PRICING**  
**SUBMISSION FROM THE**  
**NEW SOUTH WALES GOVERNMENT**

## **EXECUTIVE SUMMARY**

The road freight industry is being held back by current charging and institutional arrangements. Reform is needed to ensure the long term, sustainable provision of road infrastructure and create opportunities for vehicles that are used more productively.

This NSW Government submission outlines in **Part A** an approach to charging that:

- is based on sound economic principles;
- sets charges that recover the aggregate economic costs of providing road infrastructure;
- reflects the relative contributions of different classes of heavy vehicles to those costs;
- returns revenues from industry charges to road transport agencies in accordance with assessed requirements for expenditure, including future investment needs; and
- is flexible in encouraging the more productive use of heavy vehicles.

The submission also outlines an achievable transition plan for moving towards this longer term target through:

- updating PAYGO, including through the incorporation of enforcement costs in the cost base; and
- preparing for structural reform through the introduction of incremental charges that are negotiated with the industry to accommodate and reward the more productive use of heavy vehicles (hereafter referred to in this submission as productivity-based pricing). This access would in due course be incorporated in the longer term approach to charging. The revenue that is raised would be returned to roads.

There is no substantial disagreement with the Commission's observations on rail. However, concerns are expressed in **Part B** of this submission in two areas:

- a failure in the Discussion Draft to address the question of what is an appropriate network for rail that facilitates an 'apples with apples' comparison with road for general freight haulage; and
- the need for any adoption of a nationally consistent approach to rail regulation, as recommended by the Commission, to be able to accommodate freight and mixed freight/passenger requirements.

A response to selected Draft Recommendations and Findings in the Discussion Draft is included as **Part C** of this submission.

## INTRODUCTION

The Inquiry's terms of reference, drawn from the Council of Australian Governments' (COAG) resolutions in February 2006, require the Commission to:

' . . . estimate the full financial costs of providing and maintaining freight transport infrastructure on major road and rail networks . . . based on the principle that prices charged should reflect all costs in each mode'

and to

' . . . assess the full economic and social costs of providing and maintaining road and rail freight infrastructure, if it judges this to be feasible'.

The Inquiry is timely. There is currently an impasse over the National Transport Commission's (NTC's) proposal to adjust heavy vehicle charges (as applied under the Pay-As-You-Go (PAYGO) methodology) and there are commonly held views that road/rail pricing is not competitively neutral.

### *Economic Efficiency*

Whilst the Discussion Draft (Draft) has made useful contributions to the road and rail debate, a significant gap is the failure to address the current impasse over the NTC's proposed third determination. This determination was only the third proposed adjustment to truck charges since 1992. It is clear from the Draft that current charges inadequately reflect economic costs and are hostage to change mechanisms that are difficult to implement practically. Furthermore, PAYGO, in its current form, is not a sustainable approach for providing future road freight infrastructure in Australia.

The Productivity Commission (Commission) comes to the view that full economic pricing is not feasible and makes limited recommendations for policy action at this stage. It invites discussion on the two institutional reform options of: (1) a national road fund and (2) commercially oriented road management. However, the invitation to comment on two options may or may not yield a way forward.

In principle, it would seem reasonable to employ the same "building block" approach to road pricing as is used for water and electricity infrastructure, and indeed for some rail infrastructure.

As part of the exercise, the approach would then be extended to cover how charges might be set, including both the fixed and variable components, and how the revenue quantum might then be returned to road authorities in accordance with assessed road expenditure needs.

### *Pathway to Road Freight Infrastructure Pricing Reform*

The NSW Government acknowledges the need for interim reform to both address the inadequacies of the current arrangements and to facilitate the move towards the first-best model. The recommended approach includes:

- the Commission providing advice and guidance for the new Heavy Vehicle Pricing Determination, which the Australian Transport Commission has recently directed be developed for implementation in mid-2007;
- the inclusion of incremental (or 'productivity based') pricing to enable operators to secure enhanced access rights for higher productivity vehicles and other special initiatives as a trial arrangement ahead of the development of mass-distance-location based charging;
- a true return of revenue to the roads through the redistribution of registration charges nationally on the basis of vehicle activity, and the investment of road use charges in freight-related infrastructure projects;
- the development of a mass-distance-location based charging framework for long haul vehicles following the successful trial of productivity-based pricing, to address the issue of cross-subsidies received by some vehicles; and
- the development of cost-reflective pricing for all heavy vehicles and heavy vehicle types, taking account of lessons learned under the implementation of productivity-based pricing and mass-distance-location based charging for long haul vehicles.

### *Rail Freight Infrastructure Pricing*

There is no substantial disagreement with the Commission's observation on rail. However, concerns are expressed in Part B of this submission in two areas.

#### *Overall Remarks on Discussion Draft*

The NSW Government acknowledges and welcomes the important work completed to date by the Commission. As an aid in producing the Final Report, New South Wales offers the following comments on how further work could usefully be progressed, interim steps for reform and comments on key selected recommendations and findings.

The NSW Government notes the critical importance of the Commission's final recommendations in relation to the manner in which major transport reforms are to be implemented under the COAG National Reform Agenda and, more broadly, in establishing an environment to promote the efficient use of, and investment in, transport infrastructure in the future.

To this end, New South Wales strongly supports the Commission's Final Report providing both short and medium-term paths to implementation of more efficient road and rail pricing arrangements.

We have focused our comments on key issues of concern for New South Wales and trust that they will assist the Commission in the shaping of its Final Report and recommendations. New South Wales would be happy to provide further information to the Commission on any aspect of this submission.

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## PART A – ROAD FREIGHT INFRASTRUCTURE PRICING

### A1 – EFFICIENT ROAD PRICING

The Draft is largely silent on practical means to achieve efficient road pricing and misses an opportunity to identify and “unbundle” important information that is directly in line with the Inquiry’s terms of reference.

It provides information relevant to these areas (see Box 1).

#### **Box 1: The Commission’s Key Road Findings**

The Commission’s key findings for road include:

- In aggregate, road user charge revenues for heavy vehicles (from PAYGO) currently recover more than the costs they attribute to the network. However, if charges remain the same, as road expenditures increase, the recovery of heavy vehicle attributed costs will not be achieved.
- PAYGO’s current constrained structure of charges has resulted in some over- and under-recovery by vehicle class. Significant cross-subsidies also exist within vehicle classes.
- There is much debate relating to the current, conservative allocation of attributable costs. A higher proportion of cost attribution, specific to heavy vehicle classes, may be feasible.
- The technology to achieve location-based, mass-distance charging exists but, at present, is not cost-effective. As such, there are significant difficulties associated with the determination of fully cost-reflective heavy vehicle charges.

The Commission has chosen not to pursue economic cost estimations to determine the efficient cost of road infrastructure provision. Citing a lack of reliable data and the enormity of the task, the Commission does not recommend a divergence from the current PAYGO system (the existing charging and investment regime for road freight infrastructure).

Instead the Commission advocates the potential to achieve substantial efficiency gains through the fundamental reform of institutional arrangements for road infrastructure provision. Specifically, the Commission advances ideas in relation to the creation of an independent road fund and/or, as a midway point, the commercially-oriented management of major freight routes.

#### **Economically Efficient Road Charges**

While it is agreed that there may be merit in the efficiency argument for an independent road fund and the commercially-oriented management of major freight routes, the creation of efficient pricing structures underpins the basis for this inquiry. With the expected doubling of Australia’s freight task within the next 20 years, any inefficiency (caused from movements away from efficient prices) will only magnify as the freight task increases.

Under the current PAYGO system of heavy vehicle charging, operating and maintenance costs and current capital expenditures are recovered over a three-year period (from when they occur). Under this system however:

- large spikes in road charges are created whenever significant new investments are made or, alternatively,
- within the confines of PAYGO, significant new investments may not be undertaken when it is economically efficient to do so.

Furthermore, the pre-1992 capital stock, which existed prior to the commencement of PAYGO, is ignored (or treated as a sunk cost) by the current PAYGO charging structure. As the requirement to recover a return on road and rail capital is not consistent, from a competitive neutrality perspective, road and rail are not treated equally.

## *Efficient Economic Costs*

Consistent with economic principles, through the incorporation of a building block approach, the Commission should assess the efficient economic cost of road provision to determine road freight's economically efficient charges. In-principle, there is no reason why the provision of road infrastructure should be treated differently to that of water or energy.

Specifically, this approach requires the estimation of:

- operating expenditure and maintenance costs;
- return on new capital (less depreciation);
- return on the existing – pre-PAYGO – capital stock (less depreciation); and
- externalities<sup>1</sup>.

Using a depreciated optimised replacement cost (DORC) asset valuation methodology (or an equivalent economic valuation methodology), a regulatory asset value (RAV) of the existing, pre-PAYGO, capital stock (determined purely for the purposes of calculating an efficient economic value) needs to be established. This value is currently undetermined but is likely to be positive depending on the extent to which past capital costs are regarded as sunk or amortised. That is, have past contributions through the fuel/diesel levy correspondingly matched the consumption of the economic life of the asset over time? If so, has the asset been fully amortised?

It is likely, however, that the existing road asset (the capital stock existing pre-1992) has significant 'economic value' as it still confers economic benefits on road users above and beyond those benefits attributable to post-1992 capital expenditure.

The economic benefits attributable to the pre-1992 asset base should, in-principle, be recovered through economic charges on current and future road users (comprising a return on capital – as proxied through the weighted average cost of capital (WACC) – and depreciation charge, that recovers asset consumption of the pre-1992 asset base) as well as any current operating, maintenance and capital costs attributable to road users. Post 1992 capital expenditure has been fully recovered from road users through the current PAYGO system, which continues to recover current capital expenditure in the (three-year) period in which it is incurred.

Failure to recognise the economic value of the unexpired proportion of the pre-1992 road asset base in current road charges (through a rate of return and depreciation expense) is unlikely to achieve a competitively neutral outcome between road and rail users.

### *How should the economic costs be recovered?*

In line with best practice economic pricing principles, the Commission should consider more economically efficient road charges to replace the current PAYGO system. Charges could be set along a ten-year price path using a multi-part tariff incorporating:

- a fixed component to cover the fixed attributable costs;
- long run marginal cost pricing to account for variable attributable costs; and
- Ramsey pricing principles<sup>2</sup> to allocate any common costs.

Using a DORC methodology (or similar), applying the relevant WACC to the RAV, the economically efficient charge to recover a return on the capital expenses, less depreciation, of the total asset base

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<sup>1</sup> The Commission chooses to exclude externalities from the economic cost assessment because of the difficulties in accurately estimating the costs and the fact that they are partially accounted for through other existing regulatory mechanisms. The NSW Government supports more work being done to identify and quantify externalities.

<sup>2</sup> That is, where the allocation of common costs varies among users based on the likely impact such cost changes will have on behaviour. For example, users whose demand is largely unresponsive to price changes would proportionally bear more of the common costs. In this way, as suggested by the Commission, the 'Ramsey' allocation of common costs will minimise any distortions in demand from pricing above marginal costs – vehicle kilometres travelled (VKT) may provide a reasonable allocation proxy to achieve this.

can be established. As part of this approach, capital costs reflecting pre-1992 investments and future capital expenditure should be determined.

Underpinning this process, the introduction of full 'economic cost' pricing should be built on a series of interim reforms designed to acquire and validate the information necessary to calculate and recover the aggregate annual component costs to be recovered from road users.

Under such an arrangement, a smoother price path could be set for, say, ten years, with a review after the initial year and then periodically every three years following. Such periodic reviews would incorporate the ability to assess, and reflect within its charges, any change in circumstances. For example, if a particular class of vehicle (say B-double) were granted additional access to road infrastructure that previously it was unauthorised to use, on review of the price path, the necessary additional costs to upgrade the now authorised road use would be incorporated into that vehicle class' attributable costs, and reflected within its road charges. There would also be flexibility to accommodate a new class of vehicle, for example, B-triples<sup>3</sup>.

The driving principle behind this process is to provide scope for negotiations to occur between road user groups and road authorities at any time, when a change in circumstances is sought. Through an ability to adjust road charges when periodically reviewed, road authorities are effectively open to negotiate with road user groups, adding flexibility to the pricing regime.

Importantly, under the pricing regime proposed, a strong incentive would exist for the more efficient fleet operators to use their vehicles more productively. Operators would benefit from a lower average cost of road charges (per kilometre travelled), in comparison to inefficient/less productive operators who under-utilise their vehicles (that is, not filling to capacity or travelling less distance than the average vehicle).

#### *Revenue-Investment Link*

It is recognised by the Commission, and in many submissions, that a more direct hypothecation of revenues (from charges) is required to effectively link revenues to road investment and encourage price-responsive decision-making.

In relation to the appropriate way to attribute costs across road users, this already occurs in part under the current PAYGO system, where the attributable impact of heavy vehicle classes are estimated and then used to allocate road freight related expenditure across the vehicle classes. A similar attribution could be applied to any revised charging regime proposed. More refined attributions are desirable and data essential to this task could be acquired through the introduction of interim reforms in which such charging is applied.

Reforms are needed to strengthen the revenue-investment link and facilitate the economically efficient determination of road charges. It would be helpful if the Commission could investigate the adequacy of the current mechanisms (registration charges and the fuel excise) of revenue collection for the recovery of costs. These mechanisms need to be unbundled and, if determined inadequate, a better regime (for example, a multi-part tariff, as discussed above) should be proposed. This particularly is an issue under the Commonwealth's current collection and allocation of the fuel/diesel excise revenue, which accounts for a little under two-thirds of road revenues returned to the states. Any proposed mechanism should address the allocation and adjustment mechanisms for returning the revenues collected, from the quantum of charges, to road authorities.

This process is something of a 'black box' as it has not been adequately explained in the Draft. It would be useful for the Inquiry to focus on the 18.51c/l of fuel tax that is currently returned by the Commonwealth, the portion attributed to heavy vehicles, the basis for this apportionment and how it is set/altered.

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<sup>3</sup> While fundamental to the building block methodology, this approach is also to be included within the proposed interim pricing reforms. The proposed interim reforms include what is referred to as 'productivity-based pricing', which is defined for the purposes of this submission as an incremental pricing approach that provides a temporary measure to allow a movement to full economic cost pricing. Productivity-based pricing is discussed further in section A3 of this submission.

There should also be due recognition of the policy and budgetary environment for governments, both Commonwealth and States.

The Commonwealth's approach to collecting the fuel tax ensures it retains a significant proportion of fuel tax revenues as 'general' revenue which can be allocated in accordance with assessed budgetary priorities.

Similarly, States make choices as to hypothecation. New South Wales chooses to hypothecate all of its weight tax, overloading fines and untied Commonwealth road funds to roads. Even so, 30% or so of NSW Roads and Traffic Authority expenditure on roads took the form of an additional discretionary allocation from the Consolidated Fund in 2005-06.

Budget pressures and government policy priorities are likely to be different in future years. Governments reasonably seek to preserve discretion at the margin to allocate revenue in accordance with those circumstances. The Inquiry needs to explain and acknowledge that road and rail users are competing for funds with other legitimate services, such as health and education, and cannot be given priority a priori.

However, in principle, decisions on the allocation of government funding should be transparent decisions which have regard to efficient pricing.

What this issue highlights is the need for clear, agreed national objectives for Australia's freight transport sector to better guide long-term planning and investment decision making by all governments. This issue is discussed in detail in NSW's first submission to this Inquiry.

As noted below, it would also be helpful if the Commission would address the current disparity between the level of registrations in each State and Territory and the level of heavy vehicle activity in those jurisdictions (see Appendix 1). Currently, on a tonne-kilometre travelled basis, approximately 39% of articulated trucks in Australia operate in New South Wales. However, of Australia's articulated trucks, only 23% are registered within New South Wales. A mechanism to address this issue would in principle provide for expenditure on roads more in keeping with assessed needs.

New South Wales strongly believes that, for competitive neutrality reasons, it is better to get some approximation of the economic costs of road use, and reflect these costs in charges, than to have non cost-reflective charges that are likely to exacerbate resource allocation distortions. As the Australian Logistics Council states (Discussion Draft, p. 8.14), 'estimating economic costs in practice is not straightforward... but in this case, as in many others, it is better to be approximately right than precisely wrong'.

In this regard, the NSW Government requests that, at minimum, the Commission investigate and address what is proposed in this submission. While deficiencies preventing the attainment of an optimal framework will exist (for example, some degree of network averaging will always exist while location-based, mass-distance technology remains cost-ineffective and is therefore not implemented), the adoption of a full 'economic cost' pricing framework is still an improvement on what currently exists, and may be the most practicable 'economically efficient' outcome.

### **Assessing the Cost of Road Freight Infrastructure**

The Commission notes that to assess the full cost of providing and maintaining road freight transport infrastructure would be a 'formidable task' and 'infeasible in the context of this inquiry'<sup>4</sup>. However, this assessment is essential to progress the debate for reform in the pricing of road freight infrastructure access and, as the Commission also notes:

*... it is the economic costs (the costs of providing efficient infrastructure services into the future) that are, in principle, relevant for transport efficiency.<sup>5</sup>*

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<sup>4</sup> Discussion Draft, page XXXI

<sup>5</sup> Discussion Draft, page 4.2



The full cost of providing and maintaining road freight transport infrastructure, not simply what the various levels of governments spend, needs to be calculated to enable jurisdictions to:

- ensure the sustainable management of the road freight infrastructure as an economic asset;
- facilitate an increasing focus on total asset management; and
- ensure that benefits of higher productivity vehicles are obtainable.

This would, ideally, involve a disciplined system based on some objective measure for the assessment of the provision and maintenance of road networks, such as an independent accountancy asset based measure.

The NSW Government requests that the Commission, should it be unable to provide guidance on how these costs should be assessed as part of this inquiry, provide direction on how this task should be undertaken.

## A2 – INSTITUTIONAL REFORM

The Commission's institutional reform proposals and key findings in relation to the current institutional arrangements are outlined in Box 2. The Commission offers a cautious invitation to discuss PAYGO alternatives, in the form of a National Road Fund and/or a commercial approach to major freight route management.

### **Box 2: Institutional Reform Proposals**

The Commission's key findings in relation to the institutional arrangements of road include:

- The provision of road infrastructure in Australia is primarily funded through governments' consolidated funds.
- There is no systematic link between road-user prices and decisions regarding desirable future road expenditures. Road pricing policies will only have the ability to achieve more efficient outcomes where an explicit link between prices, revenues and investment exists.
- Present road funding arrangements potentially lead to inefficiencies and distortions in road management and investment decision making.
- The full introduction of AusLink has the potential to facilitate more efficient road investment decisions.

Acknowledging the disconnect between revenue raising and road spending as a significant barrier to efficiency, the Commission invites discussion on two institutional reform options:

1. an independent national road fund and
2. the commercially-oriented management of major freight routes.

The Commission advocates the establishment of an independent road fund and the commercially-oriented management of major freight routes as potential measures to achieve significant efficiency gains. Although these reforms have the potential to improve efficiency, particularly by addressing the current disconnect between revenue raising and road spending, they should be viewed as a subset of the more important pricing reforms. It is suggested that the attainment of economically efficient charging should be this Inquiry's central focus<sup>6</sup>.

### **National Road Fund**

The National Road Fund would be independently administered, require hypothecation from Commonwealth and State treasuries, and would facilitate expenditure on roads on the basis of assessed need. The Fund would not apply to all roads but to some designated class of roads, for example: national highways, or national 'freight' roads.

In effect this proposal represents a supply-side approach to the road system that would supersede PAYGO and, depending on how it is designed, potentially be more adaptable to changing future circumstances. It is put forward by the Commission as having merit as it could be a means of providing security of funding and therefore facilitate effective planning.

A higher proportion of total revenue (for example, weight tax and overloading fines) is already hypothecated by New South Wales to roads than in other States and Territories. In 2005-06, almost 30% of total roads expenditure in New South Wales was also sourced from the Consolidated Fund.

Governments' budget-setting requirements would favour continued flexibility at the margin. However, hypothecation of a subset of total expenditure to fund a subset of roads (the New South Wales share of

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<sup>6</sup> The attainment of an efficient pricing structure, based on a full 'economic cost' pricing framework, offers the greatest potential to achieve gains in efficiency through the creation of cost-reflective pricing signals. The creation of efficient pricing signals correctly influences market behaviour to create efficient road investment decisions and an optimal allocation of resources.

national highways or national 'freight' roads) could, in principle, be supported as worthy of further discussion in the short term.

However, the Commission's approach to this issue appears inherently to contradict the purpose and policy rationale underpinning AusLink.

The Commission supports the implementation of AusLink (including the National Guidelines for Transport System Management) and the increased transparency AusLink may bring to investment decisions. But the Commission's understanding appears to be that AusLink is a vehicle for improved road investment decisions, rather than improved transport investment decisions.

AusLink is based on the development of corridor strategies, for the purposes of providing a broader, longer-term and cross-modal context for managing the total transport needs of a corridor. The intent is to provide an objective basis for identifying investment priorities, examining alternative solutions, and identifying the best potential projects, without any prior modal bias.

The discussion of a dedicated road fund would seem, therefore, to be contrary to AusLink as a policy approach as it effectively seeks to remove strategic transport policy decisions from governments:

*'such a fund requires a significant devolution of responsibility and decision-making away from direct government control to an autonomous agency, directed by an independent board tasked with managing the funding of recurrent and capital road expenditures'* (Discussion Draft, 9.19).

As well as the potential loss of strategic policy scope for transport infrastructure investment, there are potential technical limitations to the concept of a road fund.

The report notes that the major potential benefits of a road fund would be the explicit linking of charges and road spending, forward looking charges linked to efficient future spending, and greater transparency in project evaluation.

However, the process for establishing this linkage is not developed. The Commission has noted the difficulties involved:

*'it can be difficult to empirically determine the extent to which efficient investment is taking place across the road network'* (Discussion Draft, p. 9.11); and

*'the Commission has not been able to undertake the detailed analysis necessary to make conclusions on the overall adequacy of road investment'* (Discussion Draft, p. 9.11).

### **More Commercially-Oriented Management of Road Infrastructure Provision**

The Commission is proposing that the corporatisation model be applied to state road authorities in relation to their freight roads provision. However, the separation of road spending between freight and private car is difficult to achieve in practice.

As the NSW Roads and Traffic Authority follows best-practice procedures to assess where road spending is required, the more commercially-orientated management of road infrastructure provision would seem to offer little benefit to New South Wales.

## **A3 – PATHWAY TO REFORM**

### **Sustainability of PAYGO**

The NSW Government accepts that the PAYGO allocation process is conservative and acknowledges that there are limited viable alternatives at this point in time. However, the Commission notes that a number of studies have suggested that 'road infrastructure expenditure is, and has been for some time, inadequate'.

The relevance of these studies is important because the National Transport Commission (NTC) assumes under PAYGO that expenditure is a reasonable proxy for cost if, amongst other things, pavement or bridge conditions are not changing significantly. Given the findings of the studies noted above, this assumption under PAYGO is not sustainable – the expenditure by all jurisdictions on providing and maintaining road freight infrastructure does not, and has not for some time, equalled the costs incurred from usage of that infrastructure. Therefore:

- the share of expenditure attributed to any heavy vehicle class cannot be assumed to equal the marginal cost impact of those vehicles on the network; and
- heavy vehicles in aggregate may have never been covering their marginal costs under the Second Heavy Vehicle Pricing Determination.

Whatever may be the causes of the inadequate expenditure, the nature of PAYGO itself has reinforced these arrangements. In particular:

- expenditure on road freight infrastructure is constrained, resulting in a growing backlog of maintenance requirements;
- as PAYGO merely recovers what has been spent on road freight infrastructure and is not forward looking, when expenditure is capped, PAYGO will not generate enough revenue to address the backlog of maintenance requirements;
- PAYGO has poor self-correction capabilities as any increase in expenditure to 'catch-up' on incurred costs leads to a 'price shock' for the heavy vehicle industry; and
- there is a disconnect between revenue and expenditure, principally as the road use charge collected by the Commonwealth is not fully returned to roads, resulting in a significant portion of road freight-related expenditure being funded out of consolidated revenue.

PAYGO, in its current form, is therefore not sustainable for the future of road freight infrastructure funding in Australia.

### **Interim Reform**

The NSW Government considers that there is a need for interim reform to both address the inadequacies of the current arrangements and to facilitate a move towards the first-best model. As such, New South Wales recommends the following interim reforms:

- the Commission providing advice and guidance for the new Heavy Vehicle Pricing Determination, which the Australian Transport Commission has directed be developed for implementation in mid-2007;
- the introduction of flexibility in pricing (see p. 5) to enable operators to secure enhanced access rights for higher productivity vehicles and other special initiatives as a trial arrangement towards the development of mass-distance-location based charging;
- a true return of revenue to the roads through the redistribution of registration charges nationally on the basis of vehicle activity, and the investment of the road use charge in freight-related infrastructure projects without commensurate reductions in current aggregate Commonwealth or State road expenditure;
- the development of a mass-distance-location based charging framework for long haul heavy vehicles following the successful trial of 'productivity based' pricing as a means of addressing the current cross-subsidies received by some vehicles; and

- the development of cost-reflective pricing for all heavy vehicles and heavy vehicle types following the lessons learned under the implementation of 'productivity based' pricing and mass-distance-location based charging for long haul vehicles.

Further detail is set out below.

### **New Determination**

The Australian Transport Council (ATC) recently directed the National Transport Commission (NTC) to:

*... commence work on a new heavy vehicle pricing determination having regard to the Productivity Commission's final report and the outcomes of the COAG consideration of the report.<sup>7</sup>*

This direction included a requirement that the NTC develop a proposal for 'productivity based' pricing for enhanced access rights for higher productivity vehicles and other special initiatives. This proposal acknowledged the current shortcomings of PAYGO in that:

- there is no capacity under the current arrangements to enable operators to secure enhanced access rights for high productivity vehicles and other special productivity based initiatives; and
- there is limited capacity to provide price signals to encourage more productive vehicles that provide better safety and infrastructure outcomes.

To assist in the development of a new heavy vehicle determination, and to facilitate the development of price signals designed to encourage more productive vehicles that provide better safety and infrastructure outcomes, the NSW Government requests that the Commission provide guidance on:

- PAYGO being updated and then grandfathered to enable 'normal heavy vehicles' to continue paying 'normal prices' (with all revenue being returned to the roads that carry the vehicles); and
- the development of productivity-based pricing for enhanced access rights for higher productivity vehicles and other special initiatives, including special loading schemes, taking into account the need to recover the full cost impact of these vehicles, not simply the increased expenditure incurred by jurisdictions.

These points are expanded upon below.

### *Updating PAYGO*

A number of stakeholders are seeking direction from the Commission on options to facilitate the development of a new heavy vehicle pricing determination to overcome the impasse in relation to the recent Third Heavy Vehicle Pricing Determination.

The NSW Government welcomes the initial comments made by the Commission, in particular in relation to:

- the treatment of enforcement costs:
  - New South Wales strongly welcomes the recommendation that enforcement costs be included in the cost base under PAYGO. The recovery of enforcement costs from the road freight industry would represent a step towards competitive neutrality with all other freight modes (rail, air and sea), in which the relevant safety and access regulators impose full or partial cost recovery on operators.
  - New South Wales considers, however, that it may not be appropriate to discount this cost for any revenue generated as a result of enforcing regulations. For example, many regulations target the negative externality impacts of the road freight industry on the community (such as accidents), the cost of which is not fully internalised by the industry or recovered through the penalties imposed.

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<sup>7</sup> Australian Transport Council, *Joint Communiqué*, 13 October 2006

- the allocation of local road expenditure:
  - Given that expenditure on local roads is a significant component of overall government expenditure on roads, New South Wales supports more work being undertaken by the NTC to ensure that such costs are appropriately quantified and allocated, including through the development of a separate local road allocation template, with an adequate contribution from the Commonwealth.
- the treatment of financing costs under PAYGO:
  - Whilst the NSW Government acknowledges that ‘double counting’ may arise if an explicit rate of return on capital is to be recovered under PAYGO, further investigation of the financing implications for the jurisdictions is required in light of:
    - § three year averaging applied under PAYGO; and
    - § road user charges collected by the Commonwealth not being returned to the relevant jurisdictions, which creates a financing burden for the jurisdictions in the provision of road freight infrastructure.

New South Wales requests the Commission provide recommendations in its final report on how to update PAYGO in 2007 to provide more effective and efficient allocation and recovery of expenditure.

#### *Productivity Based Pricing for Higher Productivity Access*

As the Commission notes, the NTC reports that the ‘benefits of operating at higher masses are conservatively estimated to be around five times the costs’<sup>8</sup>. As such, New South Wales supports the application of heavy vehicle pricing reform where high productivity returns can be obtained by the industry in a manner where benefits will outweigh the costs.

An interim reform initiative that could be implemented in the near future is a ‘productivity-based’ pricing arrangement to enable operators to secure enhanced access rights for higher productivity vehicles and other special initiatives. Such a charge, which should be developed taking into account the registration fees and fuel excise paid under (an updated) PAYGO, would facilitate:

- higher productivity vehicle combinations that are seeking expanded access to the road network, including B-Triples, quad-axles and vehicles accredited under arrangements such as the Performance Based Standards;
- loading practices and other excess mass arrangements for existing vehicle combinations;
- minor and specific infrastructure upgrades designed to facilitate access by specific vehicle types, such as those as referred to by the Australian Livestock Transporters Association;<sup>9</sup> and
- other special productivity based initiatives that cannot be accommodated under the current PAYGO arrangements.

A ‘productivity-based’ pricing regime to facilitate enhanced access as per the above should enable freight productivity to be improved while ensuring that at least the directly attributable costs associated with these vehicles is fully recovered.

To facilitate the development of a ‘productivity-based’ pricing and other special initiatives in conjunction with updated PAYGO regime, the NSW Government requests that the Commission develop suitable recommendations, taking into account:

- an appropriate structure for productivity-based pricing;
- the scope for changes required to encourage efficient behaviour by road users and providers;
- adjustment costs and distributional effects; and
- the need to recover the full cost impact of these vehicles, not simply the increased expenditure incurred by jurisdictions, in light of the under-recovery of the cost of providing and maintaining road infrastructure in aggregate and the complications introduced by the averaging within PAYGO.

<sup>8</sup> *Discussion Draft*, page 8.28

<sup>9</sup> *Discussion Draft*, pages XLII and 9.10

Such recommendations would assist the NTC in developing options in response to the recent direction from the ATC.

Furthermore, New South Wales requests that the Commission provide recommendations on how, in an environment of productivity-based pricing, an updated PAYGO could be grandfathered to enable 'normal heavy vehicles' to continue paying 'normal prices', ensuring that road expenditure allocated under PAYGO continues to be fully recovered from the heavy vehicle industry.

New South Wales would support the introduction of a pilot scheme in 2007, even if the research required to calculate the relevant access prices is constrained by the lack of available data. Such a trial may be invaluable in determining accurate access prices.

New South Wales would not support the discounting of any revenue raised under a 'productivity-based' pricing regime from the cost base under PAYGO until:

- the Commonwealth returns to the relevant jurisdictions all road user charges collected through the diesel fuel excise; and
- the economic cost of providing and maintaining roads has been independently assessed and it is shown that the expenditure on roads by all jurisdictions, in aggregate, equals the full economic cost of providing and maintaining roads:
  - the revenue from 'productivity-based' pricing should not be used to increase the difference between what 'normal heavy vehicles' pay for using the road and the full economic cost of allowing such usage.

### **Return of Revenues to the Roads**

The Commission notes that the expenditure recovery and revenue arrangements under PAYGO limit the ability of State and Territory governments to provide funding for roads. This, in turn, may lead to inefficient investment decisions by road managers, potentially constraining productivity increases within the industry.

The budgetary pressures on funding provided for road infrastructure arise from a number of sources:

- As the Commission acknowledges, 'road infrastructure is funded primarily through governments' consolidated funds as part of the annual budget process'<sup>10</sup>
- PAYGO does not provide price signals or return sufficient revenue to the States for investment decisions made in relation to freight-related road expenditure, as the revenue raised under PAYGO is not returned to the jurisdictions in which the investment was made or to where the heavy vehicles operate:
  - registration charges only account for 35% of revenue recovered under PAYGO and these funds are allocated on the basis of the state of registration, not the state of operation, of the heavy vehicles. This has a significant impact on New South Wales as, being the 'through State', more vehicles operate in New South Wales than have NSW registration (see Appendix 1).
- The basis for determining funding requirements is often not tied to the performance assessment of the network. For example, under AusLink, performance is assessed on the basis of roughness assessments but funding under the next round of AusLink is to be provided on the basis of corridor studies.

The NSW Government agrees that there is a 'need to ensure that the appropriate institutional, regulatory and incentive agreements are in place to encourage the largest possible benefits'<sup>11</sup> from road freight infrastructure-related reform and that this will be supported by creating incentives for road managers to facilitate the optimal use of roads<sup>12</sup>.

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<sup>10</sup> *Discussion Draft*, page 9.40

<sup>11</sup> *Discussion Draft*, page 8.30

<sup>12</sup> *Discussion Draft*, page 9.5

The NSW Government requests that the Commission consider the need for return of all freight-related revenue by all jurisdictions, especially by the Commonwealth, to the jurisdictions to which those revenues relate. In particular:

- road user charges collected by the Commonwealth through the diesel fuel excise being allocated to the relevant jurisdictions through freight-related infrastructure projects; and
- registration charges, especially for articulated vehicles, being pooled nationally and redistributed between jurisdictions according to the location and impact of heavy vehicles.

Such reform would reduce the current budgetary constraints of the jurisdictions responsible for the provision and maintenance of road freight infrastructure. It would facilitate the increasing economic role of roads as freight infrastructure and an increasing focus on the total asset management of roads, thereby enabling access for higher productivity vehicles.

### **Expansion of Interim Reforms to Long Haul and Heavy Haul Vehicles**

As noted by the Commission and in other submissions to the inquiry, long haul vehicles are generally accepted to be in direct competition with rail. More efficient pricing of such vehicles would increase competitive neutrality between road and rail for freight movements. Furthermore, long haul and heavy haul vehicles are sometimes considered to be cross-subsidised by other vehicles, resulting in an under-recovery from these vehicles in relation to their usage of the network.

It is anticipated that many of the vehicles likely to access 'productivity-based' pricing will be long haul or heavy haul operations. As such, it is feasible that the principles and experiences developed under 'productivity-based' pricing could be extended to mass-distance-location based charging for other long haul and heavy haul vehicles following a successful trial of productivity based pricing. The terms of access would address the perceived cross-subsidies received by these vehicles.

### **Development of Full Economic Cost Pricing for All Vehicles**

The long-term objective for any reforms of heavy vehicle access pricing is to develop and implement a system of road charges set under a full economic cost framework (as outlined in section A1). Such development would benefit from the lessons learned under the implementation of productivity-based pricing and mass-distance-location based charging for long haul vehicles, and may include a combination of fixed and variable charges.



## PART B – RAIL FREIGHT INFRASTRUCTURE PRICING

There is no substantial disagreement with the Commission's observations outlined in Box 3, but the comments that follow should be noted.

### **Box 3: The Commission's Rail Findings**

Rail freight is better suited to cost attribution than is road. Charges can more easily be set according to weight and distance travelled and with far less averaging. Rail freight infrastructure now generally operates within a commercial regime with access charges, with a fixed and variable component reflecting regulators' assessments of economic costs.

Some rail services cover their assessed costs. These tend to be specialised, relatively self-contained bulk haulage services, for example: Hunter Valley coal. Rail is best suited to haulage of bulk commodities with regular, large volumes and containerised, non-bulk freight on the long haul east-west corridor.

Other rail services and some bulk haulage services (for example: wheat on branch lines) fail to cover costs and have access charges that are set below the economic costs of provision. Government financial contributions make this possible. Lower external costs may be used as the justification for continued government contributions. CSOs of this nature may not be the most efficient solution to the perceived problem and often lack transparency regarding objectives and incidence.

Rail has been maintaining or increasing share on long distance, bulk haulage traffics, but has been struggling on shorter, inter-capital, predominantly non-bulk freight haulage in the east coast states. The non-bulk haulage or general freight market tends to be the focus of competitive neutrality discussion.

However, most customers choose road over rail in this area because of non-price factors. If road charges were to increase, the Commission concludes there would be little shift to rail because double handling is often required and the transport cost is a relatively small share of the overall product or service value.

The Inquiry's terms of reference require the Commission to 'estimate the full financial costs of providing and maintaining freight transport infrastructure on . . . rail networks . . . based on the principle that prices charged should reflect all costs.'

One of the features of a rail freight system is that it takes trucks off the road and reduces the need for road investment. It also reduces externalities, which tend to be more significant for roads than for rail. These are significant attractions for governments, particularly in sensitive corridors, such as heavily trafficked roads leading to and from ports. It may further be perceived as justifying non-recovery of a portion of the costs, or regulatory, planning or other interventions in the market.

Further, there is an argument that full recovery of rail costs may not be appropriate to maintain competitive neutrality with roads. The argument is based on the observation that despite rail suffering from historical under-investment, in recent years the mode has also been required to operate under a 'commercial framework'. Road has arguably escaped the former burden, and certainly the latter. Therefore, the argument runs, rail should be given time and opportunity to 'catch up'.

An analogy can be drawn with pay TV networks. In the early years of establishment an embryonic network will struggle for sufficient customers and revenue. Additional, up front investment may have to be made to offer choice in channels and improve the network. Charges may have to be restrained initially in an attempt to attract usage. Eventually some threshold may be passed, through a combination of increased customers and higher charges, which allows the network to cover its costs.

It would be useful for the Inquiry to address the question of what is an appropriate network for rail that facilitates an 'apples with apples' comparison with road, especially in light of the Inquiry's expectation of a doubling of the freight haulage task by 2020.

Finally, the Commission recommends that:

*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 (Draft Recommendation 11.3)*

New South Wales supports in-principle the application of a 'nationally consistent' approach to regulation of rail infrastructure, where appropriate. However, an issue that needs further consideration is the appropriate networks to which a 'nationally consistent' approach should apply. As the Commission has recognised, there are a number of networks or rail infrastructure that should possibly sit outside such arrangements. A case by case approach for inclusion is supported by the NSW Government.

The Commission should also recognise the different purposes for which rail infrastructure may be used (for example, transport of goods versus the transport of people and goods) and the need to appropriately balance competing interests in seeking net overall benefits to the community. As an obvious example, it would not be appropriate for the access and pricing parameters which apply to the Hunter Valley coal rail network to be adopted for the Sydney metropolitan rail network.

## **PART C – RESPONSES TO SELECTED FINDINGS AND RECOMMENDATIONS**

### **Draft Recommendation 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.*

*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.*

#### **Response**

No objection in principle.

### **Draft Recommendation 11.2**

*National consistency and coordination in rail regulatory frameworks - including of safety, operational and technical standards - should be expedited.*

#### **Response**

Support in principle.

### **Draft Recommendation 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.*

#### **Response**

New South Wales supports the application of a 'nationally consistent' approach to regulation of rail infrastructure where appropriate and it provides net benefits to the community. It should be noted that not all rail infrastructure is used primarily, or solely, for freight purposes, and therefore principles such as that relating to access should be appropriate to those different circumstances.

A case in point is the Sydney metropolitan rail network. Current access arrangements for the metropolitan network are based on the NSW Rail Access Undertaking. A feature of this undertaking is a well-developed understanding of the need to balance the operational needs of freight against the primary purpose of the network, which is to provide passenger services.

The desire for national uniformity should not override recognition of the unique operating characteristics of different rail networks.

#### **Draft Recommendation 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.*

#### **Response**

Support in principle. However, it should also be noted that in regards to access charging 'being constrained by road and sea freight transport operators', this is not an issue that is only limited to vertically separated networks. Moderation of access regulation should also possibly be considered where vertically integrated operators (especially those that do not compete in the same end market as access seekers) are constrained by modal competition.

#### **Draft Recommendation 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 examination.*

#### **Response**

No objection in principle. The Productivity Commission's finding that 'There appears to be no benefits, and some costs, in maintaining or implementing vertical integration on regional rail networks...' needs to be further considered and tested by the NSW Government.

#### **Draft Recommendation 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.*

#### **Response**

Support. However, it should be noted that the guidelines have been developed for guiding investment in the AusLink national network (including rail and intermodal links), rather than simply the 'national highway system'. That said, as discussed in the NSW Government's initial submission, AusLink lacks a clear project selection process.

#### **Draft Finding 3.3**

*A full assessment of subsidies and other potential sources of price distortion in both road and rail are required to enable judgements to be made about whether competitive neutrality and broader efficiency objectives are being compromised. For example, without knowing the efficient cost of the infrastructure services a truck consumes on a particular trip, price adjustments based on network average cost allocations may not be efficient.*

#### **Response**

Agree. It is recommended that the Commission examines options for undertaking such a task to enable an assessment of the full economic cost of providing road freight infrastructure, as envisaged by the Terms of Reference for the Review.

## Draft Finding 4.1

*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. This has not been a significant feature of the PAYGO system to date, primarily because of national aggregation of the cost base. However, network averaging itself has created cross-subsidies between heavy vehicles accessing different parts of the network.*

### Response

#### Heavy vehicles will pay their way over time

The assumption that heavy vehicles as a group will pay their way over time is based on the assumption, as made by the National Transport Commission (NTC), that expenditure is a reasonable proxy for cost if, amongst other things, pavement or bridge conditions are not changing significantly.

The Commission notes a number of studies have suggested that road infrastructure expenditure is, and has been for some time, inadequate. The need to increase expenditure implies that an inter-temporal cross subsidy is currently being provided to the road freight transport industry.

The current PAYGO arrangement may not be capable of accommodating any increase in expenditure on providing and maintaining road transport infrastructure. Should expenditure increase and it not be recovered under PAYGO, then a subsidy will have been provided to the road freight transport industry.

#### Expenditure fluctuation over time

It should not be assumed that the lack of significant fluctuation in aggregate road freight expenditure to date is an indication that current expenditure, on average, reflects the cost of providing and maintaining road freight transport infrastructure. The stability in the levels of expenditure is a reflection of budgetary pressures, primarily caused by a large portion of PAYGO revenue not being returned to the relevant jurisdictions.

It should be noted that the Federal Government currently levies excise duty on petrol at 38.14 cents per litre. In 2005-06, the Federal Government collected nearly \$14 billion in fuel excise from Australian road users and spent only \$2.5 billion in land transport funding.

By contrast, all the taxes the NSW Government collects directly from motorists are returned to roads funding.

#### Network cross-subsidies

Road infrastructure is a network and, to a large extent, can be considered in the same light as other network arrangements, such as telecommunications, in that it may be appropriate for the high capacity, high usage, low per-unit cost 'trunk' sections to subsidise the higher per-unit cost 'feeder' sections (that is, the 'last mile').

Furthermore, the Commission notes that the application of location-based pricing on major corridors only, for which marginal costs of usage are anticipated to be lower than the network average, could result in charges for heavy vehicles on such routes to fall and potentially intensify road-rail competition. New South Wales would be concerned that any proposals for partial pricing of the network, particularly in relation to corridor-based pricing, may fail to meet the requirements in the Terms of Reference to address impacts on rural and regional Australia.

#### **Draft Finding 4.2**

*Expenditure on local roads to provide access to homes and businesses is more appropriately recovered through council rates and charges than through the heavy vehicle charging system. Even if more of these costs were included in the cost base, most would appropriately be allocated to passenger vehicles, given their much greater use of the local road network.*

#### **Response**

Given that expenditure on local roads is a significant component of overall government expenditure on roads, the NSW Government supports more work being undertaken by the NTC to ensure that such costs are appropriately quantified and allocated, including through the development of a separate local road allocation template, with an adequate contribution from the Commonwealth.

Furthermore, the growing freight task in Australia combined with the changing nature of the freight task itself is resulting in heavy vehicle travel becoming increasingly pervasive. As such, an assumption that local roads are used by light vehicles only is unsustainable.

#### **Draft Finding 4.3**

*The costs of enforcing heavy vehicle mass and speed restrictions are appropriately recovered through road user charges. Any costs recovered should be net of penalty revenues. However, the inclusion of these costs is not likely to have a significant effect on heavy vehicle charges.*

#### **Response**

The NSW Government strongly welcomes the recommendation that enforcement costs be included in the cost base under PAYGO. The recovery of enforcement costs from the road freight industry would represent a step towards competitive neutrality with all other freight modes (rail, air and sea), in which the relevant safety and access regulators impose full or partial cost recovery on operators.

New South Wales considers, however, that it may not be appropriate to offset this cost for any revenue generated as a result of enforcing regulations. No such offset applies to transport regulation in the rail, maritime or aviation sections. The inclusion of such an offset could create perverse incentives for regulators and make operational budgeting unstable.

#### **Draft Finding 4.4**

*That a proportion of road spending undertaken solely to meet remote community needs is appropriately excluded from the costs to be recovered through heavy vehicle charges. Any adjustment for community service obligation expenditure in the cost allocation process should apply to all vehicles. However, heavy vehicles should still pay the marginal costs of accessing roads financed through community service obligations.*

#### **Response**

The NSW Government supports this finding by the Commission.

#### **Draft Finding 4.7**

*There is considerable debate about the relationship between road expenditure and road use. The National Transport Commission cost attribution model results in a lower attribution of costs to heavy vehicles than most of the alternative approaches considered. The Commission supports the National Transport Commission's decision to undertake further work in this area.*

#### **Response**

The NSW Government accepts that the PAYGO allocation process is conservative and acknowledges that there are limited viable alternatives available at this point in time. However, there is scope for

improvement on the current arrangements, including improved consultation arrangements by the National Transport Commission (NTC) with the jurisdictions.

The NSW Government would support the:

- NTC producing comparative assessments under alternative approaches to expenditure attribution and allocation in future determinations to facilitate consideration of the recommendations of the NTC; and
- commissioning of the Australian Bureau of Statistics to expand and/or enhance its data collection activities relevant to the development of the assumptions underpinning PAYGO in future determinations.

#### **Draft Finding 4.8**

*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 cost. However, following rejection of the Third Determination, cost recovery is unlikely to be maintained if road expenditure continues to rise with no increase in charges.*

#### **Response**

As noted above (Draft Finding 4.1), a number of studies have indicated that the appropriate expenditure on providing and maintaining road transport infrastructure does not equal the cost of such provision and maintenance. Therefore the:

- share of expenditure attributed to any heavy vehicle class cannot be assumed to equal the marginal impact of those vehicles on the network; and
- heavy vehicle fleet, as a group, may have never been covering their marginal costs under the Second Heavy Vehicle Pricing Determination.

#### **Draft Finding 4.10**

*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.*

#### **Response**

The NSW Government acknowledges that in the limited charging framework available under PAYGO, issues such as the cross-subsidies noted by the Commission will arise. Whilst there is some scope for improvement on the current PAYGO arrangements, cost-reflective pricing is the micro-economic reform needed for the road freight transport industry.

An interim initiative towards such reform that could be implemented in the near future is a 'productivity-based' pricing arrangement to enable operators to secure enhanced access rights for higher productivity vehicles and other special initiatives. The Australian Transport Council included such an initiative in its recent direction to the NTC to develop a new heavy vehicle pricing determination.

### **Draft Finding 5.8**

*Rail infrastructure operators generally are unable to fully cover economic costs and often are reliant on government subsidies of various forms to maintain viability. These subsidies are potentially significant in affecting competition between road and rail freight.*

### **Response**

A large proportion of freight rail services are subsidised and, by definition, could not really be described as commercial. However, this subsidy may be more efficient than investing in roads and may generate benefits for road users. For example, the country network CSO (approx. \$110 m pa) provides that grain and other bulk goods are not carried long distances on country roads and highways. Maintenance costs, safety issues and congestion affecting other road users are therefore reduced. If large parts of the country network were to close this would result in an increase in the cost of country road construction and maintenance.

### **Draft Finding 6.3**

*There is a range of externality costs related to freight transport. However, the externality component is often difficult to determine, both in principle and empirically. Estimated costs of particular externalities range widely due to different methodologies and assumptions. What can be said is that:*

- *external costs of freight transport generated jointly with passenger transport, are much higher in urban areas than in rural areas and are higher for road freight than for rail freight and*
- *there appears to have been significant internalisation of externalities (except for greenhouse emissions) through regulation, legal liability and various other means.*

### **Response**

It should be noted that a positive externality of rail transport is the avoidance of, or reduction in, the cost of road maintenance or provision.

### **Draft Finding 6.10**

*Further research into transport externalities in Australia is required to assist the introduction of the most cost-effective policies for attaining efficient abatement of external costs. Research should focus on:*

- *the nature and size of transport externalities and*
- *the extent to which these externalities already are internalised, particularly by policies affecting the decisions of passenger and freight transport users.*

*The BTRE is best placed to undertake this research.*

### **Response**

Support

### **Draft Finding 8.1**

*The technical feasibility of more finely-tuned road user charges, such as mass–distance and location-based charges, is a necessary but not sufficient condition for them to be economically worthwhile. In particular, the potential benefits of direct road user charging will be heavily influenced by the institutional setting within which such charging operates, as well as by the transaction costs of the pricing system itself.*



### **Draft Finding 8.10**

*The transaction costs of achieving greater pricing accuracy must be weighed against the potential efficiency benefits.*

### **Draft Finding 8.11**

*Introduction of simple mass–distance charges solely to remove one of many levels of averaging in the current system may not justify the costs (and possible distributional impacts):*

- *however, distance-based charges could establish a ‘technological’ platform for location-based charging, providing an intermediate step from an input tax to a form of direct road pricing and*
- *mass–distance charges also could provide a dedicated (and certain) source of funding for a road fund.*

### **Draft Finding 8.12**

*Mass–distance location-based charges have the potential to bring substantial efficiency benefits. But they also could entail substantial costs and pose some formidable implementation challenges. In particular, institutional arrangements for providing roads would need to change to deliver the full benefits of pricing reform. This suggests that a cautious, incremental approach would be warranted to allow satisfactory resolution of these issues.*

### **Response to 8.1, 8.10-8.12**

New South Wales supports the application of heavy vehicle pricing reform in areas where high productivity returns can be obtained by the industry in a manner in which benefits outweigh the costs. An interim reform initiative that could be implemented in the near future is a productivity-based pricing arrangement to enable operators to secure enhanced access rights for higher productivity vehicles and other special initiatives.

New South Wales would support the introduction of a pilot scheme for productivity based pricing in 2007, even if the research required to calculate the relevant access prices is constrained by the lack of available data, on the basis that such a trial would be invaluable in determining accurate supplementary access prices.

### **Draft Finding 8.7**

*Opportunity cost is the appropriate approach to land valuation from an economic efficiency perspective. For road and rail networks as a whole, the opportunity cost of land is its value in the next best alternative use, without the benefits conferred by access to transport networks. For incremental road and rail projects, the appropriate land value is its market value without the project.*

### **Response**

Given that expenditure on local roads is such a significant component of overall government expenditure on roads, the NSW Government supports more work being undertaken by the NTC to ensure that it is appropriately quantified and allocated, including the development of a separate local road allocation template, with an adequate contribution from the Commonwealth.

### **Draft Finding 8.3**

*Principally to provide a signal about net economic benefits and to allow arrangements that encourage more efficient service delivery, the total costs of providing freight infrastructure appropriately should be met from users of that infrastructure rather than from taxpayers in general. Self-financing is also ‘fairer’, in the sense that only beneficiaries of the infrastructure, in the aggregate, pay for it.*

#### **Draft Finding 8.4**

*Prices set to recover each mode's total costs, which accord as closely as possible to Ramsey principles, have the potential to promote efficient use of road and rail freight infrastructure, while meeting a self-financing requirement:*

- *while users should be required to cover at least the marginal costs of their infrastructure use, their contribution to (unattributable) fixed or common costs should be inversely related to the price responsiveness of their demand for the services provided, thus minimising efficiency losses arising from discouraged consumption.*

#### **Draft Finding 8.6**

*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. In practice:*

- *estimating the economic costs of the road network would be a challenging task, requiring judgements to be made about the appropriateness of existing road infrastructure and likely future requirements and*
- *to capture the full efficiency benefits of such pricing, prices reflecting economic costs should be able to elicit efficient investment. This requires institutional and incentive frameworks that link revenues to investment and which encourage price-responsive decision-making.*

#### **Draft Finding 8.8**

*Prices charged to users of freight transport network services should at least cover the directly attributable or incremental costs of providing the services they consume.*

#### **Response to 8.3, 8.4, 8.6, 8.8**

The Commission notes that to assess the full cost of providing and maintaining road freight transport infrastructure would be a 'formidable task' and 'infeasible in the context of this inquiry'. However, this assessment is essential to progress the debate for reform in the pricing of road freight infrastructure access and, as the Commission also notes:

*... it is the economic costs (the costs of providing efficient infrastructure services into the future) that are, in principle, relevant for transport efficiency.<sup>13</sup>*

The full cost of providing and maintaining road freight transport infrastructure, not simply what the various levels of governments spend, needs to be calculated to enable jurisdictions to:

- ensure the sustainable management of the road freight infrastructure as an economic asset;
- facilitate increasing focus on total asset management; and
- ensure that benefits of higher productivity vehicles are obtainable.

This would, ideally, involve a disciplined system based on some objective measure for the assessment of the provision and maintenance of road networks, such as an independent accountancy asset based measure like Depreciated Optimised Replacement Cost (DORC).

The NSW Government requests that the Commission, should it be unable to provide guidance on how these costs should be assessed as part of this inquiry, provide direction on how this task should be undertaken.

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<sup>13</sup> Discussion Draft, page 4.2

### **Draft Finding 9.1**

*Under current institutional arrangements, heavy vehicle road-user charges are set, in principle, to recover current road spending allocated to heavy vehicles, rather than to fund efficient future levels of road expenditure. Moreover, for the most part, the revenues received from the charges are treated as general government revenues rather than as funds directly available for spending by road agencies. There is no systematic linkage between how charges are set and the revenues they generate, on the one hand, and decisions about desirable future levels of road funding, on the other.*

### **Draft Finding 9.7**

*Hypothecation of the revenue from road charges and taxes can yield benefits, but these are unlikely to be realised within the existing departmental model.*

### **Response to 9.1 and 9.7**

The NSW Government agrees with this finding by the Commission in relation to Commonwealth diesel fuel excise and notes that, by law, registration charges collected from heavy vehicles registered in New South Wales are returned in full to the roads of New South Wales.

It should be noted that the Federal Government currently levies excise duty on petrol at 38.14 cents per litre. In 2005-06, the Federal Government collected nearly \$14 billion in fuel excise from Australian road users and spent only \$2.5 billion in land transport funding.

By contrast, all the taxes the NSW Government collects directly from motorists are returned to roads funding.

### **Draft Finding 9.2**

*Heavy vehicle road-user charges, as currently determined and applied, understandably appear to road operators more like taxes than prices. Moreover, they 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.*

### **Response**

The NSW Government agrees with this finding by the Commission and considers it to be the single most significant statement of the policy flaws on the current PAYGO system.

### **Draft Finding 9.3**

*Current road funding arrangements potentially lead to inefficiencies and distortions in road management and investment decision-making.*

*The Commission is not in a position to assess the many claims suggesting that road infrastructure expenditure is, and has been for some time, inadequate. However, a range of evidence suggests that there is scope to improve investment outcomes by making decisions more responsive to the needs of road users.*

### **Response**

The NSW Government requests that the Commission, should it be unable to provide guidance on how these costs should be assessed as part of this inquiry, provide direction on how this task should be undertaken. Such an assessment is essential to progress the debate for reform in the pricing of road freight infrastructure access.

#### **Draft Finding 9.4**

*Future road infrastructure requirements are expected to increase substantially, placing greater pressure on the current budget-based road funding system. Alternative funding arrangements increasingly will need to be considered.*

#### **Response**

A significant increase in road freight related expenditure will mean that the amount to be recovered from the heavy vehicle industry will increase under the current PAYGO arrangements. This would lead to:

- an increase in the cross-subsidisation between vehicle classes and between road types, potentially increasing inefficient choices in vehicle types and network usage;
- an increase in the likelihood that PAYGO will fail to recover, in aggregate, the road freight-related expenditure of the jurisdictions from the heavy vehicle industry without a significant restructuring of the registration fees and fuel excise; and
- a further increase in budgetary pressures on the States and Territories as a result of diesel fuel excises collected by the Commonwealth not being returned to the relevant jurisdictions.

As such, PAYGO, in its current form, is not sustainable for the future of road freight infrastructure funding in Australia.

#### **Draft Finding 9.5**

*Full implementation and application of the AusLink decision-making framework across all jurisdictions would likely lead to some improvement in road investment decisions. However, it is yet to be seen how effective the AusLink processes will prove to be in practice.*

#### **Response**

The AusLink investment model focuses on capital expansion and has, as admitted in the AusLink Guidelines, had difficulty in managing maintenance, especially capital renewal.

#### **Draft Finding 9.6**

*The departmental approach to funding road provision is characterised by poor accountability to road users, the absence of pricing that is responsive to costs and demand, and the lack of a systematic link between road revenues and efficient future expenditure. It provides a weak connection to the underlying needs of road users and their willingness to pay.*

#### **Response**

The NSW Government notes that road funding and management in this State is not handled through a 'departmental approach'. The Roads and Traffic Authority (RTA) is a statutory authority and the RTA fund is a statutory fund, into which must be paid all registration revenues of the State and other funds.

#### **Draft Finding 9.8**

*Compared with present arrangements, a Road Fund model would facilitate more efficient decision-making, funding and provision of road infrastructure. Appropriately-designed, a Road Fund could provide a regular and reliable source of road finance, improve governance of road funds and efficiently discipline road spending. However, to be effective, a Road Fund needs to have a dedicated source of funds, a significant degree of autonomy and transparent processes for allocating funds efficiently.*

*Implementing this model in Australia would pose a number of particular challenges, principally because of different responsibilities of different levels of government. While each jurisdiction could operate its own fund, a single national road fund would provide a more direct and transparent linkage between heavy vehicle charges and efficient road expenditure. However, there are a number of issues that would require inter-jurisdictional agreement, including:*

- *which road-related revenues would be hypothecated to the Fund (vehicle registration fees, fuel excise taxes and/or some form of mass-distance charge)*
- *how future revenue requirements and heavy vehicle charges would be determined and*
- *criteria for efficiently allocating funds to road projects and between road agencies.*

### **Draft Finding 9.9**

*The public utility model could bring greater potential benefits than a Road Fund by introducing market incentives to the provision of roads. Government road enterprises faced with a commercial imperative could be expected to deliver greater efficiencies and innovation in the provision of road infrastructure services.*

*However, implementation of the public utility model would require cost-effective location-based pricing and raises some important additional implementation issues relating to market power, distributional impacts and public access.*

### **Response to 9.8 and 9.9**

The NSW Government is concerned with the focus on reforming road institutions to address issues relating to the provision and maintenance of road freight infrastructure.

The reforms required to improve the management of road freight infrastructure and facilitate higher productivity outcomes can be achieved within the current jurisdictional arrangements and do not require the creation of a national road fund, particularly when there is little support within the jurisdictions or the industry for such a model. Furthermore, the development of a road fund in itself will not address the issues of:

- assessing the true cost of providing a sustainable road network;
- efficiently allocating these costs across the heavy vehicle industry;
- efficiently recovering revenue from the heavy vehicle industry; or
- facilitating productivity improvements in the road freight industry to deal with the growing freight task.

In addition, the Discussion Draft does not outline how a road fund would provide a regular and reliable source of road finance that would otherwise be unavailable under the current institutional arrangements.

### **Draft Finding 9.10**

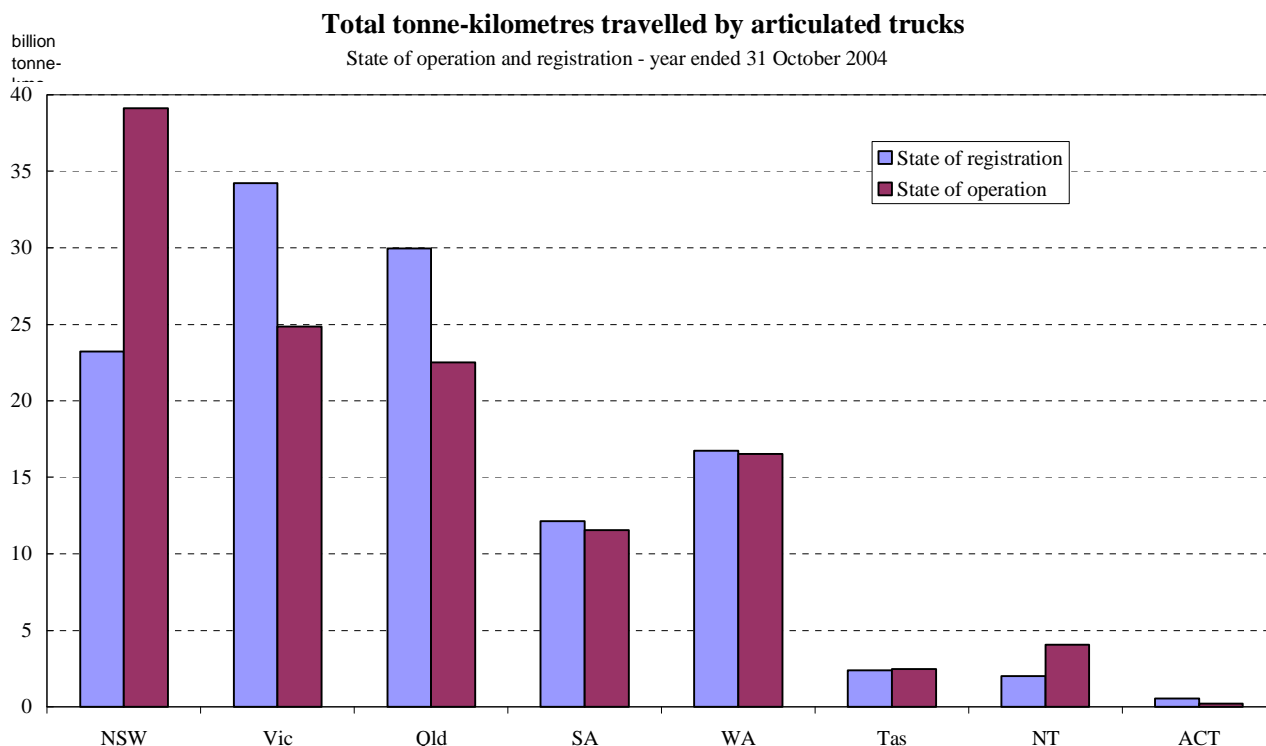
*The private ownership and provision of roads on a network wide basis is currently neither feasible nor desirable. However, private sector involvement in providing road management and/or provision of elements of a road network can yield efficiencies.*

### **Response**

Roads are a network that connects paddocks to ports and regions to cities. The NSW Government supports the consideration of network-based pricing for road freight infrastructure that seeks to differentiate pricing on the basis of the levels of service provided by different parts of the network. However, there would be concern with any proposals for partial pricing of the network, particularly in relation to corridor-based pricing. New South Wales would be concerned that any proposals for partial pricing of the network, particularly in relation to corridor-based pricing, may fail to meet the requirements in the Terms of Reference to address impacts on rural and regional Australia.

## HEAVY VEHICLE REGISTRATION CHARGES

The 2004 ABS Survey of Motor Vehicle Use (see chart below) shows that the revenue from annual heavy vehicle charges received by a State does not reflect the level of activity of all vehicles operating in that State.



By comparison, under the Federal Interstate Registration Scheme (FIRS) for vehicles involved in the inter-State movement of freight, the annual registration charges for FIRS vehicles are redistributed among the States to reflect, as far as practical, the distribution of the wear caused to roads by FIRS vehicles. The current proportions are contained below:

State	Percentage of revenue
New South Wales	46.1
Victoria	26.8
Queensland	9.5
Western Australia	4.0
South Australia	12.1
Tasmania	0.5
Australian Capital Territory	0.5
Northern Territory	0.5