



Submission

By

**Asciano, Aurizon, the Australian Rail Track Corporation
& the Australasian Railway Association**

to the

National Commission of Audit

**Improving the Efficiency of Supply and Charging for Heavy
Vehicle Use of National Road Infrastructure.**

6 December 2013

Executive Summary

Efficient freight transport infrastructure is vital to the competitiveness of Australia's major industries. Further reforms to road freight infrastructure have the potential to generate substantial productivity improvements for freight transport.

Assessments by the Productivity Commission in 2006 and 2012 concluded that fundamental pricing and institutional reform relating to investment in road infrastructure, and the use of that infrastructure by heavy vehicles, could improve transport productivity by 5 per cent.

Recommendations to reform heavy vehicle pricing and road infrastructure investment, in accordance with the conclusions of the Productivity Commission, are currently being developed by the Heavy Vehicle Charging and Investment (HVCI) Reform Project Directorate. These recommendations are expected to be considered by the Standing Council on Transport and Infrastructure, and then by the Council of Australian Governments (COAG) during 2014.

In order to realise the full extent of the available productivity gains, pricing reform and supply side (investment) reform should be integrated from the start of the reform process.

Pricing reform would comprise the introduction of direct mass distance location (MDL) charging, with charges to be determined using a building block model for calculating the cost base. (An outline of the building block model is provided at Attachment A.)

Supply side reform would involve revenue from charging being dedicated to funding infrastructure based on investment plans and commitments to deliver service standards.

Pricing reform based on accurate, cost reflective user charging, will provide effective price signals that are critical to ensuring heavy vehicle operators have an incentive to utilise infrastructure more efficiently.

Price signals would also result in more efficient infrastructure investment due to road providers being held accountable by heavy vehicle operators who, as customers, would expect infrastructure improvements, access commitments and service standards to be delivered.

If heavy vehicle charging and investment reform is to deliver improvements to the productivity of freight transport over the medium term, substantial implementation steps toward both pricing and supply side reform will need to commence in the short term.

Tangible steps such as the trialing of pricing reform in the form of direct MDL charging would have the added benefits of demonstrating to industry how the reforms will work, and building a clear understanding of what will be required of heavy vehicle operators.

The Organisations making this submission request that the National Commission of Audit recommend ongoing support for the continuation of the HVCI reform process as a key national reform priority, based on the simultaneous introduction of direct charging (pricing) and supply side changes at the earliest possible time.

This should include the development and implementation of trials of pricing and supply side reform on national highways in the short term, and the full development and implementation of these reforms over the medium term (i.e. 3 to 5 years).

The organisations making this submission

This submission to the National Commission of Audit is made on behalf of Asciano, Aurizon, ARTC, and the Australasian Railway Association (“the Organisations”). Details of the Organisations are included at Attachment B.

Current Road Infrastructure Pricing

Current heavy vehicle charges are set on the basis of recommendations made by the National Transport Commission (NTC). The NTC’s recommendations are based on a periodic determination of the heavy vehicle cost base which is also prepared by the NTC. Recommendations on the setting of heavy vehicle charges are considered by Federal and State Ministers who are members of the Standing Council on Transport and Infrastructure (SCOTI).

Charges paid by heavy vehicle operators are in two parts:

- A road user charge based on the effective rate of diesel fuel excise paid by heavy vehicle operators. The effective diesel fuel excise rate for heavy vehicles is set by Federal legislation, and the revenue is collected by the Federal Government.
- An annual registration charge dependent on the configuration of the vehicle, which is set and collected by State and Territory Governments.

Under the current arrangements, the determinations recommended by the NTC are not binding on the Federal and State Governments.

Current supply side arrangements

Revenue from current road user charges is collected by the Federal Government through fuel excise, and goes to consolidated revenue. There is no direct link between the revenue collected from heavy vehicles in the form of fuel excise and expenditure on road infrastructure.

Similarly, revenue from registration charges is collected by State Governments and forms part of consolidated revenue.

In relation to major freight roads that are used for transporting much of the nation’s freight task, state government road agencies are primarily responsible for road infrastructure planning, development and the operation and maintenance of the infrastructure.

Due to the divided income stream from road use, State government road agencies must submit funding proposals to the Federal and State Governments for specific road projects from within wider budget allocations. Funding allocations for road infrastructure are typically the result of decisions by Government Ministers, and these are often made as part of the annual budget process.

The weaknesses of the current system and the potential benefits of reform

The current charging system has a significant number of inefficiencies which are impeding productivity within the freight and logistics sector, with substantial implications

for Australian industries and the wider economy. The impediments also reflect inefficiencies within current Federal and State Government institutional structures.

The major impediments to improving the efficiency of heavy vehicle infrastructure investment and utilisation include:

- There is no direct link between the road user funds received by governments and the investments that are made by State and Federal Governments in road infrastructure and related services. In particular, there is not a direct relationship between heavy vehicle users and road providers.
- Revenue streams are divided, with registration collected by the States, and the road user charge by the Federal Government.
- Heavy vehicle registration income received by each State bears no relationship to the costs incurred in that State due to heavy vehicle road usage. Local councils, which incur significant costs from heavy vehicle use of local roads, do not have a funding arrangement that reflects the actual costs of usage.
- Because the charges are calculated for the national network as a whole, there is no direct connection between the amount of road user charge paid per kilometre, and the condition or capability of the road being used.
- There is no customer–provider relationship between the heavy vehicle road user, and the road agency responsible for road infrastructure such as would drive efficiencies in service delivery, and enable the heavier vehicle industry to operate more effectively.
- There is a lack of direct accountability from road providers to heavy vehicle users for meeting the specific infrastructure and infrastructure service requirements of heavy freight vehicles.
- The current price determination methodology does not deal adequately with the timing and subsequent recovery of expenditure, and allocates only a minimal proportion of joint costs to heavy vehicles.

More broadly, there is a lack of publicly available information to assess performance of road providers in adhering to investment plans and meeting the requirements of heavy vehicle users.

Consideration of future growth in road freight demand highlights the pressing need for more investment to meet the needs of road freight.

Since the year 2000, the weight per vehicle productivity of heavy vehicles has increased by a factor similar to that of the domestic freight task allowing the road freight industry to keep pace with demand.

Without the ability to extend the use of high productivity vehicles, there is a major risk the forecast increase in demand for road freight will outstrip growth in the productivity of the heavy vehicle fleet. This will place more pressure on existing road assets through an increase in the frequency of heavy vehicles.

Over the last 12 months, state government freight and port strategies have highlighted the major costs of infrastructure bottlenecks accentuated by the related issues of inadequate infrastructure provision for freight requirements, lack of access for heavy freight vehicles and traffic congestion.

If demand for freight transport grows at historical rates, volumes will double over the next two decades. Current institutional arrangements are inadequate to generate sufficient revenue to fund the investment and promote the productivity improvements that will be required to sustain this growth.

The potential benefits from addressing impediments to efficiency

Addressing impediments to the efficiency of freight transport would produce substantial economic benefits extending beyond the freight and logistics sector.

The infrastructure required for freight transport operations, underpins the competitiveness of the wider economy. All major industries depend on efficient freight supply chains to trade in local, national and international markets.

Recognition of the potential benefits of reform is of long standing. In 2006, the Productivity Commission, in its report *Road and Rail Freight Infrastructure Pricing*, concluded that substantial benefits could be achieved from land transport reform.

In particular the Commission found that the opportunity for more cost-reflective road pricing, combined with institutional changes to link road supply and demand, offers the potential for substantial efficiency gains.

A further assessment by the Productivity Commission in 2012 concluded that land transport reform was one of four national reform agendas (out of sixteen that were evaluated) that have the potential to provide major economic gains if each of the reforms was effectively implemented. The land transport reforms that were assessed by the Commission as having the potential to generate the greatest improvement in productivity include:

- Introducing more efficient road provision.
- Fundamental pricing and institutional reforms for road freight transport.

The Commission concluded that pricing and institutional reform could produce a 5 per cent improvement in transport productivity, contributing to an overall improvement in the nation's gross domestic product of 0.2 per cent¹.

Achieving more efficient, market-based arrangements for road infrastructure pricing and investment would involve structural reform of Federal and State Government institutions. Structural reform would address major impediments to government efficiency and to wider economic competitiveness.

These impediments include the duplication of functions between State and Federal Governments, a lack of clear accountability for the provision of roads used for freight vehicles, the absence of meaningful price signals, and a misalignment between road user charging and road usage. These problems were also identified by the Henry Tax Review.

¹ COAG's *Regulatory and Competition Reform Agenda: A high level assessment of the gains*, Productivity Commission Research Paper, June 2012, p. 72.

Short term considerations: NTC Heavy vehicle determination

Although the current heavy vehicle determination being developed by the National Transport Commission (NTC) does not address reform of current pricing and supply side arrangements, it highlights the deficiencies of the current arrangements.

Due to current heavy vehicle charges being based on pay as you go (PAYGO), the determination process reflects what the NTC has described as inherent limitations that cannot be resolved in the absence of the reform of heavy vehicle charging². These limitations include:

- Multiple use of averaging, including the averaging of costs across the network, and usage across vehicle types.
- Current data is survey based, as distinct from actual observable usage data.
- The NTC's charging determinations are non-binding on Governments.
- Because the charging determinations involve the use of historical average data, this leads to a delay between the measurement of the cost base and the setting of charges³.

Importantly, the use of historical data underscores the disconnection between the cost base for current charges and the future infrastructure requirements on which investment decisions should be made.

Further deficiencies include the methodology for determining the cost base, which involves an allocation for common costs against heavy vehicles that is relatively low compared to light vehicles. The NTC has declined to address this issue in the current determination process as it considers it would require a change that is too large, and there would be too many 'losers' with a limited capacity for this to be addressed in the timeframe for the determination.

These deficiencies contribute to a charging system that impedes efficient investment and utilisation of road infrastructure. These impediments lend weight to the view that both pricing and supply side reform of heavy vehicle infrastructure should be a priority in both the short and medium term.

The Organisations are concerned that the draft regulatory impact statement (RIS) released by the NTC in November 2013 contains options for heavy vehicle charging that could, if endorsed by the Federal and State Governments, result in a reduction in heavy vehicle charges. This has arisen despite the NTC's analysis showing significant under-recovery of expenditure over the past six years and the highly favourable treatment of heavy vehicles in the common cost allocation methodology as noted above.

The basis for calculating the cost base from which the charging options were developed has involved a change to the way the total number of heavy vehicles are calculated. The Organisations understand that there is some uncertainty as to whether the figure used by the NTC is consistent with the actual registration numbers available from State Governments. Our Organisations will be recommending that the calculation used by the NTC should be reviewed.

² *Heavy Vehicle Charges Determination Regulatory Impact Statement*, National Transport Commission, November 2013, p. xiii

³ *Ibid*, p. xiii.

A potential reduction in heavy vehicle charges, and the uncertainty over future charges created by the current determination process, would be detrimental to investment by both operators, and by providers of road and rail freight infrastructure.

Federal and State road infrastructure budgets have been prepared on the basis of anticipated annual increases in heavy vehicle charges consistent with what has taken place over recent years. The loss of revenue would lead to a shortfall in funding for infrastructure projects at a time when it is anticipated there will be growing demand for freight transport services. Any delay to infrastructure projects would be expected to have a negative effect on productivity in road freight transport.

Similarly, if there were to be a reduction in heavy vehicle charges, this would have a flow on impact to the competitiveness of the rail sector, with similar consequences such as less revenue resulting in a reduced capacity to invest in rail freight infrastructure, posing a risk to productivity.

In light of these potential consequences, the Organisations will be proposing that the Federal and State Governments request an alternative draft option for heavy vehicle charges. The alternative option should take into account current freight transport policy settings, including future infrastructure commitments and the potential impact on rail freight, and result in Government revenue from heavy vehicles at least being maintained at current levels.

Short term actions to secure reform: Initial HVCI Reform steps

The heavy vehicle charging and investment (HVCI) reform initiative, first established by the Council of Australian Governments (COAG) in 2007, offers a way to overcome the deficiencies of the current charging arrangements together with the potential to drive productivity improvements from freight transport.

In order to realise the full extent of the available productivity gains, pricing reform and supply side (investment) reform should be integrated from the start of the reform process.

Pricing reform would comprise the introduction of direct mass distance location (MDL) charging, with charges to be determined using a building block model for calculating the cost base, consistent with the model used for other regulated infrastructure. (An outline of the building block model is provided at attachment A.)

Supply side reform would involve revenue from charging being dedicated to funding infrastructure based on investment plans and commitments to deliver service standards.

Our Organisations have been concerned that recent draft reform options have involved a delay to substantial pricing reform in the form of direct MDL charging. The delay of pricing reform would result in productivity gains being lost because without price signals there would be no basis for establishing customer-provider relationships in the short to medium term. We note, however, that the HVCI Project Directorate has proposed the development of trials of pricing reform which would be an important short term initiative.

We submit that important reform actions are necessary in the short term both in relation to pricing reform and supply side reform.

Effective price signals will be critical to ensuring heavy vehicle operators use road infrastructure more efficiently.

Price signals would also result in more efficient infrastructure provision due to road providers being held accountable by heavy vehicle operators who, as customers, would

expect infrastructure improvements, access commitments and service standards to be delivered.

Therefore, both pricing and supply side (investment) reforms should be integrated at the earliest possible stage of the implementation process.

The HVCI Reform Project Directorate has outlined a series of initial steps to commence the process of supply side reform.

Importantly, it has been recognised that some practical pricing reform initiatives, such as trials of direct mass distance location (MDL) charging should be taken in the short term.

Taking substantial actions in the short term to further develop and introduce pricing reform should be a key priority for the reform process. Taking actions on pricing reform will allow the following to be achieved:

- Transparent access and service commitments would be provided for roads subject to direct charging and supply side reform.
- Ensuring pricing reform is linked to and is informed by State Government led trials and demonstration projects, recognising that State Governments will have responsibility for a number of the most important institutional reforms.
- Allowing Governments and Government agencies to develop and test both pricing reform and supply side reform.
- Demonstrating to industry through trials how the reforms will work, and allowing industry to have confidence that the changes will work effectively, with benefits linked to the introduction of the direct user charges.
- Allow it to be demonstrated that revenue from mass distance location charges would go directly to investment in infrastructure and in funding infrastructure services.
- Allow it to be demonstrated that heavy vehicle charges would reflect the costs of specific infrastructure.

In light of the importance of short term actions, the Organisations are proposing the development and implementation of tangible steps to demonstrate pricing reform and to commence supply side reform in the short term, i.e. commencing in 2014-15, including:

- Trials of direct MDL charging on national highways.
- The development of new accountability arrangements for road agencies in relation to planning and meeting heavy vehicle requirements, with accountability to be linked to the development of pricing reform.
- The development of heavy vehicle infrastructure service standards to inform accountability arrangements.

Medium term actions to secure reform: Full implementation of pricing and supply side reforms

The charging option proposed by HVCI and preferred by the Organisations supporting this submission is that heavy vehicle pricing develop under a mass-distance-location (MDL) regulated asset pricing model similar to that already used in other regulated industries such as electricity, water, gas and rail.

Under this model, existing GPS and other communications technology (which is now readily available, but which was not available when the current heavy vehicle pricing regime was first introduced) would be used to allow charges to be directly related to the vehicle mass, type of road being used (location) and distance travelled.

Our organisations support the implementation of both direct MDL charging linked to supply side reform over the medium term, i.e. 3 to 5 years, including:

- The full implementation of direct MDL charging, commencing with national highways as an interim step.
- Charges would reflect the cost of access to and the use of specific infrastructure and the infrastructure service standards delivered by road providers.
- Revenue from heavy vehicle road users would flow directly to road providers reflecting its purpose as a user charge incurred specifically in return for access to and use of specified road infrastructure.
- Road providers would develop expenditure plans for roads based on a building block approach to calculating the cost base.
- Road providers would operate on a commercial basis, and would be held accountable for meeting both investment plans and the delivery of infrastructure service standards to heavy vehicle road users, i.e. customers.
- Expenditure plans and charges would be overseen by an independent economic regulator.

While supply side reforms alone would deliver some benefits, substantially greater economic benefits, including reduced reliance on Federal budget funds for road infrastructure investment, would result from simultaneous introduction of both supply side and charging reform.

Such a simultaneous introduction would:

- Allow the establishment of genuine customer-provider relationships between the road authorities supplying road use services, and their heavy vehicle customers, driving greater efficiency in asset use.
- Create asset specific revenue streams from road infrastructure, creating an opportunity for private sector involvement in the supply of road infrastructure, funded by the consequent heavy vehicle revenue stream.
- Reduce the funding demands on State and Federal Governments at the earliest opportunity, also recognising that a standard utility model would also allow Governments to generate revenue from past investment that could be recycled into new investment.

Proposed recommendations of the National Commission of Audit

Recognising the potential efficiency gains for industry, governments and the wider economy, the Organisations urge that the National Commission of Audit give consideration to including the following recommendations in its report to the Federal Government:

- That any implementation of the current NTC determination should result in revenue to Governments at least maintaining the most recent levels.
- That the development of heavy vehicle charging and investment reform recommendations should be reaffirmed as a national reform priority for the medium term.
- That pricing reform in the form of mass distance location (MDL) charging and supply side (investment reform) should be introduced simultaneously.
- That tangible steps to commence the implementation of both heavy vehicle pricing reform and supply side reform should be undertaken at the earliest possible time, commencing with trials on national highways.
- That both heavy vehicle pricing reforms and supply side reforms should be fully developed and implemented as an integrated set of arrangements over the medium term (i.e. 3 to 5 years).

Conclusion

There are substantial potential benefits that could be realised from the structural reform of road freight pricing and investment for heavy vehicles.

The Productivity Commission has concluded that an effective reform program could improve transport productivity in Australia by about 5 per cent, contributing to an increase in national gross domestic product.

Improvements to productivity would result from the establishment of provider-customer relationships between road providers and heavy vehicle users. Customer-provider relationships would facilitate a greater customer focus and the use of price signals to improve efficiency for the benefit of the freight transport sector, with economic gains flowing to Australia's major industries.

Reform of heavy vehicle charging and investment would also offer the opportunity to reduce the reliance on Federal budget funding for heavy vehicle infrastructure. In addition, the reforms would allow the simplification of Government process and increased efficiency as a result of clearly delineating Federal and State responsibilities, and further developing the commercial focus of state road agencies.

In order for heavy vehicle charging and investment to deliver the potential improvements to transport productivity over the medium term, substantial steps toward both pricing and supply side reform will need to commence in the short term.

These steps would provide the foundation for substantially improving the efficiency of Australia's freight transport sector, and contributing to the competitiveness of Australia's major industries.

Attachment A: Outline of the building block economic regulation model

As noted in this submission, the Organisations support the introduction of direct MDL charging, with the revenue underpinning the charges to be calculated using the standard building block regulatory model.

The building block model is currently used in most Australian jurisdictions for setting regulated revenue caps and price caps for infrastructure access and services in sectors such as electricity and gas.

The building block approach involves the determination of an efficient cost base to set regulated revenue and prices. The building blocks are:

- Return on capital, determined as a regulated rate of return applied to a regulatory asset base, with the asset base initially calculated on a depreciated optimised replacement cost basis and adjusted each year for depreciation and newly created assets at their efficient cost and with a demonstrated customer need. (Inflation may be adjusted for in relation to either the return on capital or the asset base.)
- Depreciation, or return of capital, calculated over a regulated asset life applied to the regulatory asset base as adjusted annually.
- Efficient direct costs incurred in the provision of the regulated service.
- A reasonable apportionment of the efficient common costs incurred by the access provider.

Once total regulated revenue for each year is proposed by the service provider and agreed with an economic regulator, the service provider sets a revenue or price path. This revenue or price path sets the rate at which revenue or prices can change over time.

Under some approaches, incentive mechanisms linked to performance may operate outside of the calculated cap or ceiling, and therefore revenues may change more or less than the cap.

This regulatory approach will also apply a combinatorial ceiling test in appropriate circumstances to ensure that specific groups of users do not pay more than their stand-alone ceiling cost.

The objective of the building block approach is to estimate a total revenue cap that the service provider will require each year over the forthcoming regulatory period to provide its investors with a reasonable rate of return and to allow the service provider to meet efficiently incurred costs relevant to providing the regulated services, while ensuring users do not pay more than a fair price to an infrastructure provider.

Attachment B

Organisations making this Submission

Asciano

Australia's only combined rail freight and port operator, Asciano brings together Pacific National's rail operations and Patrick's ports and stevedoring businesses to form the backbone of Australia's global trade.

Contact: [REDACTED] Manager Strategy & Infrastructure Planning

Phone: [REDACTED] Email: [REDACTED]

Aurizon

Aurizon has rail and road-based freight and infrastructure operations across Australia. Aurizon operates rail freight services from Cairns through to Perth, including the Central Queensland Coal Network made up of approximately 2,670km of heavy haul rail infrastructure.

Contact: [REDACTED], Manager, National Policy

Phone: [REDACTED], Email: [REDACTED]

Australian Rail Track Corporation (ARTC)

The Australian Rail Track Corporation (ARTC) currently has responsibility for the management of over 8,500 route kilometres of standard gauge interstate track in South Australia, Victoria, Western Australia, Queensland and New South Wales. ARTC also manages the Hunter Valley coal rail network, and other regional rail links, in New South Wales.

Contact: [REDACTED], General Manager Corporate Strategy

Phone: [REDACTED] Email: [REDACTED]

Australasian Railway Association

The Australasian Railway Association (ARA) is the not-for-profit member-based association that represents passenger, freight, track, manufacturing, construction, supply and other rail companies in Australasia.

Contact: [REDACTED] Director Policy and Advocacy

Phone: [REDACTED] Email: [REDACTED]