Submission

By

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

To the

Productivity Commission

Improving the Efficient Provision, Funding and Financing of National Road Infrastructure.

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.

The Commission in its current inquiry now seeks proposals on the:

- Provision, funding, and financing of major public infrastructure; and
- Scope for reducing the costs associated with such infrastructure.

The Organisations consider that current planned reforms to heavy vehicle pricing are a key step in expanding the funding base for the provision of roads, and reducing both the amount, and cost of such infrastructure supply.

Such changes would improve the funding and capital efficiency of the road system, by:

- Introducing more direct user charging for heavy vehicles linked to more efficient investment in the road system and specifically the infrastructure required for freight transport; and
- Driving efficiencies in road supply and use through the creation of genuine customer-supplier relationships between road users and asset owners.

If charging and investment reform is to deliver improvements to the efficiency of road supply and use over the medium term, substantial implementation steps toward both pricing and supply side reform will need to commence in the short term.

Recommendations to reform heavy vehicle pricing and road infrastructure investment, consistent with the conclusions of the Productivity Commission, are currently being developed by the Heavy Vehicle Charging and Investment (HVCI) Reform Project Directorate (HVCI). These recommendations are expected to be considered by Governments in 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 through the concurrent introduction of:

- Pricing reform with the introduction of direct mass distance location (MDL) charging, using a building block model for calculating the cost base.
- Supply side reform with revenue from charging being dedicated to funding infrastructure based on committed investment plans and service standards.

Pricing reform based on accurate, cost reflective user charging, would provide effective price signals that are critical to ensuring road users have an incentive to utilise infrastructure more efficiently, with more efficient use influencing priorities for future investment.
Price signals would 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. These arrangements would also have the potential to increase private sector involvement in infrastructure and infrastructure services.

Furthermore, as long as the cost of road investments is not accurately reflected in road prices and cross subsidisation between heavy vehicles users continues, it makes commercial investment in competing rail infrastructure very challenging and potentially distorts intermodal choice.

**The organisations making this submission**

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

**Introduction**

It is the view of the Organisations that the wide-ranging reform of the national road network can deliver improved funding and cost-effectiveness of road investment, as well as significant increases to economic efficiency.

The current charging system has numerous deficiencies which are impeding productivity within the freight and logistics sector in which each of the organisations operate, and is incapable of supporting reform of road funding and supply.

The Productivity Commission Issues Paper (the Issues Paper) identifies two streams of work within the parameters of the inquiry into public infrastructure: the provision, funding and financing of major public infrastructure; and the scope for reducing costs associated with the provision of public infrastructure. The Organisations consider that the efficient delivery of road infrastructure fits within the former stream and, as such, have addressed the issues identified in sections five to eight of the Issues Paper only.

**Current Road Infrastructure Pricing for Heavy Vehicles**

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).

In determining the cost base for heavy vehicles, the NTC uses data on actual road expenditure which is then allocated between vehicle types on the basis of a predetermined cost allocation matrix.

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 for heavy vehicles is collected by the Federal Government through fuel excise, and goes to consolidated revenue. There is no direct link between the revenue collected from road users 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. While many road funding decisions are supported by economic analysis, there is no connection between revenue generated, or expected to be generated in the future, and expenditure.

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

The current charging system has a significant number of inefficiencies which affect the funding and efficient supply of road infrastructure. They also impede productivity within the freight and logistics sector, and 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:

**a) Funding Flows not aligned to road use, investment & cost**

- The National Transport Commission has acknowledged the consistent under-recovery of expenses attributed to heavy vehicle use, suggesting inefficient pricing signals and a lack of investment capital generation.

- 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.

- 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.

• 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.

b) No commercial relationship between heavy vehicles users & suppliers

• Consequently, there is no direct income stream from a given road asset to support investment by the private sector. Tolls have been used but these do not capture all the income from road use, and discriminate between users of new road assets who are subject to tolls, and those of old road assets and also some new assets which are toll free.

• 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 heavy vehicle industry to operate more effectively.

• There is a lack of direct accountability from road providers to heavy vehicle users to invest to meet the specific infrastructure needs of heavy freight 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.

Furthermore, as long as the cost of road investments is not accurately reflected in road prices and cross subsidisation between heavy vehicles users continues, it makes commercial investment in competing rail infrastructure very challenging. This means that the full productivity, environmental and social benefits, which would flow from making greater use of rail freight transport, are more difficult to realise.

Drivers of the need for further investment in road

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, growth in demand has been largely met by increased vehicle size and mass.

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.
Benefits from reform of the supply of road infrastructure

a) Economic Benefits

Freight transport infrastructure underpins the competitiveness of the wider economy. All major industries depend on efficient freight supply chains to trade in local, national and international markets. Reforms would produce substantial economic benefits extending beyond the freight and logistics sector.

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, offered 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 with the greatest potential benefits were:

- 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 cent\(^1\).

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.

b) Benefits for funding and road provision

As noted earlier, key benefits of these reforms for funding and investment would be to

- Create an asset specific funding stream with the potential to contribute to attracting private sector investment; and
- Drive efficiencies in use and asset provision by establishing a price based customer–supplier relationship between road providers and heavy vehicle users.

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Steps to Reform

a) 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 and infrastructure funding arrangements together with the potential to drive productivity improvements from freight transport.

Key steps involve pricing reform and supply side (investment) reform.

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.

Supply side reform would involve revenue from charging being directly linked to funding infrastructure based on investment plans and commitments to deliver service standards. This would also involve negotiations between users and suppliers over required infrastructure investment.

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 and introduced in the short term.

Deferral of pricing reform, as proposed more recently by the HVCI Project Directorate, would result in productivity gains being lost because without pricing reform there would be no basis for establishing customer-provider relationships in the short to medium term, and no price signals 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 including some practical pricing reform initiatives, such as trials of direct mass distance location (MDL) charging.

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 be directly linked 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.

b) 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 should be developed 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 charging regime was first introduced) would be used to allow charges to be set which are directly related to the vehicle mass, type of road being used (location) and distance travelled.

Our Organisations support the implementation of both pricing reform in the form of direct MDL charging and supply side reform over the medium term, i.e. 3 to 5 years, including:

• The full implementation of direct MDL charging, commencing with its introduction on national highways as an interim step.

• Charges that 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 flowing 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 developing expenditure plans for roads based on a building block approach to calculating the cost base.

• Road providers operating on a commercial basis with regard to heavy vehicles, and being 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 being 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 the simultaneous introduction of both supply side and pricing reform in the form of direct MDL charging.

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 and infrastructure services, 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.

Summary

Reform of heavy vehicle pricing and supply side arrangements would yield substantial efficiencies for the funding, financing and provision of road infrastructure through

1. Creating asset specific income flows capable of attracting increased investment in roads;

2. The establishment of customer-supplier relationships between users and suppliers would:

• Impose commercial disciplines on asset owners to meet investment and service objectives.

• Encourage targeted and affordable investment built around specific user needs and willingness to pay.

Proposed recommendations of the Productivity Commission

Recognising the potential efficiency gains for industry, governments and the wider economy from reforming the provision and funding of road infrastructure for heavy vehicles, the Organisations urge that the Productivity Commission give consideration to including the following recommendations in its final report that:

1. The development of heavy vehicle charging and investment reform recommendations should be reaffirmed as a national reform priority for the short to medium term.

2. Pricing reform in the form of mass distance location (MDL) charging and supply side (investment reform) should be introduced simultaneously as an integrated set of arrangements over the medium term (i.e. 3 to 5 years).
3. 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.

4. Road agencies should develop commercial customer-supplier relationships with heavy vehicle users to facilitate more efficient use of, and investment in, the road network for freight transport.

**Conclusion**

There are substantial benefits that could be realised from the structural reform of road infrastructure pricing and investment, through heavy vehicle charging reform in the short to medium term, based on having the road network operate more in accordance with commercial principles.

The Productivity Commission has previously concluded that fundamental pricing and institutional reform 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 processes and promote improved 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 basis for targeted investment in road infrastructure, and the potential for increased private sector involvement, thereby laying 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

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.
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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.
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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.
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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.
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