

Friday, 3 October 2008

Mr Nick Dimopoulos
Chief Executive Officer
National Transport Commission
L15/628 Bourke Street
MELBOURNE VIC 3000

Dear Mr Dimopoulos

Rail Productivity Review - Submission

Thank you for conducting your review on rail productivity.

An increase in rail productivity will have a positive impact on the Australian economy, directly through the subsequent growth of the rail industry, and indirectly through the benefits rail provides in keeping the transport costs of goods low and in reducing: air pollution; greenhouse gas emissions; road congestion; and vehicle accidents.

The opportunity to provide you with actions that can provide these benefits to the Australian economy, by increasing rail productivity is appreciated.

Attached for your consideration is our submission in response to your Issues Paper. I would welcome any further opportunity to discuss with your review team our concerns as articulated in our submission.

Yours sincerely,

A handwritten signature in black ink that reads "Craig Wilson". The signature is written in a cursive, slightly slanted style.

Craig Wilson
Manager Environmental Sustainability Planning

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**National Transport Commission
Rail Productivity Review**

Submission

3 October 2008

Rail Productivity Review

Asciano welcomes the review of rail productivity in Australia. The rail industry is a significant contributor to the Australian economy. It employs 42,000 people, plus 70,000 working in industries supporting rail, and has current below and above rail investment projects of \$30 billion. Focus on increasing the productivity of rail freight and passenger transport will be of national benefit.

Transport can represent 1 – 10% of the final cost of a product and greenhouse gas emissions from transport can represent 10%+ of the carbon footprint of a product. In a world of increasing energy costs and costs for carbon emissions, increases in rail productivity have the potential to assist in dampening inflationary impact on the costs of goods in Australia.

While expenditure on rail infrastructure has increased from \$741 million in 2000 – 2001 (in 2005 – 2006 prices) to \$2,488 million in 2006 – 2007, this investment has been targeted at bringing elements of the network to a standard fit for current operations. While the current investment focus on the North South Corridor on the eastern seaboard is welcome, this still leaves most of the interstate network below the required standard and without any leap in productivity. Further investment must also be targeted at increasing the productivity of how this infrastructure is used.

Rail is a capital intensive, high fixed cost transportation solution. Rail productivity is closely linked to the volume of freight task carried on rail. Any fundamental improvement of rail productivity will be underpinned by increases in volume of freight carried on the network.

Improvements in productivity can thus initiate a virtuous cycle, of increasing volumes leading to improved productivity and lower costs, which drives increasing volumes and so on.

Plan and Vision

There is a need for a long term plan to improve rail productivity

Transport is an enabler for economic activity and wealth creation. An efficient transport industry allows other industries to be efficient, and creates wealth in all sectors of the Australian economy.

Productivity increases in freight transport translate to greater national productivity growth. A focus on freight transport productivity and rail productivity will have long term benefits. For these benefits to be achieved, there is a need for a long term vision that can be articulated and implemented in all transport planning strategy.

By example, the review of productivity reform in the rail industry should consider what has occurred with the planning of continuous improvement in the trucking industry. In

1971 a national highways strategy evolved and a vision of dual carriage lanes on the Australian Eastern seaboard North South transport corridor was developed. This vision and resulting plan, had the commitment of governments at State and Federal level. This plan has resulted in continual upgrade in the road infrastructure which has supported the upgrade in heavy road vehicles.

Over the decade to 2003 – 2004, the total expenditure by all levels of government in Australia on roads was \$91 billion (in 2004 – 2005 prices). This has seen a change in truck types for inter-capital haulage, from rigid trucks, to articulated trucks, to B-Doubles, to the introduction of B-Triples using the latest overseas technology. With intercity truck movements expected to increase by 2 – 3 per cent per annum, there may be 5,000 – 6,000 trucks on the Hume Highway each day by 2025¹, increasing from the current level of 3,000 – 4,000 trucks each day.

Recommended Action

To meet the increasing transport task and the rising costs for transport, a similar long term vision for the rail industry, and in particular long distance intermodal freight haulage must be realised. This must be supported, with a plan and commitment from all levels of government.

Technology and Standards

Access to world class technology

There is significant opportunity for increases in rail productivity by addressing technology and standards to allow below and above rail operations use the latest world class technology and practice.

Whilst Australia has a common standard gauge rail network to all capital cities, this gauge is inconsistent with that of the key equipment suppliers in the United States. The USA AAR (Association of American Railroads) track standard is able to take heavier equipment up to 32.5 tonne axle load. The current interstate rail network has an axle load limit of 23 tonnes. The AAR standard also has a larger rollingstock window outline in comparison to the smaller outline for the Australian network. Unlike road transport where most vehicles designed overseas can fit on Australian roads, rail rollingstock for use in Australia cannot be purchased 'off the shelf' and instead must be made smaller and lighter to fit on the Australian network. This has several negative effects:

- It increases the cost of equipment as it has to be redesigned and built as a limited one off manufacture.
- It decreases the speed of response to rail customers as lead times for rollingstock are extended and can take years to acquire.

¹ Laird 2007

- It limits the ability to find room in the rollingstock for the various noise and pollution equipment in an environment where standards for these measures are increasing and applied inconsistently across the country.
- It delays the acquisition of the latest technologies as manufacturers instead focus on key markets that do not required redesign of their equipment.

Infrastructure standards must improve

Similar to productivity improvements in road through the use of bigger and longer vehicles, the rail network infrastructure must be improved to enable use of High Productivity Trains.

Specifically the following major improvements are required:

- Increase the current maximum 1500m length of trains between Melbourne and Adelaide, Melbourne and Sydney, and Sydney and Brisbane to 1800m or longer.
- Implement plans to provide double stacking of containers between Sydney and Perth, and Melbourne, and Perth. It is recognised that the Sydney to Brisbane route has existing overhead electric locomotive wiring, tunnels, structures and grades that makes double stacking on this route difficult and costly to implement at this point in time. Any future inland route between Melbourne and Brisbane must provide for double stacking of containers.

Recommended Action

Changes to infrastructure standards to be incorporated into long term planning to enable the delivery of High Productivity Trains throughout the Defined Interstate Rail Network.

Bottlenecks and Land

Transport corridors are congested and more land for transport must be made available

There is an urgent need to make more land available for intermodal terminal facilities and rail transport corridors. Existing terminals and corridors suffer from urban encroachment which has created pressures to limit rail operations, or require additional noise mitigation of problems that are now costly and complex to fix.

These network bottlenecks and terminals limitations affect the service quality and reliability of rail operations. This in turn decreases the attractiveness in the use of this mode as well as lowering its productivity.

Recommended Action

Commitment by government and track owners is required to:

- Identify and reserve for transport use suitable sites to meet future intermodal terminal needs.
- Identify locations where the existing rail corridor is insufficient for future needs, and protect required additional land from inappropriate developments which may prevent its later use.
- Require new residential developments within the normal 'noise envelope' from rail operations to fund noise walls or other mitigation to allow satisfactory co-existence between residents and rail operations.
- Gazette new transport corridors where identified in the network vision, such as the Inland rail route through the southern part of Brisbane, to maintain future access to this land.

Conflict Between Passenger and Freight Rail Markets

Passenger and freight rail battle for limited network capacity which results in poor network utilisation

In those situations where passenger and freight trains share the network, priority is given to passenger services. Where capacity limits are being reached, this results in significant loss of productivity for rail freight. The best example is in Sydney which has adopted curfews for the arrival and departure of freight services during the morning and evening passenger peaks, both North and South of Sydney. While the planned construction of the dedicated South Sydney Freight Line will assist on the south side, no such separation is planned for the crucial corridor north of Sydney. Rail productivity will continue to be severely constrained as long as Sydney insists on a curfew.

Freight rail is also considered last in the network planning process. Consequently, the 'passenger' rail network is optimised for passenger movements and sub-optimised for freight haulage.

The ownership of metropolitan below rail networks by State governments highly politicises their operations with any daily issues that negatively affect passenger services, resulting in further restrictions on freight rail operations.

Recommended Action

For productivity gains to be realised in the rail industry, reform of its structure is required. There needs to be a single national operator of the Defined Interstate Rail Network (DIRN) and further work on separating passenger and freight operations on networks where there are conflicts in optimising the network for one rail market to the detriment of the other.

Industry Structure and Regulation

There are too many parties involved in regulating and managing rail

While there have been some changes to below rail network ownership for the inter-capital network, this network is still owned and operated by different parties. Each of these parties has their own:

- rail market priorities, whether freight or passenger rail;
- methods for planning network shutdowns and maintenance;
- methods for managing live train operations;
- agreements for above rail operators to gain access to the network;
- rail network use charging methodologies;
- standards for rollingstock that can operate on the network; and
- investment priorities, strategy and budget for infrastructure investment.

Rail is one of the most over regulated industries in Australia. A national rail operator may potentially have to deal with:

- seven rail safety regulators with nine different pieces of legislation;
- three transport accident investigators;
- fifteen pieces of legislation covering occupational health and safety of rail operations;
- six access regulators; and
- seventy-five pieces of legislation with powers over environmental management.

The cost to the rail industry from this regulation is estimated to be \$42m per annum.²

A number of regulatory and other measures need to be reviewed, for example, driver only operations of freight trains, to gain greater productivity in the rail industry. Driver only operations already exist in some rail jurisdictions and it is the case that on a single journey the same train can travel from a regime that requires one driver to a regime that requires two.

Recommended action

There is a real need to reduce the number of parties involved in rail management and regulation. One rail regulator and one network operator for inter-capital rail movements would have significant benefits as would the review of other regulations that hinder rail productivity.

² Synergies – The Costs of Rail Safety Regulation 2008

Complementary Policies

Other policies will support an increase in rail productivity

The Australian rail fleet is aging. The average age of the locomotive fleet is over 20 years old, while the average age of the USA fleet is 8 years. The high capital cost of equipment; the low margin competitiveness of freight markets; high rail network access fees; infrastructure limiting new equipment purchases; and long depreciation times; all contribute to the old age of the rail fleet.

A policy of accelerated depreciation on existing and new locomotives and rollingstock would encourage the acquisition of newer equipment. The financial benefit this provides would encourage new capital purchases which would also have other social benefits with less pollution and greenhouse gas emissions from newer equipment. Newer equipment is also able to support High Productivity Trains, provide fuel efficiency gains and improve current equipment reliability.

The USA also has policies that restrict B-Double truck movements on interstate federal highways. The logic for this restriction is that the rail network is the mode of government choice for moving large quantities of goods over long distances. This strategy recognises and supports the social benefits of reduced road congestion, improved air quality, and fewer accidents, and is part of the U.S. Government vision for the movement of freight.

While some States in Australia have mandatory rail use targets for goods to and from the ports, these are unsupported by any complementary policy to assist the achievement of these targets.

Recommended action

Governments should develop and deliver complementary policies to support rail productivity and improve the productivity of freight transport, consistent with the long term vision for rail freight.

Externalities

There are many other costs or considerations for transport

There are several externalities that also directly benefit the economy from an increase in rail productivity.

Rail transport is inherently the safest form of transport. Statistically, rail transport is up to 20 times safer than road.³ With a rapidly increasing freight task resulting in more trucks on roads, the potential for an increase in road accidents is real. The

³ Australasian Railway Association

annual cost of road accidents in Australia is \$20 billion. Higher use of rail will reduce this cost.

It is estimated⁴ that heavy vehicle congestion costs (including environmental effects) in Australian capital cities increased by 53% between 1990 and 2005, and these costs are expected to increase by an additional 234% between 2005 and 2030. This represents congestion costs of \$2.2 billion per year. Higher use of rail will reduce this cost. With the freight task forecast to continue rapid growth, an increase in rail productivity will defer the need for further road investment to meet road network demand.

Intermodal freight rail emissions are 40% - 70% lower than truck emissions per gross tonne kilometre (GTK), even when road pick up and delivery at origin and destination is included. The carbon emissions benefits of rail in providing an emissions reduction option for transport are substantial and real. Improvements in rail productivity will provide significant reductions in rail emissions per GTK.

A skills shortage in the transport industry in truck and train drivers will be exacerbated with the increasing freight task. The future availability and cost of labour must be considered in the context of the labour productivity of a truck or train driver. With an intermodal train replacing 145 trucks, the productivity of one train driver compared to a truck driver is significant, and a modal shift to rail will have significant benefits for reducing the constraints of this type of skilled resource.

Recommended action

Externalities must be considered when reviewing transport policy and planning to reflect the significant economic, social and productivity benefits, that increased use of rail will provide.

Conclusion

There is potential to realise significant productivity gains in the rail industry

A significant increase in rail productivity is achievable and will have major benefits for the Australian economy. The benefits include: dampening the cost increases in the cost of goods with the movement of more goods at lower cost; deferring the need for further road investment due to the increasing freight task; reduced accident costs; reduced regulatory costs and reduced greenhouse gas emissions.

⁴ Extracted from data provided by BTRE and Working Paper 117

A vision, a plan and a commitment by all levels of government is required for this to be achieved. The key requirements for delivering on a substantial improvement in rail productivity are:

- improvements to infrastructure standards;
- simplification of the regulation and ownership/operation of the DIRN;
- elimination of network bottlenecks; and
- the development of government policy that acknowledges the social and environmental benefits of rail over road.

For further information, please contact Craig Wilson.

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