

Submission to: National Transport Commission

Title: Assessing the effectiveness of the PBS scheme

Date: 9 October 2017



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ATA CONTACT

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1. About the Australian Trucking Association

The ATA is the peak body representing the Australian trucking industry. Its members include state and sector-based trucking associations, some of the nation's largest transport companies, and businesses with leading expertise in truck technology.

2. Summary of recommendations

Recommendation 1

Increasing road freight safety and productivity should be prioritised by reducing the barriers to the uptake of high productivity vehicles, and not by focusing on increasing the numbers of PBS approved vehicles.

Recommendation 2

The PBS scheme should be amended to include a clear pathway to progress popular and mature PBS designs to becoming available under prescriptive regulations.

Recommendation 3

Road access for PBS and high productivity vehicles should be improved with more extensive, gazetted, PBS and HPV road networks.

Recommendation 4

Modern braking technologies such as electronic stability control should be mandated for new PBS approved vehicles paralleling and reflecting the updated ADR35/06 and ADR38/05, with appropriate exemptions which can be used to comply with the PBS's stability plan.

Recommendation 5

The proposed Regulatory Impact Statement on a performance based approach being made standard to assess and register new heavy vehicles over 42.5 tonnes should not proceed.

Recommendation 6

Any increase in the regulatory burden on the purchase of new heavy vehicles over 42.5 tonnes should be fully offset, in line with the Australian Government guide to regulation.

Recommendation 7

Local governments should approve the use of high productivity vehicles, including vehicles available under PBS, prescriptive regulations, and as modular combinations.

Recommendation 8

The development of the freight network should be progressed by setting service levels for roads, incorporating:

- Road access service standards for significant freight and supply chain corridors, which allow the use of modern, high productivity vehicles operating at higher mass limits with gazetted, as of right road access conditions.
- Significant 'last mile' higher mass limit connections.
- Road access service levels for other freight routes.

Recommendation 9

Existing problems with the PBS scheme must be fixed before the scheme can be extended, and the NTC should develop recommendations to be implemented by the NHVR which would improve the PBS process by removing inconsistent advice, reducing costs, reducing complexities and reducing delays.

3. Introduction

In August 2017, the National Transport Commission (NTC) released a discussion paper on assessing the effectiveness of the Performance Based Standards (PBS) scheme. The paper aims to:

- Present the preliminary findings of the NTC evaluation of the PBS scheme.
- Outline possible actions that will improve the effectiveness and efficiency of the scheme.
- Summarise the benefits of the PBS scheme to industry, governments and the community.

The paper also identifies the original policy intent of the PBS scheme to have been:

- Development of more sustainable transport systems through improved road vehicle regulations controlling heavy vehicle safety and infrastructure impacts.
- More flexible road transport regulations that provide for increased innovation and more rapid adoption of new technologies, while providing seamless operations nationally.

The ATA, as the peak body representing the trucking industry, supports the intent of the PBS scheme and welcomes the positive benefits it has delivered. It demonstrates the importance of encouraging modern, safer, more productive vehicles in the Australian trucking fleet.

These positive benefits, as referenced in the next section of this submission, are important and extending their impact in the trucking industry should be a policy priority. However, due to the nature of the road freight task and limitations of the PBS scheme this will not be achieved by a narrow focus on growing the number of PBS approved vehicles.

Instead, the PBS scheme should be part of a policy framework that delivers safer, more productive heavy vehicles available under prescriptive regulations, with as of right road access conditions.

4. Modern, safer, more productive vehicles

The positive benefits reported for PBS vehicles in safety, productivity and for the environment are important. The NTC paper details these positive outcomes, with highlights including:

- PBS vehicles are involved in 46 per cent fewer major crashes than existing non-PBS vehicles for the same distance travelled.
- An estimated reduction of over 440 million kilometres in truck travel and at least four lives saved in 2014-16.
- An average 24.8 per cent productivity gain across commodities carried by PBS vehicles.
- Estimated saving of \$65 million in road maintenance expenses for 2015-16.
- Estimated saving of 94 million litres of fuel in 2016 and reduction of 250,000 tonnes of CO2 emissions.¹

These positive benefits are further evidence of the benefits from using high productivity vehicles (HPV) generally.

An Austroads research report published in 2014, *Quantifying the Benefits of High Productivity Vehicles*, found clear safety benefits with HPVs showing “76 per cent fewer accidents than would be the case for conventional trucks” and “a 63 per cent reduction in major accident incidents on a weighted fleet basis.” Importantly, the report found that the safety performance of HPVs “is expected to lead to an estimated saving of 96 lives by 2030.”²

¹ NTC, August 2017, Assessing the effectiveness of the PBS Scheme: Discussion paper, 1.

² Austroads, 2014, Quantifying the Benefits of High Productivity Vehicles, pi.

Austrroads also reported on clear environmental benefits from the use of HPVs. Operational HPV fleets, due to the use of newer vehicles, were reported to make use of the latest emissions standards. Additionally, HPVs were reported to provide significant savings in emissions through the reduction in operational kilometres travelled and were also expected “to save 5.9 million tonnes of diesel by 2030.”

There were also clear productivity and economic benefits. It was reported that assuming staged access to the highways connecting Brisbane, Sydney, Melbourne and Adelaide that “Australia will gain \$6.9 billion in direct real term benefits,” with two thirds of the operational benefits “attributable to the direct benefits flowing from access to the Hume Highway.” Austrroads also reported flow-on economic benefits in real terms of \$5.6 billion, where “48 per cent of this benefit will flow specifically to the manufacturing, building materials, transport and food sub-sectors of the economy.”

Other indirect benefits reported included reducing the “aspects of freight operations that are observed by the community” through lower numbers of trucks, and reduced impacts from noise, emissions and accidents. Reduced truck numbers also leads to “lower pavement impacts” and the potential for a “calculable road maintenance benefit for a typical Australian highway.”

The benefits of improving road freight productivity has been demonstrated before. Between 1971 and 2007, trucking industry productivity increased six-fold due to the uptake of high productivity vehicles like B-doubles. It has been estimated that in the absence of productivity improvements over this period that nearly 150,000 articulated trucks, in addition to the 70,000 registered for use in 2007, would have been required to undertake the 2007 articulated truck freight task.³

The reported benefits by PBS vehicles is not a narrow result of the use of PBS vehicles, it is part of the wider context of the benefits to improving heavy vehicle productivity in general.

5. Limitations of the PBS scheme and the nature of the road freight task

The NTC paper highlights a projected increase of about 20 per cent in the road freight task over the next 10 years, and states that the PBS scheme is perfectly positioned to enable both industry and governments to cope with the predicted increase.⁴

Whilst the reported benefits of PBS vehicles demonstrate the scheme plays an important role in handling the freight task, and its projected increase, **it is important to recognise that the PBS scheme is not positioned to solely enable the handling of the predicted increase in the road freight task.**

Due to the restrictive nature, limited road access, long lead times and other features of the PBS scheme, it is not suitable to the significant part of the road freight task that does not have predictable freight volumes and does not provide sufficient lead time for PBS approval.

Additionally, the PBS scheme outcomes are at odds with the nature of current commercial demand. The scheme has facilitated the supply of many rigid truck and trailer sets without an equally steady supply of safer, roll-coupled articulated combinations suitable for linehaul and general freight.

The practical experience of road freight operators is that while the PBS scheme works well in particular sectors (such as the intense and high volume gravel and cement markets, and for container haulage (excluding containers with unknown load heights)), it only has a limited at best application for the wider road freight sector.

³ Bureau of Infrastructure, Transport, and Regional Economics, 2011, Truck productivity, pxiv.

⁴ NTC, August 2017, Assessing the effectiveness of the PBS Scheme: Discussion paper, 5.

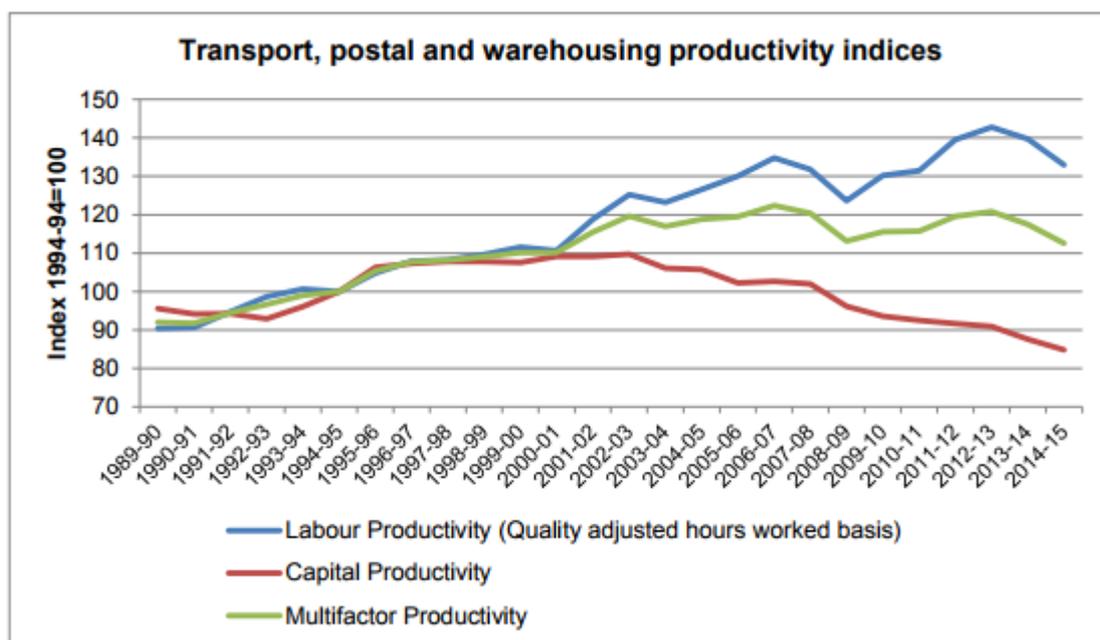
The NTC paper identifies that not every heavy vehicle type is suitable for the PBS scheme, and of the heavy vehicle fleet from which PBS vehicles can emerge only 4.6 per cent of vehicles were PBS approved by the end of 2016.⁵

6. Improving road freight safety and productivity

Through allowing innovative design, the PBS scheme has enabled vehicles which have improved safety and productivity outcomes. However, limitations of the PBS scheme in terms of the nature of the freight task means that the potential of these benefits are unlikely to be fully realised without further reform and improving road freight productivity needs to extend beyond a narrow focus on the PBS scheme.

The below graph from the 2016 NTC paper on a National Land Transport Productivity Framework uses the Australian Bureau of Statistics industry level data for the Transport, Postal and Warehousing sector.

Figure 1: Productivity trends in transport, postal and warehousing over time



Source: ABS 2015c as produced by NTC, August 2016, National Land Transport Productivity Framework Issues Paper

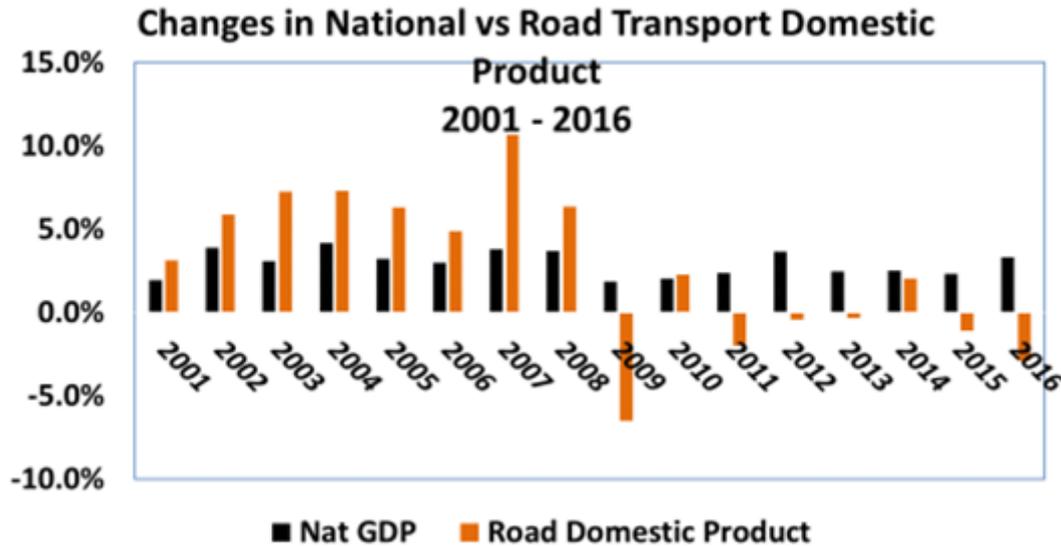
The ABS data shows that multifactor productivity for the sector has slowed since 2002-03 and declined since 2012-13. Capital productivity has been in decline since 2002-03.⁶

The NTC paper (on assessing the PBS scheme) identifies a significant positive road transport GDP in the years leading up to and immediately following the approval of the PBS scheme (figure 2).

⁵ Ibid, 11.

⁶ NTC, August 2016, National Land Transport Productivity Framework Issues Paper, 8-9.

Figure 2: Gross Domestic Product for the Road Freight Sector 2001 – 2016



Source: ABS 5206.0, 2001 – 2016 National Accounts, as produced by Industrial Logistics Institute, March 2017, Performance Based Standards Marketplace Outlook Project, 34.

Whilst the results in 2006-07 and 2007-08 are notable, it is implausible that these positive road transport results would be attributable to the introduction of the PBS scheme with just 140 PBS vehicles approved in 2008-2009.⁷

The growth in PBS vehicles since this time has also failed to lead to any noticeable sector wide economic improvement. The greatest number of PBS approved vehicles was in 2014-2016, with 3,238 approvals. At the same time, road transport went into decline in 2015 which accelerated to its second worst result in 2016 since 2001.

The increase in road transport GDP in 2006-07 is more plausibly attributable to the **12.4 per cent increase** in non-dwelling construction that occurred in the year.⁸

Whilst the productivity results for individual PBS vehicles are welcome, the scheme has not improved the overall productivity for the sector. The limited number of PBS vehicles, which are only suitable for a limited part of the road freight task should not be forgotten in this context.

The benefits being delivered by PBS approved vehicles need to be made available to the wider heavy vehicle fleet, through migrating popular PBS vehicle types to becoming new prescriptive and modular vehicle types. The NTC paper identifies that during the evaluation “many survey respondents reported that the PBS scheme is time-consuming, complex, expensive and resource-intensive.”⁹

Unless new prescriptive vehicles and modular combinations are made available which make the benefits of high productivity vehicles more widely available, the potential safety and productivity benefits for the heavy vehicle fleet will not be realised. Modular combinations, which allow trucking operators to utilise trailers in different combinations depending on the task, are particularly important.

The true success of the PBS scheme should not be increasing the number of PBS approvals. Instead, the best measure of the success of the scheme is how well it facilitates the incorporation of modern, safer, more productive vehicle designs and modular combinations in the prescriptive vehicle designs available for use by trucking operators.

⁷ NTC, August 2017, Assessing the effectiveness of the PBS Scheme: Discussion paper, 11.

⁸ [2008-09 Budget paper No 1](#), 2-6.

⁹ NTC, August 2017, Assessing the effectiveness of the PBS Scheme: Discussion paper, 17.

The safety benefits of PBS approved vehicles can, and should, be extended by making those vehicle designs more accessible outside of the PBS scheme.

Recommendation 1

Increasing road freight safety and productivity should be prioritised by reducing the barriers to the uptake of high productivity vehicles, and not by focusing on increasing the numbers of PBS approved vehicles.

Recommendation 2

The PBS scheme should be amended to include a clear pathway to progress popular and mature PBS designs to becoming available under prescriptive regulations.

7. Road access

Road access is critical to improving road freight safety and productivity outcomes. The NTC paper notes that “generally, the more productive a heavy vehicle, the more likely it is to be regulated under a permit regime.”¹⁰

This increased regulatory burden is preventing the greater use of more productive vehicles, both within and outside of PBS approval. The NTC paper identifies a number of concerns of customers with lack of access certainty and the costs involved in undertaking PBS route assessments, and restrictions that limit operation to reduced mass limits or on a reduced network. Feedback received by the ATA provides further evidence that industry has significant concerns about the lack of access and difficulty in obtaining access for PBS vehicles.

Measures to improve the road access conditions for PBS approved vehicles should be prioritised. Additionally, improved road access for HPVs should also be prioritised. Priority should be given to gazettal of networks, to provide certainty for industry in light of unpredictable freight volumes. For example, a key reform would be for a gazetted HPV A-double network, making routes ‘open for business’ and without permit regulatory red tape.

Ultimately, this work should be progressed as part of a wider road investment reform that focuses on improving the customer service for road users through better safety, access, reliability and cost. The ATA made detailed recommendations to the Australian Government on improving supply chains for the wider economy by improving our road network in its [submission on national freight and supply chain priorities](#).

This customer focused reform agenda should include:

- Introduction of independent management of road networks and selection of road investment and maintenance projects.
- Long term and stable road funding.
- Setting road access service standards for significant freight and supply chain corridors which allow the use of HPVs operating at higher mass limits (as a gazetted route).
- Setting significant ‘last mile’ higher mass limit connections and service standards for other freight routes.

The success of the B-double, available under prescriptive regulations and with gazetted networks, provides policy makers with a guide to how to improve the safety and productivity outcomes of road freight.

Recommendation 3

Road access for PBS and high productivity vehicles should be improved with more extensive, gazetted, PBS and HPV road networks.

¹⁰ Ibid, 21.

8. ATA response to NTC proposed actions

The NTC paper proposes seven possible actions to increase the uptake of PBS approved vehicles. The ATA has the following responses, based on the objective of increasing the uptake of safer, more productive heavy vehicles more widely, and not based on the narrow objective of increasing the numbers of PBS approved vehicles.

NTC possible action 1

Review the PBS framework and the standards to improve productivity, safety and the precision of matching vehicles to roads.

ATA response: Conditionally supported, provided any changes reduce the regulatory barriers to the use of safer, more productive vehicles.

Additionally, the NTC paper cites the ability of older vehicles without modern braking technologies to obtain PBS approval. The safety benefits of modern braking technologies and electronic stability control are well established, and the ATA has consistently advocated that electronic stability control should be mandated for new trucks and trailers, with appropriate exemptions. This should also apply to new PBS approved vehicles, and be implemented at the same time and to the same standard as detailed in the proposed new ADR35/06 and ADR38/05.

This view is not limited to the ATA. In 2016, Heavy Vehicle Industry Australia (HVIA) published a policy on safety technology for the PBS scheme. HVIA said that the reality is many vehicles in the PBS fleet do not reflect the level of safety performance portrayed. HVIA proposed that newly approved PBS designs and all new vehicles built to existing designs should be required to be compliant and fitted with minimum standards on modern braking technologies.¹¹

As this requirement would increase upfront and maintenance costs for trucking operators, other elements of the PBS scheme should be amended in recognition of the improved safety standard, such as the payload management procedure requirements for containers.

Recommendation 4

Modern braking technologies such as electronic stability control should be mandated for new PBS approved vehicles paralleling and reflecting the updated ADR35/06 and ADR38/05, with appropriate exemptions which can be used to comply with the PBS's stability plan.

NTC possible action 2

Investigate the need to develop a simplified PBS scheme for popular and mature PBS designs backed by greater access certainty (to be led by industry bodies).

ATA response: Should be replaced in line with ATA Recommendation 2. Popular and mature PBS designs should be made more widely available as prescriptive vehicle designs.

Additionally, either the ATA recommendation or the NTC possible action would require reform to be implemented by governments. As such, either process should be led by government, with proper consultation of industry.

NTC possible action 3

The NHVR publish national notices for all four levels of PBS network.

ATA response: Conditionally supported, provided the notices lead to improved access.

¹¹ Heavy Vehicle Industry Australia, October 2016, HVIA Policy Position: Performance Based Standards – Safety Technology.

NTC possible action 4

Austrroads and the NHVR develop a nationally harmonised infrastructure capability assessment framework for use in all access decision making.

ATA response: Conditionally supported, provided the framework delivers improved certainty in decision making and does not reduce existing road access.

NTC possible action 5

Develop a Regulatory Impact Statement (RIS) to assess whether a performance based approach should be the standard to assess and register a heavy vehicle's suitability on the road. This would apply to all new heavy vehicles over 42.5 tonnes.

ATA response: NOT SUPPORTED.

This action is described in the NTC paper as reversing the current regulatory requirements and is proposed in the context of the high regulatory barrier to using PBS approved vehicles despite their safety and productivity benefits. But the way to increase the uptake of safer, more productive vehicles is not by increasing the regulatory burden on all new heavy vehicles over 42.5 tonnes. Instead, regulatory barriers that discourage the uptake of safer, more productive vehicles should be reduced.

In line with ATA recommendations 2 and 3, reforms which make high productivity vehicles and popular and mature PBS combinations more widely available as prescriptive vehicle designs, together with improved road access conditions, are reforms which would remove barriers to the use of these vehicles.

Additionally, increasing the regulatory barriers on the purchase of new heavy vehicles over 42.5 tonnes is only likely to discourage the uptake of new heavy vehicles, increasing the average age of the heavy vehicle fleet and increasing the reliance on older, less productive vehicles for the increasing road freight task.

The NTC would also be unable to progress this work without identifying suitable regulatory offsets. Principle three of the Australian Government's guide to regulation states that the cost burden of new regulation must be fully offset by reductions in the existing regulatory burden.¹² There has been no indication that any regulatory offsets are under consideration.

Rather than increasing the regulatory burden on the purchase of new heavy vehicles over 42.5 tonnes, the agenda of governments needs to be focused on reducing regulatory barriers to the use of modern, safer, more productive vehicles.

Recommendation 5

The proposed Regulatory Impact Statement on a performance based approach being made standard to assess and register new heavy vehicles over 42.5 tonnes should not proceed.

Recommendation 6

Any increase in the regulatory burden on the purchase of new heavy vehicles over 42.5 tonnes should be fully offset, in line with the Australian Government guide to regulation.

NTC possible action 6

Engage with non-road infrastructure owners to identify the costs and benefits of upgrading their infrastructure to accommodate PBS vehicles. Also engage with ancillary operators to identify if the PBS scheme can optimise the productivity and safety of their heavy vehicle fleet.

¹² Australian Government, 2014, [Ten principles for Australian Government policy makers](#).

ATA response (for engaging with non-road infrastructure owners): Supported. Findings from the engagement should be made publically available (at least on a de-identified basis, if required).

ATA response (for engaging with ancillary operators): Conditionally supported, but the engagement should include the ATA recommendation for migrating popular and mature PBS designs to becoming more widely available as a prescriptive design, which would assist optimisation of the productivity and safety of the ancillary truck fleet.

NTC possible action 7

Identify if there is a need to develop a performance based approach for medium-to-heavy duty commercial vehicles (8t to 42.5t total mass) and buses operating in urban areas.

ATA response: Conditionally supported, providing any potential approach includes the ability for popular and mature vehicle designs to be migrated to becoming available on a prescriptive basis.

In addition, the PBS based approach should not affect the continued use and approval of prescriptive designs.

9. ATA response to suggestions for consideration by NHVR and road managers

The NTC paper also lists six suggestions for consideration by the NHVR and road managers.

1. Encourage local governments to approve the use of PBS vehicles as a better alternative to prescriptive vehicles.

ATA response: NOT SUPPORTED.

Considering the limitations of the PBS scheme, this suggestion would risk reducing road access for trucking operators and increasing supply chain costs.

Throughout the NTC paper it has been noted that:

- There is concern with inconsistent advice provided by the NHVR call centre for PBS permit applications and concerns with inconsistent and subjective decision making on PBS permit applications (see suggestion 6 below).
- PBS approval process is lengthy, expensive, time consuming and resource intensive.
- PBS vehicles experience network access limitations and uncertainty.
- Increased costs of PBS vehicles ranges from \$3,500 to over \$120,000.
- NHVR issued in-principle approvals do not always convert to actual permits, resulting in significant losses to industry.
- 24 per cent of PBS applications take longer than 30 business days.
- Often PBS vehicles are only allowed to operate at reduced mass limits or on a reduced network.

Additionally, as noted in section five of this submission, the PBS scheme is not suitable for handling the significant part of the road freight task that does not have predictable freight volumes and does not provide sufficient lead time to seek PBS approval.

Considering these significant shortcomings, the PBS scheme is not a viable alternative to prescriptive vehicles and modular combinations for the road freight task, and should not be prioritised as a better alternative. This would be an effective increase in the regulatory burden for trucking operators which without being fully offset would not comply with the Australian Government guide to regulation.

High productivity vehicles, whether available as a PBS or prescriptive vehicle, offer local governments an opportunity to support the growth of local industries, and to incur less local road wear for moving the same transport task. Their approval should be encouraged, but without a narrow focus on just vehicles within the PBS scheme.

Recommendation 7

Local governments should approve the use of high productivity vehicles, including vehicles available under PBS, prescriptive regulations, and as modular combinations.

2. Develop nationally harmonised operating conditions for different PBS vehicle types, network levels and mass limits for use in both state and local roads.

ATA response: conditionally supported, as long as it leads to improved road access conditions.

3. Substitute existing in-principle assessments by issuing permits with a delayed start date.

ATA response: conditionally supported, as long as implementation actually removes uncertainty.

4. Accelerate the development of the strategic freight network and work done on major and popular highways to simplify the task of managing heavy vehicle access for road managers. This often means lesser bridges to fix and minimum pavement to repair. Risk based operating conditions such as Intelligent Access Program – Mass (IAP-M) will allow the live load factor to be reduced to allow safer and more productive vehicles to use a broader network.

ATA response: The strategic road and freight network should be developed by setting road service standards which provide gazetted as of right access for high productivity vehicles.

This development should not include an increased reliance on IAP. ATA member association, the Australian Livestock and Rural Transporters Association (ALRTA), has provided a submission to the NHVR which notes that with regard to IAP:

- It is based on a poor technology platform that relies on continual driver declarations.
- Is the primary factor preventing greater uptake of higher mass limits (HML) by eligible vehicles on gazetted HML routes.
- Greatly erodes the productivity gains of operators who do take up HML.
- Rarely improves 'last mile' access to the farm gate.
- Does not protect vulnerable infrastructure.
- Generates millions of false non-conformances annually.
- Has not resulted in a single successful HML related prosecution.¹³

¹³ ALRTA, 22 September 2017, Submission on the mandatory application of the intelligent access program as a condition of accessing higher mass limits, 10.

Recommendation 8

The development of the freight network should be progressed by setting service levels for roads, incorporating:

- Road access service standards for significant freight and supply chain corridors, which allow the use of modern, high productivity vehicles operating at higher mass limits with gazetted, as of right road access conditions.
- Significant 'last mile' higher mass limit connections.
- Road access service levels for other freight routes.

- 5. Address the lengthy and expensive PBS approval process. Industry suggestions include developing a means to allow prospective applicants to self-assess their innovation against PBS requirements, and developing a centrally managed database for heavy vehicle components.**

ATA response: Supported.

The ATA supports reforms to address the lengthy and expensive PBS approval process, but is concerned that this is a suggestion without detailed NTC recommendations to be implemented.

- 6. The NTC notes a number of survey respondents are concerned about the inconsistent advice provided by the NHVR call centre for PBS permit applicants. Industry also reported that in some instances this has led to inconsistent and subjective decision making to PBS permit applications.**

ATA response: the ATA is disappointed that this suggestion does not contain an actual recommendation for improvement.

Recommendation 9

Existing problems with the PBS scheme must be fixed before the scheme can be extended, and the NTC should develop recommendations to be implemented by the NHVR which would improve the PBS process by removing inconsistent advice, reducing costs, reducing complexities and reducing delays.