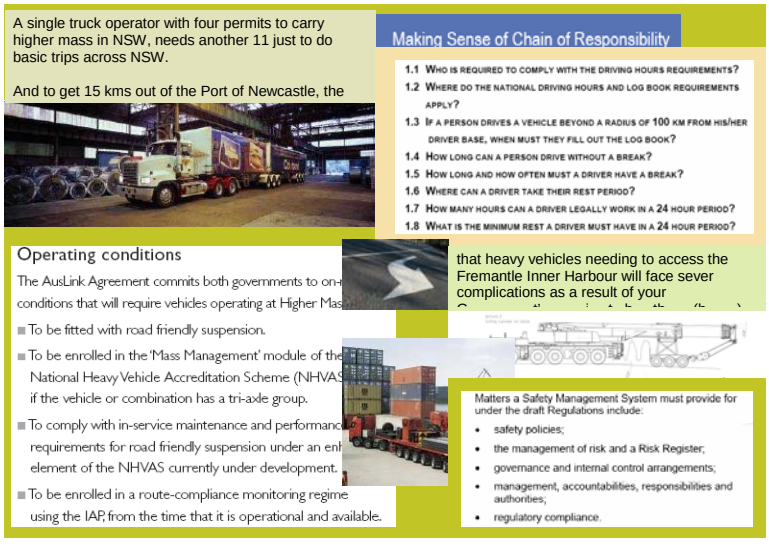
AUSTRALIAN LOGISTICS COUNCIL

Regulatory impediments to efficient supply chain operation



Prepared for Australian Logistics Council

By Meyrick and Associates

Consultation Draft for Industry and Government Comment

February 2007

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General

This report has been prepared as a consultation draft for the
Australian Logistics Council (ALC) by Meyrick and Associates.
The work was commissioned by the ALC's Regulation Steering Group.

The ALC would like to thanks Meyrick and Associates
for the preparation of this paper.

Comments on this paper are invited and should be sent to

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AUSTRALIAN LOGISTICS COUNCIL

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1. INTRODUCTION

The Australian Logistics Council (ALC) has for some time been concerned about regulatory impediments to efficient supply chain operation. ALC is conscious of the work that has been done recently by other organisations, including the *Twice the Task* report prepared for the National Transport Commission (NTC) and the Commission's response to that report. This work has identified a number of problem areas that are of concern to the Council. ALC now wishes to develop a coherent industry position on these issues, and identify the steps that industry can take to promote a prompt and effective resolution of them.

To address these issues, ALC commissioned Meyrick and Associates to undertake a study of the impact of regulation on the supply chain. The program for the study is comprised of two phases, with the second phase proceeding only if the results from the first phase show sufficient promise, and funding for the second phase is forthcoming:

- Phase 1 would focus on identification of priorities and the development of provisional strategies for addressing these priorities.
- Phase 2 would focus on a detailed analysis of specific priority issues, including quantification of the costs to specific supply chains of regulatory impediments. Proceeding to Phase 2 would require the provision of an additional budget.

This paper documents the outcomes of the first phase of this study, defining seven possible action areas on which the ALC might focus, with a brief discussion of the nature of the problems that exist in these areas.

The seven action areas discussed in separate sections are:

- high mass limit vehicles
- port related transport
- implementation of performance based standards
- fatigue management
- use of over-mass vehicles travelling to and from intermodal terminals
- permits for over-dimension vehicles
- inconsistent rail regulation.

The final section of the paper summarises the key issues related to each of the topics and a set of recommended actions for addressing these issues.

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2. HIGH-MASS LIMIT VEHICLES

2.1 Description of the issue

There has been considerable progress in increasing mass limits for road freight vehicles in Australia, and making these limits more consistent across States. The *Twice the Task* report notes that:

> *The introduction of increased mass limits, longer semi trailers, larger vehicle dimension limits and subsequently the roll out of extensive B-double and road train routes have all provided productivity gains for the road transport industry. The productivity improvements in road freight transport achieved in the shift from semi-trailers to B-doubles was a major contributory factor in coping with freight task increases over the past 20 years. (SKM/Meyrick, 2005)*

But there is more to be done in this area. *Twice the Task* recommends further work towards consistent higher mass limits for trucks throughout Australia, particularly on interstate highways, and major urban freeways and arterial roads. This may in the longer term require the adoption of different design standards for infrastructure, particularly bridges on major freight routes.

Following a major international study undertaken under the auspices of National Road Transport Commission (NRTC) in the mid-1990s, agreement was reached (in the late 1990s under the Australian Transport Commission) to allow an increase in the permitted operating mass of approved vehicles over a defined subset of the road system. The permitted load increase was defined for each axle group, with the effect that:

- 6-axle semi-trailers could carry an additional 3 tonnes
- B-doubles would be able to carry an additional 5.5 tonnes

This resulted in increased payload capacities of between 10 and 13%, despite vehicles operating at higher mass limits (HML) not being physically larger than existing vehicle configurations. In order to obtain approval to carry additional loads, the following regulatory safeguards were established:

- Vehicles would need to be equipped with road-friendly suspension complying with the relevant Australian Design Rule.
- Operators of these vehicles would need to implement mass-management systems that comply with National Heavy Vehicle Accreditation Standards.

The intention of the initiative was to progressively provide HML vehicle access to the entire arterial road network. Progress on the development of the HML network has, however, been mixed. Informal industry estimates of the proportion of the arterial road network on which HML vehicles could operate as at September 2006 are reproduced in Table 1 below, which clearly shows that NSW and QLD are considerably lagging behind the other states. This lag in application of the HML scheme in effect results in a loss of efficiency for transport operators moving freight in these two states.[1]

[1] The differentials displayed in Table 1 seem to bear out the claim of the National Transport Commission (NTC) that: 'In effect, regulation has helped embed a focus on infrastructure asset protection by transport agencies rather than the productive use of the asset'. (*Improving the Regulatory Framework for Transport Productivity in Australia, 2006*)

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TABLE 1: PROPORTION OF ARTERIAL ROAD NETWORK AVAILABLE FOR HML VEHICLES

Jurisdiction	HML routes as % of arterial road network
Northern Territory	100%
Victoria	95-100%
South Australia	80-85%
Western Australia	65-75%
Tasmania	65-75%
Queensland	10-15%
New South Wales	5%-10%

2.2 Recent Developments

The second half of 2006 saw significant developments with the HML scheme, with both NSW and Queensland, as part of their bilateral AusLink funding agreements with the Commonwealth Government, committing to extensions to the HML networks in their respective states. Specific details about the NSW system are outlined below.

In NSW, transport operators can apply for HML access through the NSW Roads and Traffic Authority (RTA) by pre-enrolling in the Intelligent Access Program (IAP). The IAP is GPS based system that is designed and prescribed by road authorities to ensure vehicles adhere to designated HML routes. In essence, IAP seeks to monitor the specific driving conditions, driver behaviour and trip documentation expected on a HML route.

In NSW, applicants must nominate the roads on which they seek to operate at HML. As from 1 July 2006 HML access can be sought on the Newell, Sturt, Barton, Hume (from the Victorian border at Albury to Goulburn), and New England Highways (from the Queensland border to Tenterfield), and on other roads within a 100km radius of these roads. In addition, a further substantial extension to the NSW HML network took effect on 31 December 2006. This covers the roads running between Sydney and the regional centres of Wollongong, Newcastle, Dubbo..

Where applicants seek HML access on a local road, the RTA will instruct the applicant to seek written approval from the relevant Local Government Authority, and submit this to the RTA.

The NSW RTA will not issue a HML permit unless:

- the vehicle meets all the regulatory safeguards for HML and
- the entire length of the route requested for HML (including local roads) has been approved.

While these extensions to HML are a very positive step, they appear to have at come at a price, with both NSW and QLD making pre-registration for the IAP a condition of access to the states' HML networks. This represents the introduction of additional regulatory requirements of certain vehicle operators that are not required in other states like Victoria. The efficiency impediments resulting from linking HML to IAP are considerable because of three basic factors:

- the cost incurred by transport operators for installing IAP
- the gaps in the HML network and the lack of appropriate connections between local roads and the HML routes
- the administratively onerous HML permit licence system (in NSW).

Each of these factors is discussed in section 2.3 below.

2.3 Supply chain consequences

2.3.1 Applicability of IAP

If, as it would seem at first glance, all trucks travelling along the relevant routes in NSW will need to pre-register for IAP (as outlined in section 2.2 above) then the IAP system in that state appears relatively straightforward. However, according to information obtained from the Australian Trucking Association (ATA), if a vehicle is registered under the Federal Interstate Registration System (FIRS) and operates on a FIRS-declared route such as the Newell Highway (in NSW), then NSW state rules about routes conditions like IAP pre-registration do not apply.

The ATA indicated that only a moderate proportion of FIRS operated freight vehicles understand this to be the case. This implies a certain level of operator uncertainty — something also echoed the NSW RTA who recently stated that the implementation of the NSW IAP legislation is unclear about what is required of truck drivers and operators. This is also consistent with feedback obtained from the Queensland Trucking Association (QTA) — where members expressed dissatisfaction about signing onto the IAP system without having clear information about how it would work.

2.3.2 Cost of IAP and Linkage to HML

The NTC estimates that for heavy vehicle operators the financial cost of using IAP services is between $500 and $1,600 per vehicle per year. The cost range reflects the fact that many trucking operations are already using GPS for fleet management purposes and, as such, accommodating the IAP would come at a much lower cost. Transport Certification Australia has calculated that a B-double running one way between Melbourne and Sydney on a higher mass limits permit with just four tonnes extra payload (out of a 5.5 tonnes potential increase), would break even on all extra expenses in just 16 trips. It is also expected that as the market expands, the associated economies of scale and market competition will reduce costs *(Road Transport (General) Amendment (Intelligent Access Program) Bill, Second reading, page 88, 6 September 2006).*

By contrast with these NTC cost estimates, NatRoad has calculated direct installation costs of $3,000 per vehicle. NatRoad suggests that there is very minimal guidance in the marketplace about the size of the ongoing IAP administrative and compliance burden — the industry feels this will be considerably greater than direct set-up costs. This administrative and compliance burden covers the costs of gaining accreditation, program reporting and enforcing penalties for non-compliance *(Australasian Transport News, page 20, September 2006).*

The ATA has indicated to Meyrick that some industry players who pre-enrol for IAP may not subsequently take up HML as the set-up costs will be higher than their cash flow. This could severely hurt those smaller trucking operators running intra-state trips only.

While it is clear that there is a range of estimates for the additional IAP cost impost on operators using the HML throughout NSW, there is a more fundamental issue at play. That is, irrespective of the actual costs of IAP, the fundamental industry view is that sufficient safeguards were included in the 1999 agreement on HML passed by the Australian Transport Council (state and federal transport ministers) and the Intelligent Access requirement was not part of the agreement. Participation in the IAP has never previously been a specified pre-condition of access to the HML routes, and it is difficult to see why it should be now. Other states (besides NSW and QLD) have managed to extend their HML networks without introducing any such requirement. B-Doubles have operated on a restricted network within each jurisdiction, again without any requirement to participate in the IAP.

Overall, it appears that bolt-on regulation (by linking HML to a non-standard requirement (IAP)) has and will create confusion for transport operators moving within and through NSW and QLD. The consequent additional costs are considered an unnecessary regulatory burden.

Nevertheless, the NSWRTA reports that approximately 1,500 applications to date have been received for IAP pre-enrolment and for using the expanded NSW HML network, with over 500 of these approved in late 2006. This suggests that the HML implementation arrangements in NSW have now been accepted as a *fait accompli* by the NSW trucking industry (NSWRTA, personal communication, 6 Feb 2007).

2.3.3 Onerous NSW HML Permit System

The NSW system of applying for HML routes appears to be onerous, with permits being both truck and task specific — an operator must obtain separate permits for each vehicle operated. This imposes a considerable cost and time burden. An Australasian Transport News article of 8 December 2006 starkly illustrates the key issues and consequences here:

> *A single truck operator with four permits to carry higher mass in NSW, needs another 11 just to do basic trips across NSW.*
>
> *And to get 15kms out of the Port of Newcastle, the owner-operator needs to apply to three different councils covering 11 roads. It has taken three weeks to get one permit that covers 100 metres of a road that is already a Road Train Route.*
>
> *We don't have a problem with IAP (although a little suspicion about how it will be used in the future) or the benefits from HML so long as you get paid right to cover the extra costs, but the system of permits is a nightmare," the operator said.*
>
> *Confusion at local councils about who they deal with at the Roads & Traffic Authority has been a major issue*
>
> *The RTA is quite quick to approve the permit on their own roads, but rounding up the councils is very time consuming - and most aren't in a rush.*

Such confusion, duplication and inconsistency indicate that the NSW HML permit process is posing an unnecessary regulatory impediment to a more efficient transport supply chain. Indeed the expected IAP impost on operators needs to be kept in perspective. That is, while IAP is likely to cause headaches moving forward the more substantial problem is arguably the embedded inefficiency of the current NSW HML permits system and its consequent adverse impacts on service productivity and fleet utilisation.

2.3.4 Gaps in HML Networks

In May 2006 the Strategic Industry Leaders Group produced the report 'Punching Above Its Weight: Australia's Cement Industry 2006-12' for the Federal Government. In articulating a strategic action agenda for the cement industry the report listed examples of specific gaps in HML routes that were of concern to the industry:

- Tarong to Wacol (Queensland): Over 250,000 tonnes of fly ash are transported annually on a dedicated route from Tarong power station to Wacol and Yatala in Brisbane. Most of this volume is carried on B-Doubles and HML approval would lead to a 10 per cent increase in efficiency on this route;
- Pamela Street into Bulwer Island (Queensland): Over one million tonnes of product is transported by road from Bulwer Island but the two kilometres of road that is not classified as HML represents a significant inefficiency; and
- Angaston Cement Plant (South Australia): There are no B-Double routes into Angaston, leading to cost inefficiencies between the plant and the main haulage routes north and east.

Examples of supply chain inefficiencies resulting from HML route restrictions are outlined by the QTA:

> *Trucks moving from the Bowen area in Queensland headed for the Brisbane fresh produce markets must finish their journey 600 metres short of the markets. Trucks are permitted to travel on the Bruce and Ipswich Highways plus Granade and Kessels Roads, but are not permitted (by Brisbane City Council) to travel on Sherwood Road. The rationale for this restriction is unclear given that there are no bridges or culverts on this road, and most of the traffic is commercial and industrial vehicles (Phone conversation, QTA, December 2006).*

2.3.5 Connections to HML Routes

There are practical problems with heavy vehicles not being able to efficiently connect to or get onto the HML-approved routes in NSW and QLD. The vehicle mass-restrictions on adjoining roads can constrain transport operators and shippers.

On 7 April 2006 the Federal House of Representatives Standing Committee on Transport and Regional Services held industry consultations as part of its Transport Networks Inquiry at Toowoomba QLD. An inquiry witness, David Simon (Managing Director of Simon National Carriers — a fleet operator of interstate line haul prime movers) commented:

> *I am talking about how we have some weight limits on local roads, where the product is actually coming out from. Then, when we get on the arterial highways, we are allowed higher mass limits. We cannot carry those higher mass limits because we have that five-kilometre lead-in to that road. So we have inefficient trucks running on the highways (Official Committee Hansard, page 53, 2006).*

Similarly, Doug Short (Director of Trans Bulk Haulage Pty Ltd — a Toowomba-based operator moving bulk commodities in and out of Brisbane to the Darling Downs and Northern NSW areas) noted:

> *Under the National Heavy Vehicle Accreditation Scheme trucks are allowed to run at 68 tonne on federal funded highways but my trucks never run at 68 tonne, mainly because we source all of our bulk products off the federal funded highway. So we are running four to six tonnes below what we can actually pay, so that is certainly detrimental to our operation. We have the opportunity to carry more weight, and on certain roads we are allowed. But certainly that is not very productive (Official Committee Hansard, page 54, 2006).*

The 2007 National Farmers Federation's (NFF) Pre-Federal Budget Submission outlined that while their membership acknowledged that some major roads accommodated HML vehicles and that there are commensurate benefits coming with the use of these major roads, there are still inefficiencies for regions and businesses located off these major routes. This is because there are many instances where farmers contend with poor local roads leading from the major road corridors, which are not capable of dealing with the HML vehicles. This means that farmers have had to utilise multiple smaller trucks or travel an extra 100 kilometres or more to access a main road or train line since the local transport infrastructure is not able to handle the heavier load. This imposes higher transportation costs on the farm sector *(National Farmers Federation, 2007 NFF Pre-Budget Submission, page 16, November 2006)*.

Having said this, it is important to recognise the recent moves made to avoid the type of transport cost inefficiencies outlined above. For example, on 1 July 2006 the NSW Roads Minister announced a relaxation of HML vehicle restrictions off the Newell Highway. This was an anticipatory decision allowing heavy vehicle movements between the Newell Highway and the proposed Parkes transport 'HUB'[2] via Brolgan Road, Hartigan Avenue and Westlime Road) *(Minutes of the Ordinary Meeting of Parkes Shire Council, page 29, 18 July 2006).*

[2] The HUB development will be a 500 plus hectare multi-modal transport facility, seeking 7-day 24-hour modal choice and complete freight logistics chain management services. It provides for the largest greenfield intermodal site in NSW. The Parkes Shire Council successfully argued (to the NSW Government) that a financially viable multimodal facility would require a supportive HML road distribution system.

At this stage, we would like to emphasize the distinction between supply chain cost inefficiencies due to genuine regulatory impediment and those stemming from insufficient road funding. In an HML context, a genuine regulatory impediment can arise where arterial roads which could and should be classified as HML routes (because the bridges, culverts, surfaces on these routes can adequately and safely cope with sustained heavier loads and increased traffic levels) are not approved. The earlier mentioned example (from Australasian Transport News 8 December 2006) of a route failing to be approved for HML despite the fact that it was already a road train route represents a genuine regulatory impediment. The resulting transportation cost inefficiencies can be readily removed. This differs to the cost inefficiencies referred to by the NFF. We suspect these inefficiencies largely stem from insufficient road spending, which strictly speaking is not a regulatory impediment.

2.3.6 Fleet Redeployment

Given the inconsistent application of HML across states, we considered whether such inconsistency had resulted in foregone productivity over recent years. In 2004, the NTC noted that the lack of HML uniformity across jurisdictions has restricted its usefulness for interstate road haulage. This has forced a substantial proportion of interstate line haul operators to operate at General Mass Limits (GML) only. Regional and local operators in most states and territories who use the local roads system were also largely constrained to operate at GML *(NTC, Mass Limits for Mass Management Accredited Vehicles, October 2004*). The upshot is that inconsistent HML rules have created a regulatory impediment to efficient supply chains due to lower levels of vehicle productivity than otherwise could have been the case.

2.3.7 Alternative Routes

One potential response by operators to the additional cost and administrative problems with HML and IAP could be to breach the regulations by utilising alternative less-efficient non-HML routes for their trips. However, the ATA suggested to us that there had been little evidence of this occurring to date. This is because the magnitude of fuel costs was a significant motivation in operators choosing to use the most fuel-efficient routes - the most direct routes or those with less hills. This tended to be the HML-approved routes.

2.4 The way forward

There are two basic points we would like to make with respect to focussing attention on moving forward.

Firstly and most significantly, it would be in the interests of the NSW and QLD Governments and their respective road agencies to carefully consider adapting their HML systems to something more closely aligned with the Victorian model. The Victorian HML system is generally regarded throughout the road transport industry as a success, and it was implemented relatively inexpensively and efficiently. The Victorian Government and VicRoads displayed a genuine and sustained interest in introducing HML on as much of the arterial road network as possible, and to encourage extension to the local road network wherever practical. This has resulted in virtually 100% HML coverage.

We do acknowledge that the costs associated with significantly expanding HML coverage in NSW and QLD is likely to be considerably higher than it has been in Victoria. This partly reflects more adverse geographic and weather considerations - the Governments and road authorities of NSW and QLD argue that their road networks are at greater risk of damage from rainfall and the terrain is more hilly than in the other states. This has contributed to an apparent abundance of sub-standard bridges on the network, particularly within NSW. Given this, we would argue that more pragmatic (practical) road funding agreements need to be struck between the Federal Government and those of NSW and QLD — to adequately enable these states to undertake the necessary HML rating of roads and associated bridge repair/strengthening works. This will go some way to alleviating the inconsistent roll-out of HML across the eastern seaboard states, which in turn could rectify some of the unnecessary regulatory impediments that restrict transport supply chains.

If NSW and QLD could move to a comprehensive HML *system* and away from the rather piecemeal HML *permits* approach, it is likely to reduce the unnecessary regulatory impediments to road freight transport in these states. This is particularly so in NSW where it would seem that the HML permits system is inconsistent and onerous partly because of the confusion among operators about HML responsibilities and powers existing between the various layers of Government — specifically between the RTA and local councils.

Such problems at the local government level could be a function of a lack of engineering capability required to assess bridges. One innovative solution here would be for councils to share the use of engineering services.

The broader message here is that while it may be too late to adopt the Victorian HML approach in NSW, there is certainly merit in reassessing the administrative requirements in NSW to determine if they can be streamlined. We would argue that not only can a more cohesive, streamlined and systematic approach reduce private sector transport operating costs but also curtail the growth in public sector road agency costs dedicated to the administration of HML.

Secondly, there could be scope to build in a *vehicle productivity* objective into the charters of road agencies like the NSW RTA. At present the charters have a heavy emphasis on road asset maintenance. A focus on vehicle productivity as a performance criterion would mandate road agencies to consider a more holistic combination of private and public interests in their strategic decision-making and operations, and would provide greater incentives for road agencies to explicitly consider the impacts of strategic policy decisions on vehicle productivity.

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3. PORT RELATED TRANSPORT

3.1 Description of the issue

Road freight movements in areas adjacent to major ports can be problematic especially where ports and their access roads are located in urban areas characterised by high levels of congestion during normal work hours and a desire for low levels of noise during other times. To some degree the issues affecting the efficiency of the port related road freight task are associated with mass limit restrictions that are covered in the previous section.

3.2 Supply chain consequences

In this section we discuss three key consequences of regulations covering port access routes:

- lower than efficiently optimal loads are carried by trucks and therefore more trucks are required to move freight to and from ports
- extra handling of freight occurs as a result of the need to transfer it from B-double or B triple vehicles to small trucks that are permitted on road corridors connected to ports
- heavy vehicles travel longer distances.

3.2.1 Limits on the carriage of multiple 40ft containers at Botany Bay

Although there is an increasing use of 40 ft containers along access routes to a number of Australia's major ports, there are limitations on the movement of these containers within the port precinct of Botany Bay. While a truck can carry two 40 ft containers in Melbourne Port, until very recently only one of these containers at a time could be carried on the routes leading to Botany Bay. As of 31 December 2006, HML access has been extended to Botany Bay, but, as discussed in the previous section, the approach adopted in NSW mans that access is restricted to vehicles that have signed up for he IAP program.

Similarly, while B Triples can move between Geelong and the Port of Melbourne, there are no such port related road routes in NSW for these vehicle classifications.

3.2.2 Limits on weekend after hours access to Botany Bay roads

Congestion at Port Botany is a serious problem. Some industry players believe it would be reduced if the transport industry were to pick up containers on the weekend (rather than just up to 2.00pm) and in after hours periods. However, noise abatement regulations imposed by Botany Bay and Randwick Councils prohibit industrial activity on the weekends or after hours in an industrial estate located close to residential areas. As a consequence operators such as Gregory's Transport do not pick up and move containers between these areas and Port Botany during these times. A fundamental problem is that decisions about industrial activity and road use near the port are in the control of individual councils, each of whom makes decisions based on the needs of local residents. So for truck operators wanting to move freight on these local roads, they are subject to restrictions on industrial activity imposed by both councils and restrictions on the movement of B-doubles imposed by Randwick Council.

According to a Gregory's Transport spokesperson, the fact that decisions about land and road use are determined on a case by case basis through assessment of individual development applications exacerbates these problems. He suggests that his company's container clearance rates from the wharves would double if these restrictions were to be lifted *(Lloyd's List Daily Commercial News, Botany truckies blame council noise restrictions, 15 November, 2006).*

3.2.3 Proposed restrictions on heavy vehicles travelling to and from Fremantle Inner Harbour

In early 2005 the Western Australian Government announced its intention to remove articulated heavy vehicles from a section of Leach Highway, a key access route to the Fremantle Inner Harbour[3]. As the Chamber of Commerce and Industry of WA wrote to the Local impacts Committee in 2005:

> *"The chamber of Commerce and Industry of WA (CCI) is concerned that heavy vehicles needing to access the Fremantle Inner Harbour will face severe complications as a result of your Government's promise to ban these (heavy) vehicles from Leach Highway between Albany Highway and Kwinana Highway..... Considerable doubt has been expressed by industry about whether the diversion plan would be successful. Diversions clearly imply heavy vehicles being required to follow routes that they would not otherwise follow, and as a result decrease transport efficiency."(W S Sashegyi, Director Industry Policy, Chamber of Commerce and Industry, WA, May 2005).*

The change will require trucks carrying exports to Fremantle to do take a dog-leg around Riverton, in order to access the Kwinana Freeway and then travel north to Fremantle. To do this requires competing with commuter traffic to access and then travel along the very busy Roe Highway, a route that involves travelling through 26 sets of traffic lights. *(phone conversations with representatives from Transport Forum WA, Transport and Planning, Chamber of Commerce and Industry, WA, November 2006)* .

3.2.4 Transporting iron ore to the Port of Geraldton

A transport company contracted to move iron ore from a mine site in the Murchison area to the Port of Geraldton is required to pay for a license to do so. A new railway line connects the mining area with the port but it is not being used because it cannot meet the shipping windows. In what seems to be a decision motivated by a need to address community concerns about iron-ore trucks on the roads, the WA Government has reinvigorated the Transport Coordinator's Act requiring mines located within 100 kilometres of the railway to pay a license to use road haulage for transporting mining outputs. Ironically, although 27.5m road trains carrying ore are required to have a license, 36m road trains carrying grain on the road do no need a license (*Transport Forum WA, November 2006).*

[3] The limitation applies to the section of the highway that runs between Kwinana Freeway and Albany Highway and from South Street between the Kwinana Freeway and Roe Highway

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3.2.5 Moving heavy load exports to the port of Devonport

Simplot who ship potatoes through the Port of Devonport saw merit in being able to get full FEU boxes onto the TT Line sailings to Sydney. A PBS-approved quad-axle vehicle was required to be used to move this product the 12 kilometres from plant to ship at Devonport. The savings were estimated at around $1000 per TEU. No permit could be obtained and the potatoes are now sourced from New Zealand.

3.3 The way forward

One of the priorities for dealing with the problems of truck access to key port routes is to address the piecemeal, local orientation of decisions related to land use and road access. This could involve the following actions either as complementary or alternative parts of a holistic strategy:

- for a national body to seek cooperation among state governments to develop guidelines for local governments on how to reconcile industrial and residential interests in their own land zoning and road use planning and approval processes, or would
- for this body to seek cooperation among state governments to make greater use of their powers to give developments applications for port related activities (not just development of port infrastructure) state significant status and thus administer them at a state rather than at a local government level
- for this body to actively encourage — perhaps through funding incentives — representative bodies from the local government sector to participate alongside other stakeholders including the Australian Logistics Council and its members such as transport operators, government regulators, road asset owners, major shippers, and port corporations and port operators in the development of policies and strategies that integrate and reconcile industrial and residential interests.

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4. USE OF OVER-MASS VEHICLES TRAVELLING TO/FROM INTERMODAL TERMINALS

4.1 Description of the issue

Road vehicle limits are set with the entire road network in mind. In setting these limits, a trade-off must be made between the cost of additional road damage and the safety consequences of permitting the operations of heavier, longer or wider vehicles over the entire network.

Although it may be inappropriate to allow an increase in vehicle mass across the whole network, there are occasions on which allowing such vehicles to operate over small explicitly-defined segments of the network would generate economic benefits that would greatly outweigh any additional road damage costs, without causing safety problems.

One particular instance is where the road transport leg is ancillary to a long-haul rail movement to a port. Limits on road vehicle mass constrain the efficiency of not only the (usually relatively short) road leg of the journey to a rural-based rail terminal but also the subsequent sea voyage.

The debate about the efficiency benefits of removing overmass vehicle limit restrictions and road safety considerations has largely occurred over the past 15 years. In 1992, the Northern Territory road authorities assessed the case for allowing 120 tonne road trains to run between Mt Isa and the Port of Darwin. In Victoria, the issue has been critiqued since 2000, with the Victorian Road Freight Advisory Council (VRFAC) voicing regional industry concerns. *(VRFAC Discussion Paper Rural Intermodal Container Trucks, August 2004).* In 2004 the VRFAC proposed a solution to this problem, which is detailed later in this report. At the same time, the NTC undertook its own industry consultations to ascertain the genuine nature and extent of the problem.

In principle, the impediment and its consequences can be described by the following hypothetical case. Consider an exporting business located in regional Australia identifies a potential customer in South Korea. This customer demands the delivery of product in 40-foot containers loaded to 35 tonnes, as this is most efficient for transport within South Korea. Containers of this weight are too heavy to transport via local and arterial roads in regional Australia and would need to be transported to the port precinct only partially packed, and then topped up before being loading onto the ship. The extra haulage (due to higher number of truck trips) and port handling would increase overall costs and reduce the profitability of the business[4] *(NTC, Future heavy vehicle road pricing mechanisms: Information Paper Issues, Options and International Developments, page 29, October 2004).*

Apart from the adverse impact on shipper transport/logistics costs (and the possible loss of international trading opportunities), the restriction on short haul trips between production points and intermodal terminals can discourage the use of rail as a cost-effective, environmentally friendly and safer alternative to trucking for long-distance haulage.

[4] This is broadly analogous to the consequences flowing from roads not classified as HML routes. That is, a higher number of trucks (with smaller payloads) are used to accommodate the freight task than otherwise could be the case.

4.2 Supply chain consequences

The number of specific examples of transport businesses and/or freight owners being adversely affected by overmass vehicle restrictions between regional production points and intermodal terminals was found to be quite low relative to some of the other regulatory impediments discussed in this report. In addition, a number of different views on the proposed impediment prevail among industry players. Some industry players believe the restrictions represent a real and costly regulatory impediment to transport operators and shippers - unnecessary regulations which could be readily removed with consequent efficiency benefits and no reduction in road safety, wear or tear. This is in contrast to the supposed problem merely being one of an industry perception. We consider these views in turn.

4.2.1 Pacific National

Feedback from one of Australia's main national intermodal terminal owner/operators, Pacific National (PN), was fairly benign. PN's intermodal operations and regulatory affairs spokespeople suggested that there is no market evidence of overmass vehicle restrictions that cause discernible cost imposts on customers wishing to haul their product to PN railheads across the country. In addition:

- There was no verifiable loss of current PN market share or foregone opportunities (to the road freight alternative) because of a lack of opportunity to move freight to or from an intermodal terminal by road;
- Most of the significant heavy vehicle truck operators have acquired the necessary regulatory exemptions enabling travel on restricted regional road routes between shipper premises and a nearby intermodal terminal. For example, FCL trucks in regional Victoria move a considerable number of 40-foot containers using overmass vehicles. The state of play at present is that VicRoads may grant these operators permits for heavy 40-foot containers of export products to be transported by road to rural rail freight terminals on six-axle articulated vehicles up to 45 tonnes gross vehicle mass (see Section 4.3.2 for more detail on the requirements).
- The cost and time associated with applying for regulatory exemption permits for overmass vehicle trips could be a considerable burden on smaller operators and shippers, particularly if they only occasionally need to shift 40-foot containers. In such instances there is an incentive for operators to use a higher number of smaller (and thereby less productive) trucks to travel between regional premises and a metropolitan port. However, there was an absence of specific examples here. Having said this, PN believe that this impediment would only affect a minor proportion of the overall freight task.

4.2.2 National Transport Commission

As outlined in Section 2.1, the NTC evaluated whether overmass vehicle restrictions constituted a regulatory impediment. While the NTC found that a number of industry players were frustrated (consistent with the sentiments of the VRFAC) about not being able to load a container to 30 tonne gross mass as part of an intermodal application, it is argued that these frustrations were misplaced.

> *The perceived impediment was that there would be no way of transporting the 30 tonne container by road between factory and rail terminal, or, between rail terminal and consumer at the other end of the application. Innovation has been such in recent years that this is no longer true: it is now possible to transport a 30 tonne gross mass container by road (Impediments to Improving Efficiency in the Area of Intermodal Transport, Discussion Paper, page 17, August 2004).*

In other words, the development of innovative Performance-Based Standards (PBS) vehicles over recent times has in good part enabled transport operators and shippers to run payloads (for a short haul road leg between premises and railhead) which would previously have been deemed as overmass (weight). The following are NTC examples of applicable PBS vehicles:

> *MaxiTrans have designed and constructed a skel trailer that redistributes the load throughout the length of a skel trailer in a way such that the trailer has a capacity to carry a fully laden 30 tonne container while satisfying the current 20 tone triaxle limit (Impediments to Improving Efficiency in the Area of Intermodal Transport, Discussion Paper, page 17, August 2004).*
>
> *Another example of innovation promising to overcome impediments relates to the development of 'Autotainer' and 'Maxibox' operations by both Patrick and Toll respectively. On behalf of Patrick, there has been the development of a Barker built skel trailer that is sufficiently low such that it meets the national 4.3m legal height for commercial vehicles despite having to carry a container with a height of 3.2m (10'6"). The skel trailer in combination with a Volvo FM9 340 prime mover fits within the 19m overall length limit despite the fact that the container to be carried is 54' (16.5m) in length (Impediments to Improving Efficiency in the Area of Intermodal Transport, Discussion Paper, page 17,August 2004).*

In a sense the NTC work tends to complement the feedback from Pacific National. Innovation in the vehicle design and the granting of appropriate exemption from the overmass regulations are likely to have fed off each other to produce a pragmatic balance between increased supply chain efficiency and acceptable levels of road safety, wear and tear.

4.2.3 National Farmers Federation

In contrast to the comments of NTC and Pacific National, the 2007 National Farmer Federation's (NFF) Pre-Federal Budget Submission outlined that freight hubs in regional centres (particularly where road intersects rail) are important for maximising the efficiency of Australia's agricultural sector in transporting goods to market.

More specifically, the NFF believed that allowing regionally produced goods to effectively gain access to the corridor at the producer's nearest point (i.e., an intermodal terminal) would help to reduce inefficient mid-transport operations and reduce costs to the supply chain. This is a striking observation. However, since the submission does not provide specific examples or details of how farmers' operational efficiency was hindered it is very difficult to determine whether it is due to a genuine regulatory impediment creating an unnecessary short-haul corridor restriction *(National Farmers Federation, 2007 NFF Pre-Budget Submission, page 17, November 2006).*

On balance of the market feedback received and critical evaluation conducted, we believe that current vehicle regulations governing the movement of overweight freight between factory or farm gate production points and close by intermodal terminals in regional areas do not appear to be currently driving significant and unnecessary cost inefficiencies in transport supply chains.

4.3 The way forward

The VRFAC rural intermodal container trucking proposal and VicRoads' current 45-tonne permit scheme are two key strategies that have so far guided the way forward in ensuring that overmass vehicle regulations do not unnecessarily pose a regulatory impediment to efficient supply chains in Australia. We believe that each of these initiatives should continue to be progressed and should be used as a model in other jurisdictions. With this in mind we provide some details about each of them in the following sections below.

4.3.1 Rural Victoria Intermodal Container Trucking

The 2004 VRFAC discussion paper described the conditions under which container trucks from production points to rural intermodal terminals in Victoria could use certain segments of the Victorian road system.

The overall goal was to facilitate rural Victorian intermodal operations. More specifically, the discussion paper suggested that by allowing the use of innovative vehicles, the Victorian government could encourage increased use of rail to transport freight. The suggested benefits of this mode shift would be improved productivity, reduced road wear and bridge impacts, and a reduced number of truck movements (including those transporting empty containers) for a given operation.

The discussion paper suggests that the use of innovative vehicles should be considered for a rural intermodal freight transport operation, where a business case is developed and presented that demonstrates that benefits can be delivered against the following objectives:

- An increased proportion of the total transport task will be undertaken by rail - to be eligible under this scheme the road leg must be a relatively small proportion of the transport journey and the road leg must be to the nearest rail freight terminal;
- Minimising container transport by road for a given operation - this would include increased efficiency in the use of laden containers, and minimising the transport by road of empty containers;
- Minimising the transport of containers by road in urban areas;
- A net reduction in road wear and bridge impacts — this is to be evaluated against the approved national infrastructure related PBS;
- Road safety is improved - this is to include an evaluation of the proposed vehicle which demonstrates that it meets the approved safety related requirements of the national PBS project.

In addition to addressing the objectives of the scheme, any proposal would also need to address the following:

- The route is suitable in respect of road geometry and capacity;
- Bridges and culverts on the proposed route have sufficient capacity.
- Local Government endorses in writing the operation on any local roads, having considered:
  - Road geometry, bridge and culvert capacity, and traffic impacts; and
  - Community amenity impacts, including planning issues associated with container transport, handling and storage.
  - The proposal is in accord with State planning provisions.
- There is a high degree of confidence about compliance with road transport law, including continual compliance with vehicle mass, route access and any specified operating conditions, exemplified by:
  - Participation in the National Heavy Vehicle Accreditation Scheme - Mass Management Module; and
  - Having a VicRoads approved vehicle tracking system with third party auditing and reporting of route non-compliance to VicRoads on a monthly basis, with any on-going operation to conform to the protocols and processes being developed by the national Intelligent Access Project.

4.3.2 VicRoads 45-Tonne Permit Scheme

VicRoads can currently grant permits for the movement of heavy 40-foot containers of export products using overmass vehicles by road to rural rail freight terminals on six-axle articulated vehicles up to 45 tonnes gross vehicle mass under the following conditions:

- The bridges on the routes must have sufficient capacity and the roads must be suitable. The relevant municipalities must support the use of any local roads on the route;
- Travel must be within a 50 km radius of the rural rail freight terminal;
- The following minimum axle spacings must be complied with and the following mass limits must not be exceeded (www.vicroads.vic.gov.au/Home/HeavyVehicles/RoutePermitInformation/45TonnePermitScheme.htm).

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5. IMPLEMENTATION OF PBS

5.1 Description of the issues

Increasing vehicle capacity is an obvious way to increase supply chain efficiency, but there is a widespread community concern about the safety consequences of the use of larger and heavier vehicles. Road agencies also have legitimate concerns about potential road damage.

Performance Based Standards (PBS) provide an opportunity to encourage innovation that will allow increased capacity to be provided without compromising safety goals or increasing road damage.

Tagged by NTC as SMART trucks because they work smarter, significant efficiencies can be achieved through designs such as the Super B-double combination with self-steering axles that can carry two forty foot containers and turns better than a standard semi-trailer or the Trackaxle self-steering system fitted to trailers, which improves the truck's low speed steering capability and its safety, while reducing road damage caused by tyres scrubbing around corners (National Transport Commission (NTC) Chief Executive Nick Dimopoulos, SMART ideas on the road to success, The Australian, 28/11/2006).

The role of PBS is rendered even more important by the fact that general increases in road vehicle mass limits are likely to be difficult to achieve.

In principle the scheme is meant to give cross-jurisdictional access on a defined Australia-wide road network to over-dimension and overweight vehicles that meet a set of performance based standards. There is widespread acceptance that PBS is an excellent idea in principle.

In Victoria the recent news that VicRoads is considering a trial to run 30-metre container carriers tagged High Efficiency Container Transporters (HECTs), which have been PBS-approved on a prescribed network of public roads connecting the Port of Melbourne with "rail freight satellite terminals and major container depots" over an area "which could encompass the greater Melbourne region, including Geelong, to centres generating container traffic of more than 1,000 TEU a year" is also very promising *(Lloyd's List DCN, Extra length trial for ports, page 7, Thursday, January 4, 2007).*

It is also encouraging that the process of working out the details of the proposed scheme in Victoria involves participation not just of transport operators (through the VTA) and the regulator (VicRoads) but also the Department of Infrastructure and the Municipal Association of Victoria. However, experience with PBS schemes in other jurisdictions has so far been disappointing.

Many industry players have so far found the PBS process to be cumbersome, complicated and time consuming and characterised by considerable uncertainty for the proponent. The process has involved the proponent approaching a 'case-study lead agency' to assess the proposed innovation and to then recommend it to an interim regulation panel (IRP) for endorsement. (Until recently, proponents have not been able to address the IRP directly in their deliberations.) If the IRP decided to endorse the innovation, lack of mutual recognition of PBS between jurisdictions has meant that the operator has needed to seek approval of the road agencies responsible for the roads on which the operator is seeking permission to travel.

Moreover, approval from the certifying authority in a particular state has not automatically implied that vehicles can be operated freely within that state: road authorities may have additional requirements that effectively preclude the operation of the vehicle. Similarly, local governments may have requirements that prohibit the vehicle's use of some roads on a particular route or that link with a key freight route.

According to the ATA, the key to the success of the PBS system is the existence of a nationally agreed road network classification. If there was an agreed network of classified roads, this would be an effective and efficient basis on which transport operators could then propose to develop and use innovatively designed vehicles. However, the NTC model that is being negotiated with state road agencies is based on a map of classified roads, which is only indicative rather than definite. As such when an innovative truck design that has passed the technical tests is presented to the state road agencies they are then in a position to question the acceptability of the truck using a particular section of the network from a local perspective.

5.2 Supply chain consequences

In brief the implications of these shortcomings are that:

- Opportunities to operate road-friendly high productivity road vehicles are diminished
- The 'deadweight' burden of regulation is high because of the need to seek approval
- Longwinded approval processes lead to costly duplication of effort as proponents attempt to increase their chances of approval by pursuing both the permit and PBS processes.
- Uncertainty over regulatory acceptance of innovative vehicle design undermines the incentive to innovate

A number of examples illustrate the frustrations that industry has experienced in attempting to gain approval for innovations according to the performance based standards scheme.

5.2.1 Toll's truck combination for Pilkington Glass

The first example is provided by Toll's Paul Little in a presentation made earlier this year. It demonstrates industry's need for quick and simple approval processes and to this end it also shows industry's preparedness to try whatever avenue delivers success most quickly:

Toll recently developed an innovative truck combination for Pilkington Glass, which delivered

substantial safety and efficiency gains, including saving two hours manual loading. But it didn't 'fit' within our prescriptive road regulations. It had to run under permit for 12 months awaiting approval.

As the freight task doubles, will the permit system explode in red tape? Do we go through the painstaking process of changing the law every time technology progresses, which is continually? Or maybe we should look to a new regulatory framework, which embraces and encourages industry innovation? We don't want however to be over regulated, surely simple commonsense solutions shouldn't have to pass exhaustive and unnecessary barriers or be bogged down by prohibitive administrative requirements. Please less "red tape" not more, the industry is drowning in red tape.

('Growing Freight Task, Paul Little, National Transport Commission 'Twice the Task' Report Launch, 14th February 2006)

FIGURE 1: INNOVATIVE TRUCK DEVELOPED BY TOLL FOR PILKINGTON GLASS

(Source: Growing Freight Task, Paul Little, National Transport Commission 'Twice the Task' Report Launch, 14th February 2006)

5.2.2 FCL PBS vehicles

According to a spokesperson of the former FCL (now owned by Toll), transport operators carry the weight of commercial risk:

" …in obtaining innovative vehicle designs, expensive PBS reports and then the applications languish on bureaucrats' desks for periods up to 12 months without a reply. Constant chasing is required to even have the matter considered. … We don't even have the roads of Australia assessed for classification type, so that road authorities can determine where we can operate. ….

In Victoria where FCL Interstate Transport P/L (was) approved to operate two different PBS vehicles these vehicles can only operate on declared HML routes at less than the approved PBS limit until the bridges and routes (were) assessed to determine suitability. We are talking about the difference of 1 tonne gross 49-50 tonnes. Meaning either the tri axle drive or quad axle trailer must be operated at less than the maximum until approval is granted.

The air suspended quad axle trailer is fitted with a retractable axle fitted to the front which lifts when not carrying weight and the last axle is a steer able axle which provides the driver with improved turning ability enabling the driver to get into tighter places. This combination is towed by a conventional prime mover at 50 tonnes gross with 27 tonnes on the quad axle group.

Tri drive; this vehicle consists of a load sharing lazy drive axle and tows a three axle trailer at 50 tonnes gross. The tri drive is approved to operate at 22 tonnes but due to approval process one of this vehicles axle groups must be downloaded to until these assessments have been completed, I requested assessment of the additional tonne some seven months ago on a number of declared roads, approval has not been provided for these routes yet. (Some approvals have now been provided)

With the increasing cost of fuel, customers constantly seeking opportunities to reduce costs or at least increase efficiency at the same cost levels there is a need to be more efficient in the way that we approach the road transport task.

We will never be able to supply the road infrastructure needed to meet the future demands, therefore we must find alternative ways of being able to undertake the growing freight task before the opportunities to plan are lost and we end up with the more public action and concern at the real or imagined impact of trucks passing through residential or school areas.

PBS is one of those opportunities, where approved innovative vehicles can travel on selected routes reducing the significant social impact of trucks whilst improving the competitiveness of both our manufacturers and the transport industry, but industry needs to remove the red tape blockages and unrealistic requirements that out of touch bureaucrats insist on implementing."(comment by spokesperson for the former FCL, 2006).

FIGURE 2: FCL'S PBS APPROVED VEHICLES

(Source: FCL, 2006)

5.2.3 Innovative Shell Tanker vehicle

The third example demonstrates the way that a lack of intra-jurisdictional recognition and mutual recognition of the IRP decision results in more costs and deferral of productivity gains for the applicant.

As the case study lead agency, the Queensland Department of Transport championed the approval of a Shell tanker vehicle, which met PBS standards. Endorsement was also achieved by the IRP; however the Queensland Main Roads Department would not permit the vehicle on asset protection grounds. Senior intervention subsequently reversed this ruling in Queensland. The Department Transport, Energy and Infrastructure in South Australia is now considering the application in that State (Meyrick and Associates, Review of PBS Institutional Arrangements, Presentation of Interim Findings to NTC PBS Policy Steering Committee, Brisbane 9 June 2006).

5.2.4 A Western Australian trucking industry perspective

The view expressed by the Transport Forum WA is that although the principle of PBS is good, truck operators in that state have found the process far too hard and are just not willing to use it anymore: apparently only four proposals have been put forward this year, and while three of these were approved, this is a very low number of applications.

In one example of a proposed innovation, a truck that was built with new braking technology that allowed the vehicle to pull up in half the time of a road train and provided considerable more stability has not been approved.

A further concern expressed about the process in Western Australia is that there is inadequate communication and discussion between the proponent and the assessor about the reasons for a proposal being rejected. The inadequate communication was attributed to a lack of availability of personnel in the Main Roads Department with the skills needed to carry out this task.

5.3 The way forward

It is encouraging that COAG has identified PBS as the major transport productivity reform and that it has recently agreed to a proposal by the NTC to streamline the approval process in three ways *(NTC website, 2006)*:

- The initial technical assessment formerly carried out by a case study agency will now be carried out by a group in the NTC who will determine, within strict time frames, whether the vehicle meets the required standards and what level of the road network it should be allowed on.
- The NTC group's recommendations are then passed on to a regulation panel — which includes representatives of the state road agencies. The panel will decide whether to endorse the proposed innovation and the right of the vehicle to use a specified road classification
- Road agencies will only have the right to veto this endorsement if it believes there are grounds to do so and this process of review must occur within a period of 30 days.

The practical details of these changes are now being developed by the NTC with anticipated delivery of the final reform package expected in the first half of 2007.

There are a number of actions that need to be completed if this milestone is to be reached so that the national PBS scheme can have a genuine effect on road transport productivity. The two most critical of these actions are for the details of the performance based standards to be developed and the national road classification system to be finalised.

Without the completion of these actions, variations in vehicle performance standards and differences in road classifications between states will continue to create further difficulties in allowing vehicles that meet performance based standards to actually travel along the whole of a desired route. Although there are plans for roads throughout Australia to be categorized according to a national classification system by July 2007, little progress has yet been made on this initiative.

Even though NTC has streamlined the PBS approval process that will be presented to Transport Ministers in April this year, the fact that state agencies will still have the right to veto individual applications leaves proponents in an unacceptable position of uncertainty. According to the ATA, this is worse than having to deal with a road network classification which is potentially inefficient. If a route included roads that were classified only as class 2 rather than class 3, at least truck operators would be able to propose innovations that exactly suited the road network to be used with the certain knowledge that once the technical approvals were gained, the vehicle could then travel on those roads.

Until there is a national set of rules for PBS that relate to a nationally agreed network of classified roads and describe acceptable levels of road wear and tear and community standards on the one hand and transport productivity on the other, the PBS system will continue to be an inefficient, unreliable and counterproductive system for supporting the development of innovation and improved truck design.

Apart from these essential conditions being met there are a number of other problems that are a high priority to address:

- the national decision making processes that support the completion of assessment and approval of proposed vehicle innovations need to be transparently binding on state government agencies, which should be accountable for supporting completion of an assessment in a number of weeks rather than a number of months.
- The final package needs to include agreement by COAG on strategies for minimising the desire or opportunity for state government agencies and local governments to veto proposals that have been approved by the regulation panel. Gaining buy-in from local governments is likely to prove particularly challenging and perhaps the regulation panel rather than the proponent should have ultimate responsibility for negotiating with them over access to local roads that are critical to access to the designated freight network.
- In line with the suggestion above about gaining local government approvals, it would be preferable if transport operators could complete the assessment processes via a single one stop shop for access to the nation's road networks.

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- As with the liberalisation of regulations related to higher mass limits or over-dimension vehicles, a critical factor in the success of the implementation of PBS is to ensure that local governments can acquire the same understanding as other stakeholders of the benefits that can be achieved for local communities as well as the broader economy from allowing higher efficiency vehicles on roads.
- To adequately support the uptake of the PBS approach it is important to increase the number of people with expertise in vehicle dynamics and simulation to support timely and effective assessment of proposed vehicle innovations. By comparison with the alternative of prototype testing, computer simulation of new truck designs is easier and less expensive. However, it is estimated that there are only about six firms in Australia with the expertise to undertake computer simulation.

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6. FATIGUE MANAGEMENT REGULATIONS

6.1 Description of the issue

Road transport operators are subject to various forms of regulation and enforcement of regulatory requirements. Working conditions and the conditions conducive to the safe operation of road vehicles are covered by legislation and regulations that are specific to the transport sector. Road transport operators, as with all workplaces, are also subject to occupational health and safety (OH&S) requirements: developed and enforced by state based OH&S agencies. For operators whose employment contracts are covered by NSW state awards, the recent introduction of a new award and contract determination reinforces the requirements of the state's OH&S regulations on fatigue, and as such will impose on them a third layer of risk of non-compliance.

6.2 Supply chain consequences

These multiple sources of coverage give rise to the potential for conflicts and duplication between road transport and OH&S regulations and their enforcement. While there is broad acceptance of the need for some level of regulation in order to minimise the occurrence of fatigue among drivers, the administrative burden, loss of flexibility and risk of prosecution that this entails in complying with systems that vary from one state to another is considered by many players to be far too high.

The key consequences of these multiple sets of regulations are likely to be as follows:

- Operators complying fully with one set of regulations may be unwittingly exposed to legal risks through breach of another.
- Administrative costs of dealing with multiple sets of regulation, especially for operators working in several jurisdictions, are excessive.
- Prescriptive driving hours requirements are likely to make it necessary to have extra drivers and a bigger pool of trucks, which will reduce efficiency and increase operating costs for interstate operators in particular; unless these costs are passed on by small operators and drivers to larger players (and ultimately to shippers and consumers) to whom they are contracted, some of them will not be able to afford the cost imposts.
- Lack of certainty over which legislation prevails could lead to an overly cautious approach and diminished labour productivity; it may also lead owner operators to leave the industry which in turn could have damage productivity and safety because of the current shortage of skilled drivers

Moreover, the national framework of regulations that is being proposed by the NTC, which aims to overcome the inconsistencies between states, is considered by many to be overly complicated and expensive to operate. Even though the NTC has made a number of concessions to industry, the final draft that is being proposed is very prescriptive and will impose very significant limitations on trip itineraries, that some question will really achieve the goal of reduced fatigue. .

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6.2.1 Inter-jurisdictional inconsistencies create duplication and increased exposure to risk

Road safety versus occupational health and safety law coverage

The regulations that currently apply to heavy vehicle drivers in relation to allowable driving hours vary from one state to another in a number of ways.

State based occupational health and safety laws cover driving hours for heavy vehicle drivers in Western Australia (Occupational Safety and Health Act 1984 and Occupational Safety and Health Regulations 1996) and the Northern Territory (the Northern Territory Work Health Act) but in South Australia, Tasmania, Victoria and Queensland driver fatigue management and driving hours are covered by road transport laws. In NSW the situation is different again; while chain of responsibility regulations under road transport law cover driver fatigue, these are duplicated and reinforced by very detailed occupational health and safety regulations, which in turn have recently been further duplicated by the establishment of the new state industrial award and contract determination.

So, drivers can be stopped and fined by road agency or police officers for driving hour breaches in NSW, Victoria, Tasmania, South Australia and Queensland. However, although a driver in the Northern Territory can be penalised for a driving law breach that could have resulted from excessive driving hours, there are no regulations that could attract a driving hours penalty. In WA, although an enforcement officer can prohibit a driver from driving, the regulating agency has no power to impose a fine or demerit points.

Variations in the scope of fatigue management obligations

The scope of obligations on truck drivers and truck operators also vary a great deal from broad guidelines and flexible work and rest time arrangements in the Northern Territory and Western Australia through to far more prescriptive regimes in the other states, and in particular NSW.

The Northern Territory fatigue management framework operates as a code of practice which is voluntary but employers can be called to account to demonstrate they have met the safety outcomes that are contained within the code. The reason the code, which targets heavy vehicle operators, freight forwarders, consignors and drivers, is not mandatory is that the long distances, extreme heat and high level of isolation in the Northern Territory make it impracticable to impose specific rest times on drivers.

The terms related to driving hours and rest periods are expressed as broad guidelines which are intended to be used as "a basic benchmark". For example drivers are expected to be fit to handle long shifts but the code of practice does not prescribe the maximum length of those shifts. Nor are drivers in the NT required to keep a log book. Instead the code of practice suggests that drivers need — rather than must take:

> *"take two periods each of at least twenty four hours rest in a fourteen day period, at least six hours rest in any twenty four hour and to monitor their own work performance and take regular periods of rest to avoid continuing work when tired period;"*

(Northern Territory ROAD TRANSPORT FATIGUE MANAGEMENT, Code of Practice, http://www.ipe.nt.gov.au/whatwedo/roadsafety/fatigue/code/pdf/Bookinsi.pdf)

In WA, transport operators and drivers work to a compulsory fatigue management plan which nevertheless maintains a similar sense of flexibility to the approach that applies in the Northern Territory, and is certainly less conservative than the standard regulations that apply in the remainder of the country (phone conversation with Department for Planning and Infrastructure, WA representative). In a 72 hour period, drivers in WA are permitted to drive 45 hours, with a maximum of 17 hours on any one day as long as this includes 7 hours of continuous rest plus a minimum of 10 minutes break and an average of 20 minutes per 5 hours.

In the other states, a maximum of only 12 hours of driving and 14 hours of work in a 24 hour period is permitted. An extra two hours of driving is permitted for drivers and road transport operators that participate in the voluntary Transitional Fatigue Management Scheme that operates in these states.

Different log book requirements

Among the states in which log books are required, there are also differences. For example, the minimum distance to which log book entries apply for drivers is 200 kilometres from the driver's base in Queensland, and 100 kilometres in Victoria and NSW. In these jurisdictions, employers are also required to keep records of driving, working and rest hours for all journeys including those less than the 200 and 100 kilometre minima.

6.2.2 Overly complex rules and high administrative burden

A common theme among transport operators and industry associations is the difficulties in understanding how to develop a trip plan that actually complies with the rules that apply in NSW under the state's fatigue management regulations.

NatRoad for example cites a case of a driver operating on the Transitional Fatigue Management Plan who was recently penalised in NSW for exceeding the maximum allowable driving hours in a single 24 hour period. Apparently, when stopped, the driver had driven 11 hours in the previous 24 hours and 12 hours during the preceding 24 hour period. However, from 1.00 pm to 1.00pm during the 48 hour period, he had driven for 14 hours.

The significance of this situation is that the driver had driven according to a plan calculated to comply with the allowable hours rules and was at first convinced that he had not breached them. It was only when a NatRoad person carefully assessed the log book that he realized his error *(phone conversation with NatRoad representative, December 2006*). NatRoad believes that avoiding such errors under the new national regime will require drivers and schedulers to be constantly and assiduously calculating the status of their driving hours, especially when schedules need to be adjusted because of unforeseen circumstances such as a detour, a road blockage, a changed request from a customer or an overcrowded rest area.

6.2.3 Impact of differences in current systems

Managing multiple rules about allowable driving times

One of the implications of these differences is duplication of administrative effort and cost for transport operators and truck drivers that work interstate. Northern Territory based transport operators and drivers travelling into any of the other jurisdictions need to adjust their driving hours and keep a log book for the time that they travel there. Western Australian based drivers making their way east into South Australia need to adjust their schedules and log book entries to comply with the shorter allowable working and driving hours that apply in that state, and indeed in other states. Similarly, Tasmanian based drivers that also drive in mainland states are required to keep two log books, one covering trips within Tasmania and the other for trips on mainland roads.

High administrative burden of the NSW OH&S regulations

By far the most burdensome of cost imposts created by an individual state regulatory framework is the occupational health and safety regulations (Occupational Health and Safety Amendment (Long Distance Driver Fatigue) Regulation 2005) with which drivers and truck operators that travel on NSW roads for distances greater than 500 kilometres must comply. These regulations are very detailed risk management obligations that affect employers, drivers, consignors and consignees (with more than 200 employees) of transport tasks involving heavy vehicles with a GVM of 4.5 tonnes and travelling for all or just part of their trip in NSW for a distance of more than 500 kilometres.

Employers and relevant consignors and consignees are required to develop and maintain detailed and prescriptive driver fatigue management plans which include trip schedules and rosters - and checks on the accuracy of these for all drivers. Employers must have auditable policies and systems for assessing the suitability of drivers, providing training and monitoring and reporting on the integrity of work, driving and queuing practices.

A number of transport operators based in NSW and elsewhere have expressed grave concerns about the great difficulties and high costs associated with working within this regime, especially in relation to ensuring the accuracy of trip schedules in an operating environment that demands just in time response and is therefore inherently changeable on a day to day basis.

The impact of the NSW regulations is being particularly felt by small transport operators as is exemplified by the following comments made by an operator in response to the proposed NTC regulations:

> *"We are having difficulty with the regulations as our industry seems to have so many rules at the moment. We are doing Driver Fatigue Management Plans, courses on fatigue for all our drivers. We have NHVAS in place and do Maintenance, and Mass.*
>
> *One of our trucks left Brisbane last week and the truck was stopped by the RTA 4 times to be checked this added to the fatigue problem. He was stopped at Chinderah, Nambucca Heads, Eunagi Rail and the Twelve Mile. …… Please don't regulate us any more." (Betts Transport Pty Limited, Submission to NTC, September 2006)*

In reflecting on the cost and regulatory pressures being placed by shippers on large transport companies, and in turn on small operators, a Bluescope Steel spokesperson concurred that the cumulative effect of the new fatigue management and other regulations related to mass and height limits and the carriage of dangerous goods is making it increasingly difficult for this major shipper to deal with owner operators *(meeting with BlueScope Steel representative, December, 2006).*

Following representations from NSWRTA, a Ministerial Working Group on Heavy Vehicle Fatigue including NSWRTA, TWU NSW, WorkCover and NTC and chaired by the R&TA, was convened to review fatigue management regulations last year with the objective of seeking greater consistency in the regulatory framework in NSW. Its report was given to the Minister on 2 February 2007. It is not at this time clear what if any changes will be made in response to this report.

Heightened exposure to employment contract risk in NSW

Very recently, a further layer of legal and administrative responsibility has been imposed on employers by the promulgation of a new industrial relations award and contract determination. Similar to the NSW occupational health and safety regulations, this imposes on businesses whose employees drive heavy vehicles in NSW an obligation to maintain rosters and trip plans that ensure that employees and self employed contractors that drive heavy vehicles can complete their driving tasks without becoming unreasonably fatigued. The NSW Award and contract determination also imposes extensive obligations on employers to implement drug and alcohol policies and systems.

But perhaps the most controversial aspect of this new industrial award is the requirement to also report on each driver's remuneration as part of his or her trip plan. Border Express considers this last aspect of the new award to be 'a major concern'. The company questions whether the NSW state government will have the resources, staff, and know-how to efficiently and effectively enforce the award and it questions the benefit to be derived from this additional layer of regulation, on the back of costly systems and practices that they have only recently implemented in order to ensure compliance with the OH&S regulations covering fatigue.

Untested layers of regulation may pose too big a risk

No doubt the combination of road transport, OH&S and industrial relations laws related to fatigue management will result in considerable cumulative administrative costs. More importantly, however, all three of these fatigue management regimes are yet to be tested but already there is uncertainty about the meaning of critical elements of the NSW fatigue management scheme. In these circumstances it would be unrealistic to not expect a transport operator, consignor or consignee to be trapped by an inconsistency or conflict between the regulations. Avoiding such a situation is likely to involve an additional financial burden on those supply chain players who decide to take preventative action. In order to minimise this burden and the risk of a regulatory breach, consignees may be reluctant to engage some small operators if they find it difficult to maintain the administrative cost of compliance.

6.2.4 NTC's proposed national fatigue management framework

NTC's draft heavy vehicle driver fatigue management regulations aim to provide a nationally consistent system of fatigue management. Although a number of modifications have been made to them following consultation with industry, the final draft that is being submitted to the ATC is still a very prescriptive and comprehensive scheme of risk management processes.

The key elements of the template legislation are as follows:

- a Regulated Hours Scheme of maximum hours of driving and working and minimum rest periods;
- a Transitional Fatigue Management Scheme to provide truck drivers some flexibility in driving hours in return for the adoption of aspects of fatigue management;
- a Fatigue Management Scheme (which is still in the pilot stage) for operators prepared to demonstrate control over factors leading to driver fatigue *(NTC website, November 2006).*

The model legislation is expected to be implemented generally throughout Australia except in Western Australia and the Northern Territory where the WA and NT Governments, in conjunction with industry, will continue to use Codes of Practice for fatigue management.

According to many industry players the proposed regulations will unduly hinder road freight businesses from reacting to demand for just in time freight movement. Some believe that it will simply not be possible to comply with the regulations without putting extra trucks and drivers on the road.

A further concern is that the paper work required for keeping a 28 day work diary, copies of which are to be submitted to each employer or operator, is impractical and onerous on drivers and their employers.

Although compliance with the NSW occupational health and safety regulations covering fatigue will ensure compliance with the national road law based fatigue management system, not all states are pleased by this. For example, the Western Australian occupational health and safety regulator WorkSafe in its submission to the NTC about the draft model legislation expressed the view that the fatigue management legislation would:

> *"lead to two separate regimes dealing with occupational health and safety. These being the occupational safety and health regulatory regime under the OSH Act and a new regime set out in the road safety legislation specifically dealing with heavy vehicle driver fatigue" (WorkSafe WA Commissioner, Submission – National Vehicle Driver Fatigue Regulatory Proposal, 19 September 2006).*

While the revised version of the proposed law goes some way to accommodating the needs of drivers moving between WA or the Northern Territory (where the laws will not apply) and the rest of Australia, it is still nevertheless true that if the law is introduced, there will still be at least three systems in operation if South Australia, Queensland, Tasmania and Victoria introduce the laws without any substantial modifications to the new template.

Increased labour and administration cost

In its submission to the review of the draft proposal NatRoad argued that:

> *"The more that regulation dictates the hours of operation, the less the ability road freight businesses have to manage their business. Road transport is required to react instantly to demand, resulting in the need for flexibility to manage the freight task, catering to short lead times and a varying demand. Increasing prescriptive regulation inhibits the ability to manage commodity movement." (NatRoad, NTC Driving Hours & Fatigue Submission, page 5, September 2006.)*

To support this argument NatRoad cited the hypothetical case of a consignor making a significant change to an order overnight:

> *"an operator being advised by their customer at the close of business that one B double load of freight was scheduled for pick up the following afternoon for delivery overnight to Sydney. At 10:00am on the morning of the scheduled pick up, the order was increased to three B double loads and the operator was advised that the commodity had to be picked up by 3:00pm. Without delay this operator had to find two B doubles and two drivers to undertake this work and organise a return commodity. While some believe this to be unusual it is actually the industry norm, just one example of thousands that happen every day highlighting the task facing road freight operators day in and day out. The underlying issue is that commodity demand cannot be predicted on a daily basis. So what happens if the road transport operator, because of regulation, cannot fill the task? The same as the thousands of other consignments that would be affected every day, the freight would not be delivered, be it fruit, Weetbix, water, fuel, nappies bread etc etc…"*

This hypothetical case illustrates industry perceptions about the increased difficulties that could be experienced by transport operators in attempting to satisfy customer demands while at the same time uphold the new working and driving hours requirements. The conclusion that seems to be implied is that requirements will be so prescriptive that making rapid changes to trip plans will be too difficult.

More drivers and trucks may be needed

Among many industry players there is little doubt that it will be necessary to increase the number of drivers and number of trucks in order to maintain the current level of customer service. This view is reinforced by the realization that the land based freight task is likely to double over the next 20 years.

To support this argument, NatRoad presents a further two case studies[5]. The first compares the experience of a driver operator working to the current standard 14 hours of driving and 6 hours of continuous rest over a 24 hour period with the a 12 hour driving and 7 hour rest period that would prevail in the new standard hours regime. On a Melbourne - Adelaide return run, NatRoad shows that the driver would clock up 130,000 kilometres per year instead of 150,000 kilometres and would lose approximately $32,400 or 18% of his income.

[5] NatRoad also reports that building the itineraries in these case studies so that they complied with the driving and rest hour rules was extremely difficult.

The second case compares the impact of adherence to the proposed Basic Fatigue Management Plan with the impact of working to the Transitional Fatigue Management Plan on a truck company with a fleet of 55 vehicles operating on a Melbourne-Sydney return run. In this scenario, NatRoad calculates that one return trip a fortnight would be lost in order to avoid exceeding night and long hours. The financial impact of the reduction in kilometres would be a 20% reduction in income, which NatRoad believes would be enough to close the business.

The rigid regulations may not reflect the real fatigue issues

A submission by Hardy's Haulage to the NTC demonstrates the potential irony associated with the proposed legislation. Aside from the increased costs resulting from increased paper work, this extra effort could reduce the time that is presently spent resting and so undermine the objectives of improved management of driver fatigue.

As the Managing Director of Hardy's Haulage explained:

> *"The proposed legislation will also increase, substantially the workload of drivers with the increased requirements for paperwork and recordkeeping. Time which would be spent in performing these requirements will be impacting on breaks and reducing the time which is present spent resting. This will increase the costs of operations and these increased costs will no doubt be passed on in the form of increased freight rates — something, which for some time now, our country has been pressured not to do." (Submission of Comments on Public Review Draft Heavy Vehicle Driver Fatigue Model Legislation, Sept 2006)*

NatRoad maintains that the prescriptive nature of having a single rest period of 7 hours in the standard framework and just a 6 plus 2 hour option in the basic fatigue management framework deprives truck drivers working to these regimes of managing their fatigue in a way that suits their own circadian cycle.

The Occupational Health and Safety Manager from K&S Freighters, Grant Trewin argued that satisfying a rigid work hour limit and rest regime does not necessarily protect a driver from fatigue: that drowsiness can occur at any time and as a consequence of a broad range of factors other than the length of time spent behind the wheel. Robust, proactive occupational health and safety policies and practices on the part of the employer will encourage a driver to stop when he needs to. But K&S freighters like others in the industry is concerned that these practices could be undermined by a specifically timed driving roster which imposes a break after 5 or 6 hours when the driver is feeling refreshed. To this observer and other industry players this seems to be a confusing and potentially dangerous threat to good fatigue management practice *(phone conversation with Occupational Health and Safety Manager, K&S Freighters, November, 2006).*

The effectiveness of counting hours as a means of minimising driver fatigue is also seriously challenged by T.L. Brown Transport, a Queensland operator that has implemented very sophisticated safety focused measures over the last 7 years as one of the pilot operators of the Transitional Fatigue Management Scheme. Having just regained market position that was lost as a consequence of deciding not to 'subcontract for companies who do not promote or support safe, legal driving and loading/unloading practices', this single vehicle owner driver is refusing to 'swap to rules (the Advanced Fatigue Management option) that will reduce safety' in his business. He perceives that the rules are impractical and potentially unsafe, and 'could see operators commit acts of non-compliance' *(T.L. Brown Transport, Submission of Comments on Public Review Draft Heavy Vehicle Driver Fatigue Model Legislation, Sept 2006).*

A Hardy's Haulage spokesperson expressed the same concern. He believes that the prescriptive driving and rest hour regime will force drivers to drive when they are tired. Others claim that the regulations will force drivers to take the 7 hour continuous rest period at places just an hour or two short of their homes and that such a scenario will only serve to encourage them to find unsafe ways of avoiding the rules.

Only the advanced fatigue management framework which may be outside the reach of operator drivers and small to medium sized operators allows the driver to choose how to split the 8 hour rest break. For operator drivers and small to medium sized operators, there is also a productivity cost associated with compliance to the 7 hour break that forms part of the standard-hours regime in that if the driver wakes up before the end of the 7 hours he is not permitted to drive or do other work: this time is thus wasted.

Impact of paper work and higher penalties on labour supply

At a time when the road transport industry is facing critical shortages of skilled truck drivers, a number of operators are seriously concerned that the increased paper work associated with the proposed regulations in combination with the increased potential for drivers to be penalised for breaches or to lose their driver's license, will be the tipping point for drivers already struggling under the weight of the NSW regime. The sentiment among some is that the majority of good operators are being forced to pay for the bad behaviour of a few who will still find a way of avoiding the rules. It its submission to the NTC, PS, AV and SJ Walker Livestock & General Transport contended that:

> *"The only thing that penalties will achieve is to make more money for the government, and force professional competent reliable drivers from the industry. Most drivers know when they need to stop and rest. The others will not be stopped by log books."*

He was not the only industry player to link the risk of higher penalties with a reduced availability of skilled people in the future.

Hardy's Haulage managing director harbours a similar fear that the increased burden of regulation and with it the increased risk of penalty is likely to push older drivers out of the industry.

A related issue expressed by Hardy's Haulage and shared by many people we contacted is that the increasing paper work is especially burdensome on truck drivers with limited literacy skills. The simplification of diary entry requirements in the revised version of NTC's proposed legislation aims to address these concerns but it remains to be seen if they will be enough to allay truck drivers' fears about the risks of prosecution *(phone conversation with Hardy's Haulage representative, November 2006).*

This is particularly difficult for small to medium sized operators such as Hardy's Haulage who have invested heavily in high quality trucks and operating systems — such as reliable itineraries that ensure that drivers get home at regular, predictable intervals - designed to look after their truck drivers.

While supporting in principle the intention of the NTC heavy vehicle driver fatigue model legislation to reduce fatigue related incidents among heavy vehicle drivers, a submission by Swire Cold Storage expressed concern about the impact of the requirement for 4 nights including 2 consecutive nights off in 14 days on labour costs and the ability to attract good drivers. This submission pointed out that because of the severe shortage of experienced truck drivers, transport companies pay their drivers overtime, which makes up a large proportion of their wage. If the overtime were to disappear because of driving time restrictions, and the company were to employ casuals to cover this work, this would increase labour costs while also making remuneration of the permanently employed drivers less attractive *(Swire Cold Storage Pty Ltd, Submission of Comments on Public Review Draft Heavy Vehicle Driver Fatigue Model Legislation, Sept 2006).*

Too few rest areas

The lack of rest areas is a critical problem in staying within the allowable driving hour limits. According to the ATA, there is a need for about 22,000 rest areas to allow truck drivers to comply with the driving hour limits but there are only about 1200 of them nation-wide *(phone conference with ATA representative, December 2006).* NTC's model fatigue management framework proposes a 45 minute reasonable defence clause to cover the contingency of having to drive extra time to reach a rest area. Because the onus is on drivers to prove that the extra time was indeed needed, the cost and effort required to do so is also borne by them.

6.3 The way forward

The National Transport Commission's November 2006 Summary Response to Public Comments contains a number of modifications to the draft model legislation that go some way to addressing stakeholders' concerns about a number of important issues. Examples of these changes include:

- a clear link with NSW occupational health and safety legislation to avoid potential inconsistencies and duplication of obligations
- a distinction between minor and substantial risk categories for all offences to ensure tougher penalties only apply where there are significant safety concerns
- inclusion of a driver defence to allow a driver to continue to drive for 45 minutes to find a rest area, and

- a more simply formatted work diary.

Ultimately it is up to the states to decide if and how they will adopt the proposed laws, and it seems that Western Australia and the Northern Territory will not do so. However, COAG has already agreed that states will amend their occupational health and safety laws to ensure maximum consistency with reforms approved by the Australian Transport Council *(NTC, Summary Response, page 27).*

If the revised version of the proposed legislation is endorsed by the Australian Transport Council and COAG it will be critical for state ministers to instruct their relevant road and occupational health and safety agencies to work with NTC and industry bodies in progressing the implementation of the new federal regime in a consistent and coordinated manner.

One of the concerns about the effectiveness of a national system is its adoption by the states at different times. To avoid this problem, an agreed timeframe for implementation should be followed. In parallel with this process, it will also be imperative for NTC to make resources available to assist those jurisdictions that choose not to adopt the federal regime to make necessary amendments to their own occupational health and safety laws.

Given the range of concerns about the proposed regulatory framework among heavy vehicle drivers, it is imperative for the NTC to establish a rigorous process of evaluation similar to the regulatory impact process completed as part of the development of the proposed model legislation. The evaluation process should use actual data to examine the impact of the regulations on the incidence of fatigue, productivity and efficiency, and a range of other industry performance factors such as the availability of skilled drivers among small, medium and large transport operators and shippers in the transport supply chain.

As the shortage of adequate facilities both discourages compliance and decreases supply chain efficiency, remedying the current deficiencies in the provision of rest areas should be a priority. NSWRTA has suggested a dedicated fund under AusLink for the provision of heavy vehicle rest areas.

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7. PERMITS FOR OVER-DIMENSION VEHICLES

7.1 Description of the issue

In a paper published on behalf of the NTC in 2002, its author Dr Peter Hart wrote that:

> *It might be questioned whether the number of moves involved or the costs experienced by operators justifies the effort needed to reform travel requirements and procedures. Whilst the number of moves by heavy hauliers is a fraction of those for general freight vehicles (perhaps 1%), the low loader segment provides an essential service that is needed for major infrastructure, defence and business projects.*
>
> *Timely delivery of major plant and equipment items does contribute to control of project costs. Individual movement costs of OSOM vehicles are of the order of ten times those for general freight carriers and therefore substantial costs are involved. Furthermore, jurisdictions and various authorities including police must expend a substantial effort to manage these movements. Significant economic benefits can therefore come from efficient and consistent management of OSOM vehicle movements (NTC, Review of Industry Issues for Low Loader Operation, Final Report, prepared by Dr Peter Hart, Hartwood Consulting Pty Ltd December 2002, page 23).*

More recently, at an NTC workshop on the topic of OSOM vehicle permits, a number of industry players referred to Dr Peter Hart's report in although a number of studies had been completed very few improvements have been made to the way in which permits are granted for OSOM vehicles.

The special needs of particular freight movements require the use of vehicles that are longer and/or wider than general limitations on the use of the highway system will permit. There are a number of reasons for believing that these needs are likely to increase in future.

- Scale in building, mining and agriculture will continue to grow or firms will cease to be competitive.
- Imported plant (not available in Australia) is driving the dimensions of many of the specialised vehicles.
- Building redevelopments will increase within congested urban areas as part of urban renewal cycles.
- Mining growth will continue with the increase in world demand for minerals and energy.
- Larger agricultural operations/efficiencies will mean greater movements between farms by contract harvesters and seeding contractors using larger equipment.
- Change in tasks will occur: for example, grain moving to centralised distribution facilities, loan and borrow arrangements for milk cartage by different firms, pulp mills sourcing more timber from further afield.

Each jurisdiction has a system for accommodating these needs. But there are inconsistencies between the systems applied by different jurisdictions, and some of the systems are unduly onerous.

AUSTRALIAN LOGISTICS COUNCIL

7.2 Supply chain consequences

- Unnecessary delays in the delivery of essential equipment and inputs due to the elapsed time required to secure permits
- Additional costs resulting from the need to change escort arrangements between jurisdictions
- Technical requirements lack consistency and uniformity, reducing interoperability and productivity and restricting investment in fleets.

7.2.1 Slow and inefficient permit processes

Single event permits

From the perspective of the individual operator that wants permission to use an over dimension vehicle, delays in the process to gain a permit are a significant source of inefficiency and cost. Apart from in Western Australia where permits for gazetted roads can be granted for a period of 12 months at a time, single use permits are more of the norm in other jurisdictions. In Victoria period permits are only available to 4.3m width and industry has been in discussion with the state government about introducing 12 month period permits since 2002. Currently, for vehicles that exceed general access limits, VicRoads bases its decisions on whether to issue a permit, as well as whether to do so for a single journey or for a 12 month period on the road safety, road infrastructure impact and efficiency factors relevant to each application *(Victorian Competition Efficiency Commission, Regulation and Regional Victoria: Challenges and Opportunities, 2004, page 72).*

In South Australia it often takes 4-5 days to be granted a routine permit, and if the permit needs to be amended because of a difference between the expected and the actual dimension, the reassessment can take further days. The crane industry for example reported recently that it takes three weeks to gain a single event permit in some jurisdictions.

In order to circumvent delays many operators make provisional 'notice of intent' applications, just in case a permit is needed. This practice is a particular problem in Victoria. Not only are such applications a waste of scarce departmental resources, but they can also be costly to the operator. For example, rather than delaying a project one operator recently paid up to $1000 per fortnight for a provisional notice application for moving three large cranes in four geographic areas.

Another way of reducing the risks of delay on time critical projects is for operators to submit multiple applications just in case approval is not granted with one or it takes too long to be processed.

Like the overuse of notices of intent applications, multiple applications result in duplication of cost for the individual operator and overloads agency resources as well. Delays are most acutely felt by industry and government alike when the permits are required urgently for a peak demand application such as for harvesting and sowing, and agencies' resources are therefore most stretched. These problems are exacerbated when permits are only for short period projects such as the movement and installation of a crane. In some cases, the alternative strategy is to take the risk of breaching the regulations.

Dealing with multiple agencies and private organisations

As well as the inefficiencies associated with varying inter-jurisdictional road agency requirements, inefficiencies also result from the need to satisfy the different requirements of other state government agencies within each state. These include infrastructure departments, telecom authorities, tram and railway operators, electricity authorities and the police. As an example, it is not just cross-jurisdictional differences in piloting and escorting requirements that are a problem when moving an over dimensional vehicle across state borders; even within an individual jurisdiction, discretionary decisions by police about the need for additional piloting add cost, uncertainty and inefficiency to the transport task.

Because of a lack of agreement about how to accommodate the movement of over dimensional vehicles on road networks, infrastructure such as overhead electricity lines or railway structures are generally not well designed to avoid conflicts with the special purpose vehicles that are becoming more common. As a consequence, heavy vehicle operators and these agencies have to deal with a plethora of confusing rules and misinformation that are frustrating and costly.

These problems are further exacerbated by the difficulty of gaining cooperation from private operators of railways and overhead electricity lines, among whom there is little or no imperative and no clear mandate to readily assist the transport operators.

In 2002 Dr Peter Hart's report on the issues of low loader operations commented that:

> *'Optus telecommunications lines "have been strung up with little regard for over-height vehicle movements. These cables, which are run on strong guy wires, are located at least 1m below electricity cables They have been installed at minimum clearances heights across main freight routes in many instances, under the authority of the Federal Telecommunications Act.' (NTC, December 2002, page 23)*

Comments made by industry participants in the NTC workshop last year would suggest that there is still a lack of coordination and no clear agreement between agencies, private utility providers and transport operators about who has responsibility for addressing these issues.

Difficulties in negotiating local governments' needs

A common concern among industry players is that local governments are sometimes reluctant to permit over-dimension vehicles to use access roads over which they have jurisdiction. They may be reflecting the local community's fears about safety, noise or general loss of amenity, but in some instances the obstruction is a strategy for negotiating better state government funding for the protection of the road asset. The Victorian Transport Association believes that sometimes the delays are based on a poor understanding of the technical capabilities of the vehicle and its real impact on the road asset and cites the example of a permit being rejected or delayed when one had been granted some months earlier for the same load (*conversation with Victorian Transport Association representative, November 2006*).

Even in Western Australia for example, where the permit system is considerably more efficient than elsewhere, the state government and industry have had to address challenges from the City of Canning in relation to the extension of the metropolitan network of high wide load corridors. The particular corridor in question will connect the Kwinana industrial area south of Perth to the Kewdale/ Welshpool transport and logistics area south east of Perth. The Western Australian Government has committed $22 million in funding for the establishment of this second of Perth's metropolitan corridors for high and wide vehicles so that it enables modularised steelwork in loads of 200 tonnes or more to be transported between workshops at Kewdale-Welshpool and the Australian Marine Complex and its common user facility at Kwinana, both of which have been supported by federal and state government funding. This and the other corridor have improved the capacity of WA engineering and fabrication firms to compete for resource development and major naval work.

Addressing the City of Canning's concerns about the vehicles using access route roads involved negotiations between the WA Chamber of Commerce and Industry, two local heavy engineering firms and Main Roads WA. Given the very significant investment made by the state government into the Australian Marine Complex and to the corridor in supporting the industrial activity at the facility, the negotiation with the local government seems a grossly inefficient way of establishing a workable network *(Chamber of Commerce and Industry WA representative, letter titled High Wide load Corridor 2 to the Chief Executive Officer, City of Canning, 11 July, 2006).*

Changes by state government agencies

At an industry level there are also delays in getting improvements to the permit system. For example, the VTA — OSOM Group representative recently reported that discussions with VicRoads about the permit process and suggestions for a list of priority streets and roads have been in train with the road agency since the end of 2002, and Victorian operators are still waiting for this to be resolved. Apart from feeling frustrated at the slow progress, operators in this state continue to incur high administration costs and delays for urgent weekend work for 'regular loadings'.

7.2.2 Inconsistent and out- of- date standards

Many productivity changes have been achieved by the road transport sector through the use of sophisticated truck and equipment design. However, as a representative of the Civil Contractors' Federation recently expressed, over-dimension vehicle regulations have not kept pace with these advances:

> *We believe certain regulators of our part of the Transport Industry have not kept up to date with the changes required or the Improvements made in Design of Truck and Trailer Combinations which our Industry has committed to and a combined approach between all is a "Must" for growing economies within Australia.*

> *Despite the relative size of the Civil Industry to the Transport Industry overall we are frequently moving loads of significant mass and size. To ignore the needs of the Civil and Mining Industries hoping it will fix itself or it is too hard and will go away is irresponsible and will dramatically effect costs on Major Projects where if they are reviewed substantial costs could be saved (Civil Contractors Federation, presentation to NTC Heavy Vehicle Access Management Workshop, 2006).*

Crane industry

The Civil Contractors Federation believes that the lag in knowledge about new technology is particularly the case with respect to the movement of cranes: that regulations covering combination lengths and axle-mass increases need to be reviewed in the light of these performance improvements. For example, because of the specialised design of heavy floats, low loaders, with better trailers and enhanced tracking characteristics, the current national 19.5 metre length limitation could be increased to 22 metres. In supporting this position a Civil Contractors Federation representative told delegates at a recent NTC workshop that:

> *"What we are saying here is there are a number of new and current Designs which improve the manoeuvrability of Combinations and we believe reduce the Wear and Tear on Roads, decrease Trailer Cut in Arc when turning, and reduce Dynamic Load Shock on Bridges. "B" Doubles run on the same "OD" Routes at 26m and we believe are not as efficient as New Technology 22m Quad or Tri Axle units with Self Steering rear axles" (NTC heavy Vehicle Workshop, 2006).*

However, a lack of certainty on the part of government regulators about their readiness to respond to these design improvements is hindering industry from investing in further improvements for the future.

At present, the regulations in NSW require that all four of the vehicles shown below as well as two pilot vehicles be used to transport Gillespie Crane Services cranes to site.

FIGURE 3: VEHICLES USED FOR CRANE TRANSPORTATION

According to a Gillespie Crane Services representative, if the European approaches to moving cranes were to be adopted; this company would be able to use two rather than four semi trailers and would save about $0.5 million per year for crane movements in the Sydney metropolitan area.

All-terrain cranes with 12 tonne per axle and 16 inch tyres have been on the market in Europe for 30 years. Most all-terrain cranes in Australia travel at 12 tonnes per axle and most states in Australia approve cranes with these specifications. The current rules in NSW apply a 3L plus 15 inch formula, and require 20.5 inch tyres. These requirements make the cranes longer, wider and less manoeuvrable, and more expensive.

Gillespie Crane Services argues that there would also be an efficiency benefit to the public as well because road closure would be reduced by up to 6 hours every time a crane is set up (*Gillespie Cranes, presentation to NTC Heavy Vehicle Access Management Workshop, July 2006).*

This company along with others in this industry have recently made a submission to the NSW Roads and Traffic Authority to gain approval for changes to the regulations to allow for 12 tonne per axle and 16 inch tyres.

Agricultural sector

With the growing shift to broad acre farming, the agricultural sector relies on the use of larger equipment that is typically hired or operated by contractors, and is transported from one property to another.

For example, this year has seen the introduction by a Queensland manufacturer of a 45 foot wide draper platform front for the new large capacity combine currently available. Two 48 foot fronts have been produced for trial. These wider fronts are being fitted to machines to slow the ground speed, reduce damage and produce easier and safer operation. This capacity machine can do the same work as two equivalent harvesters in the late 1980's (700t per day).

However, the equipment is now of such a size that even when it is folded down or consolidated it needs to be transported on vehicles that are in excess of permitted dimensions. The present Gazette limits for height are 4.3 metres (NSW), 4.6 metres (WA, Tas), 4.9 metres (SA) and 5 metres (Vic, Qld), whereas a minimum of 5.5 metres of preferably 6 metres is needed according to the Victorian Farmers Federation and the Tractor and Machinery Association.

Limitations on the allowable length of equipment are a cost burden for the sector. Efficiency and technical issues are creating demand for pre-delivery assembly, which creates difficulties for the transportation from the manufacturer to the dealer. Greg Gasson, representing the Tractor & Machinery Association recently argued that a 30 metre maximum length for an agricultural combination should be the national limit in order to operate machinery such as a tractor/implement/seeder combination as a unit. Although the maximum length is 30 metres in Queensland, the limit in Victoria is 25 metres. The minimum additional cost per machine to accommodate permit conditions for one operator is $20,000.

In a study carried out by the Victorian Competition Efficiency Commission in 2004, several inquiry participants expressed concerns about inter-jurisdictional inconsistencies in the technical standards that apply to vehicle height width and length. Wakefield Transport for example which operates in the Sunraysia area that traverses Victoria, New South Wales and South Australia, noted the greater difficulties in carrying indivisible loads such a grain silos through NSW. The same issue about the costs of moving agricultural equipment across borders was raised by the Wimmera Development Association, which also suggested that varying limits on vehicle length can raise the number of trips required, and hence, transport costs *(Victorian Competition Efficiency Commission)*. Given that agricultural plant such as harvesters are transported from the grain growing areas of southern Queensland to South Australia, eradicating these inconsistencies is particularly important in reducing industry costs.

7.3 The way forward

Make special purpose vehicle regulation a national reform issue

A couple of recent workshops, one organised by the NTC and another jointly funded by NTC and Austroads on the issue of access for special purpose vehicles, highlighted the fact that because the sector is small, it lacked the influence of other segments of the road transportation sector to bring about reforms at a national level. It is hoped that as a consequence of the workshops, NTC in particular will continue to promote and support discussion at a national level about a range of changes that should be considered. Some of these are discussed in the following sections.

In acting as a facilitator, NTC should encourage collaboration among industry and state governments but should also include at the table three other important stakeholder groups:

- the local government sector
- police, and
- public and private sector utility providers and infrastructure owners whose operations are affected by over-dimension vehicle movements.

Introduce nationally uniform framework for special purpose vehicle access

While it is important for each state to continue to have control over permit decisions based on assessment of the impact of over-dimension vehicles on particular terrains, special purpose vehicle operators need a greater level of certainty and consistency about which road networks throughout Australia they can expect to drive vehicles with specific dimensions.

It would be desirable to establish a national network of roads (the B-Double network in NSW has been suggested as a good starting point) on which special purpose vehicles of specifically defined dimensions could drive. It would be highly desirable for this network to include corridors from general stevedoring facilities at major ports to heavy industrial zones and facilities (such as coal mines and power stations)

As a counterpart to an agreed national road network, it would also be desirable to establish a national framework of criteria that would describe the vehicle dimensions that are suitable for generic types of terrains and environmental circumstances. The framework could perhaps adopt the basic elements suggested by Dr Hart in the NTC 2002 study on low loader vehicles:

> *national travel requirements, limits and administrative practices that do not change at jurisdiction boundaries;*
>
> *travel practices or allowances that differ because of policy differences between jurisdictions. Where practices are allowed the travel requirements should be consistent (e.g. night travel requirements); and*
>
> *Local restrictions or allowances that are justified by local conditions or industry practices.*

With respect to reducing the confusion and uncertainty surrounding discretionary decisions about local restrictions Dr Hart has identified four different types of terrain - urban driving; undulating country/highway driving; mountainous driving; and remote areas - that may be a useful basis for establishing a more nationally consistent and communicable set of conditions for determining where and when special purpose vehicles of different dimensions should have access.

The framework should also include realistic and consistent guidelines on hours during which over-dimension vehicles can operate. The objective should be to ensure that hours of operation are flexible as they reasonably can be, with any restrictions clearly justified by considerations of the safety and the amenity of other road users.

Introduce longer term permits

Instead of a project by project approach many industry players would prefer the increased efficiency of permits that have a life of at least 12 months and preferably longer — some have suggested five years, and preferably communicated through gazettal notices which would clearly identify access routes for vehicles with specified mass and dimension limits. Such a system would give operators a greater opportunity to plan their activities and would dramatically reduce delays and transaction costs for operators and government agencies.

Michael Quinn from the Civil Contractors Federation recently expressed this view:

> *Continued implementation of Over Dimensional Excess Mass 12 Month Permits must be increased to reduce Work Load for all Parties. We believe Loads up to 22m Long, 4.0m Wide, 4.8m High and 59.5ton in Mass is a High Re-occurrence Area for the Permits Section and the Civil Industry in general where 12 Month Permits will reduce work load considerably for all concerned (NTC heavy Vehicle Workshop, 2006).*

This is more or less the approach that has been established in Western Australia where 50,000 permits were issued last year. Motivated by a need to reduce the extraordinary workload associated with the administration of permits that has resulted from the mining boom (170 triple road trains would be on the road in any 6 hour period), the Main Roads Department has led a process of collaboration with industry participants to develop and publish a network of commonly used road routes for over-dimension vehicles. As part of the overhaul of the permit system, applications for single journey or period permits for trucks intending to use these roads are processed in the same day. Moreover, with the new system introduced over the last year, permits are not for a single use or for 12 months, but for a period of three years. Nevertheless,

While industry believes that the permit system in WA provides an excellent model for the other jurisdictions, there are still a number of problems that need to be addressed. For example, the turnaround is several weeks for trucks that would use other roads not mapped, there is a need to streamline bottlenecks that result from annualised applications covering big fleets, and negotiating with Western Power and local governments is still slow. According to Transport Forum WA, although the industry appreciates the efforts of the Main Roads Department in streamlining permit processes, the agency is in part hamstrung by a shortage of staff (*phone conversation with Transport Forum WA representative, November 2006).*

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8. INCONSISTENT RAIL REGULATION

8.1 Description of the issue

Despite a long process of reform, many inconsistencies remain in the regulation of technical and safety standards in the rail sector. Accreditation requirements for rail rolling stock differ between states; communications protocols differ; training undertaken in one jurisdiction is not always recognised in another; and there are niggling inconsistencies in safety equipment requirements. These differences inhibit the efficient operation of rail services operating across state borders, and add to costs and increase transit times.

These outcomes are largely the function of long-standing state-based systems that have reinforced non-uniformity, and continue to be a barrier to sound risk management and productivity improvement in the rail sector.

8.1.1 Technical Standards

There does not appear to be a common starting point for improving consistency in a plethora of technical standards related to mass and dimension limits (axle-load, speed limits, train length, rail gauge, and outline gauge), radio coverage and frequency allocations, track-side fault monitoring, equipment identification and data analysis. *(Affleck, 'The Australian Rail Industry: Overview and Issues', Paper prepared for the National Road Transport Commission, 2003).*

8.1.2 Safety Standards

The effectiveness and efficiency of interstate rail operations has been constrained by the continued fragmentation and inconsistency in interpreting and applying state-based safety accreditation processes.

Over the past decade, rail operators with activities in more than one state or territory must obtain separate safety accreditation in each jurisdiction. After the uniform accreditation requirements of each jurisdiction are accepted by all regulators, rail operators must then satisfy a supplementary set of prescriptive local requirements and procedures, which are based on local track infrastructure conditions and operating rules/procedures. However, the experience to date has been of substantial delays owing to the complexity of local compliance requirements, including those required for field-testing of new technology for compliance.

8.2 Supply chain consequences

In general, non-uniformity creates extra costs for interstate rail operators, owing to reduced equipment utilisation, and multiple compliance and employee competency requirements — this is potentially also a barrier to new entrants, innovation and effective safety risk management.

In September 2006 the Bureau of Transport and Regional Economics (BTRE) released '*Optimising Harmonisation in the Australian Railway Industry'* — a comprehensive analysis of the burden stemming from inconsistent rail regulation and the need for harmonisation of technical operating safety standards. We have drawn on a number of practical examples in which inconsistent technical and safety regulations have impeded efficient transportation by adding to operational costs.

8.2.1 Technical Standards

Rail Gauge Diversity

Diversity in rail gauges seriously affects railway performance. This technical differential produces an all-or-nothing outcome: if the gauge changes, the train cannot proceed. The consequences are highly significant for railway operation. Basically, each cluster of common-gauge railway lines necessarily operates as an independent system. This is evident, in particular, with the narrow gauge lines of Queensland and Western Australia.

For rail gauges, the loss of efficiency arising from having separate track networks generates additional costs. The three key sources of these extra costs, which form a substantial proportion of the total cost of using the rail mode, are:

- Bridging costs - the bridging between the gauges is significant. Bridging may involve trans-shipment of goods across wagons or the swapping of each wagon's bogies (wheel sets) from one gauge to another.
- Duplicated locomotives and rolling stock - duplicate locomotives, and sometimes wagons, are required for each gauge.
- Time cost - there is inevitably a significant cost in terms of increased transit time. Rail services have therefore tended to be confined within these smaller, common-gauge networks. Consequently, rail has not achieved its inherent advantages in moving freight over longer distances (BTRE, *Optimising Harmonisation in the Australian Railway Industry, Report 114, page 103-104, Sept 2006).*

Multiple Communication Systems

The presence of multiple communications systems is an area where the regulatory bridging costs across the systems are very evident. PN has a database of national radio frequencies and costs in excess of $50,000 are incurred each time a track manager changes a frequency or channel. PN is of the view that the lack of common communication platforms is particularly felt in the interstate rail freight market. Operators have found it necessary to procure and maintain multiple sets of communications equipment, maintain detailed radio frequency data, and educate staff in multiple operating environments *(*BTRE, *Optimising Harmonisation in the Australian Railway Industry, Report 114, page 148, Sept 2006).*

8.2.2 Safety Standards

The BTRE aptly describes the real consequences faced by rail safety managers when operating across a number of different regulatory environments:

> *When a player moves across regulatory interfaces, the bridging (transaction) costs can include significant management resources. Specifically, those management resources can represent considerable opportunity costs, notably where the attention and proactivity of key safety managers is diverted to managing the multiple regulatory systems. Further, additional resources are also required for tailoring the training and auditing for each system. Managers also need to devote time to seek and maintain consistency, especially when facing unilateral regulatory decisions. Such unilateralism implies an inherently unstable regulatory system. (BTRE, Optimising Harmonisation in the Australian Railway Industry, Report 114, page xxiv, Sept 2006)*

A national rail operator deals with seven safety regulators, seven accreditation systems and multiple accident investigation units. In practice, this leads to inconsistency, delays and unnecessary cost.

Duplication of Locomotive Accreditation

In 2006 QR National undertook an exhaustive process to amend its accreditation in NSW to allow the use of the 2800 locomotive class and two additional wagon classes. The work included:

- Risk assessment and management plans for all aspects of rolling stock operation;
- Modification of the consolidated audit program;
- Development of a series of safety interface agreements with stakeholders; and
- An operational risk assessment.

A comprehensive series of train operation tests[6] were completed, despite the fact that the 2800 class has been operating for many years in QLD. A number of these tests were performed twice, for both the Australian Rail Track Corporation (ARTC) and RailCorp. While the personnel of both track providers have been cooperative and helpful, the fact remains that the multiple-regime process is costly and genuinely unnecessary.

> *The current system of rail safety regulation involves both direct and indirect costs for the rail operator. Significant employee resources are devoted to the compliance effort in multiple jurisdictions, while direct compliance costs for a national operator like QR National are several million dollars per year. Costs have increased significantly year on year, with more than one hundred new safety regulator employees appointed across the various jurisdictions over the last three years. Compare this regime with road, where a single national safety compliance system is provided at public expense (QR National Submission to Productivity Commission Response to Discussion Draft Road and Rail Infrastructure Pricing, page 16, November 2006).*

[6] The testing schedule included: static rolling stock outline test, static vehicle weigh test, static vehicle twist test, vehicle/bogie swing test vehicle/vehicle swing test, static brake test, brake performance test, ride performance test, kinematic rolling stock outline test, traction performance test, rock & roll test, environmental tests, signal visibility test, electrical safety inspection, signal compatibility test and signal interference test.

Inconsistent National Health Assessment Standards

In its 2004 submission to the Productivity Commission's Review of National Competition Policy, PN outlined an example of the practical implication of having to address and redress multiplicity. In December 2003, Victoria gazetted its own standard five months before NTC released a new national standard in May 2004, and then within a few days of the release of the national standard, NSW adopted the Victorian gazetted standard as their own. In July 2004 this series of actions was followed by the release of an issues paper for rail safety regulatory options for the state by the Victorian Department of Infrastructure. The end result was that PN had to devote resources to seek to achieve and maintain consistency with both the national and the Victorian and NSW regimes *(Optimising Harmonisation in the Australian Railway Industry, Report 114, page 273, Sept 2006).*

8.3 The way forward

Perhaps the most notable forward-looking development over the past 12 months has been the NTC's Proposed Model Rail Safety Bill regulations. These regulations were drawn up following an extensive review of the current co-regulatory approach to rail safety in Australia.

- The model Bill makes provision for subordinate legislation and is responsive to such safety critical issues as the systemic treatment of risks to rail safety, and alcohol, drug and fatigue management. Model regulations to support the implementation of this legislation have also now been agreed.
- The NTC argues that the implementation of the model Bill and regulations is an essential precursor to achieving national consistency in the administration of rail safety. The inclusion of *nationally* approved guidelines and compliance codes in this framework is intended to assist Federal and state-based regulators in avoiding the historical problem of state-based regulators interpreting legislation in different ways, thereby leading to practical industry inconsistencies between states and territories industry.

According to PN's Safety, Heath and Environment division the above goes to the crux of whether rail safety regulation in Australia can be successfully harmonized *(Phone conversation with PN, December 2006).* PN is apprehensive and cautious by noting that the NTC bill is not national legislation — it is merely a template for regulatory reform based on a voluntary agreement between the Commonwealth and States. While the nationally approved guidelines and compliance codes may be helpful in certain respects, there still remains scope for each state regulator to unnecessarily tinker with national legislation.

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9. SUMMARY AND CONCLUSIONS

9.1 HML network

Progress on the development of a national HML network has been uneven with Queensland and NSW significantly lagging behind the other states and territories. This has restricted the usefulness of the HML concept for interstate road haulage, and forced a substantial proportion of interstate line haul operators to operate at General Mass Limits (GML) only.

NSW and Queensland have made a commitment to extending their HML networks, and a significant roll-out has taken place over 2006. However the need for enrolment in IAP as a pre-condition to using the HML network is likely to form an unnecessary regulatory impediment to road transport supply chains.

Also, inefficiencies result from operators having to apply to several local governments for access to local roads as a second pre-condition for permission to use the HML arterial road network. The effectiveness of the HML system is further exacerbated when it is simply not possible to use local roads that connect farm or other point of production with the HML network.

Recommended way forward

To address these shortcomings NSW and QLD Governments and their respective road agencies should be encouraged:

- ***To carefully consider modifying their HML systems so that they are more closely aligned with the Victorian model, in terms of having a comprehensive HML system rather than a piecemeal HML permits approach. If NSW considers that it cannot feasibly adopt the Victorian model then considerable focus should be diverted to a combination of streamlining onerous administrative arrangement for HML permits.***

- ***To develop means for facilitating HML approvals at the local government level, such as sharing of engineering services for bridge assessment.***

- ***To build in a vehicle productivity objective into the charters of road agencies like the NSW RTA. Such a performance criterion would provide greater incentives for road agencies to explicitly consider the impacts of strategic policy decisions on vehicle productivity.***

9.2 Port related regulations

Although over weight export freight moves by road between intermodal terminals and the Port of Melbourne, a range of regulatory imposts related to hours of operation, type of truck and freight load, affect the efficiency of road freight movements to a number of ports throughout Australia. Some of these are imposed by state governments but others are imposed by multiple local governments. In some instances the rationale for the regulation is community safety and amenity but sometimes they are driven by more political agenda.

Recommended way forward

A high priority for dealing with the problems of truck access to key port routes is to address the piecemeal, local orientation of decisions related to land use and road access.

A national body could take the lead in seeking cooperation among state governments to develop guidelines for local governments on how to reconcile industrial and residential interests in their own land zoning and road use planning and approval processes.

This national body could also take the lead in encouraging the local government sector — perhaps through Australian Local Government Association representation — to participate alongside other stakeholders including the Australian Logistics Council and its members in the development of policies and strategies that integrate and reconcile industrial and residential interests.

9.3 Access to intermodal terminals for overmass vehicles

Feedback received from Pacific National and views expressed in a study in 2004 by NTC suggest that regulations affecting the movement of above limits freight loads by road to and from intermodal terminals are at worst only a marginal problem.

Recommended way forward

Although regulations affecting road transportation as part of a set of intermodal linkages are perceived to have minimal negative impact on road transport efficiency, there are still a number of ways in which efficiencies in this part of road transport system could be improved. Models from two sources are worthy of note:

The permit system in Victoria which allows six-axle articulated vehicles up to 45 tonnes gross vehicle mass to carry heavy 40 foot containers of export products to rural rail freight terminals under certain conditions should also be promoted as a model by other jurisdictions for encouraging more efficient use of heavy vehicles in relation to intermodal transport.

The Victorian Freight Advisory Council made a number of other practical suggestions (including adoption of PBS for permitting the use of innovative high mass vehicles) about policies for encouraging more efficient use of road transportation as part of an efficient intermodal system.

9.4 Implementation of the PBS scheme

Although there is widespread acceptance of the importance of PBS in achieving efficiencies, a common experience for industry players has been that PBS processes are time consuming and complicated, and impose on them an unfair level of commercial risk. As well as satisfying the requirements of state road agencies, local governments may also have requirements that prohibit the vehicle's access to some roads on a particular route.

Recommended way forward

A streamlined PBS approval process will be presented to Transport Ministers in April this year.

It is imperative that industry encourage NTC to ensure that the deadlines are met for two initiatives

that are important for the success of this streamlined process:

- ***the completion of a clear, detailed set of standards for implementing the process***
- ***agreement on a national road network on which SMART vehicles meeting specific performance standards will be able to drive.***

At the same time the message needs to be reinforced that industry is left in an unacceptable position of uncertainty for as long as state agencies still have the unchallenged right to veto applications — and local governments also continue to have the unchallenged right to prohibit movement of SMART vehicles on local roads .

As with the liberalisation of regulations related to higher mass limits or over-dimension vehicles, a critical factor in the success of the implementation of PBS is to ensure that local governments can acquire the same understanding as other stakeholders of the benefits that can be achieved for local communities as well as the broader economy from allowing higher efficiency vehicles on roads.

9.5 Fatigue Management

The administrative burden, loss of flexibility and risk of prosecution that are incurred in complying with multiple fatigue management systems that vary from one state to another and within states is considered by many players to be far too high.

The NSW occupational health and safety regulations that apply to drivers, operators and other off road parties are particularly onerous for any supply chain player in NSW or elsewhere whose activities require goods to be moved by road in NSW. The impact of the NSW regulations is being particularly felt by small transport operators who are finding it increasingly difficult to afford the administrative burden and commercial risk created by fatigue related regulations. In addition to the OH&S laws, NSW employers are now obliged to comply with a further set of fatigue related imposts as a consequence of a recently introduced industrial relations award and contract determination which among other things imposes extensive obligations on employers to implement drug and alcohol policies and systems and report on remuneration levels for truck drivers.

However, both small and large transport operators in all jurisdictions are concerned about the likely impact of the proposed NTC model legislation which is a very prescriptive and comprehensive scheme of risk management processes that will still impose very significant limitations on driving hours and trip itineraries and many believe will require extra trucks and drivers on the roads. The lack of rest areas is a critical problem in staying within the allowable driving hour limits.

While the revised version of the proposed model legislation goes some way to accommodating the needs of drivers moving between WA or the Northern Territory (where the laws will not apply) and the rest of Australia, if the laws are introduced by the states, there will still be at least three systems in operation: that is as long as South Australia, Queensland, Tasmania and Victoria introduce the laws without any substantial modifications to the new template.

Recommended way forward

If the revised version of the proposed model legislation is endorsed by the Australian Transport Council and COAG:

It will be critical for state ministers to instruct their relevant road and occupational health and safety agencies to adopt a consistent and coordinated approach to implementation of model legislation.

It will be imperative for the NTC to establish a rigorous process of evaluation similar to the regulatory impact process completed as part of the development of the proposed model legislation. The evaluation process should use actual data to examine the impact of the regulations on the incidence of fatigue, productivity and efficiency, and a range of other industry performance factors such as the availability of skilled drivers among small, medium and large transport operators and shippers in the transport supply chain.

Compliance with more stringent fatigue management regulation will need to be supported by the provision of adequate rest areas, perhaps though a dedicated funding stream under AusLink.

9.6 Over-dimension vehicles permits

Three sets of factors related to seeking permits for over-dimension vehicles impose unnecessary cost and inefficiency on these road transport operators.

- Inter-jurisdictional inconsistencies, the different requirements of other state government agencies (infrastructure departments, telecom authorities, tram and railway operators, electricity authorities and the police) within each state, and dealing with local governments all cause undue administration attention and cost, especially when large indivisible loads required especially by the agricultural or mining sectors need be transported across state borders.
- The second significant factor is the time required to gain permits. This is a particular problem when permits are for one-off applications or very short periods of time, or are required during high peak demand periods such as harvesting. To avoid the delays, it is common to revert to multiple applications or notice of intent applications, which also add to the administrative burden for industry as well as government agencies.
- According to industry, a third source of inefficiency and cost results from the regulators' poor understanding of the technical capabilities of over-dimension vehicles leading to unnecessary limitations on allowable length, width and height of vehicles and their loads.

Recommended way forward

A number of initiatives need to be progressed to address these impediments to efficiency:

Agreement needs to be brokered among all the stakeholders at a national level to bring about a far greater level of harmonisation of the dimension limits for particular road categories in relation to a national road network.

From industry's perspective it would be desirable if permit processes were streamlined and

simplified, preferably using a one-stop shop approach, irrespective of location. Perhaps a more realistic goal would be to establish a national framework of criteria that state and local governments could use to assess applications for access for vehicles with clearly defined dimensions on roads that can be categorised according to generic types of terrain and environmental circumstances. This could form the basis of the development of a national network of roads on which special purpose vehicles of specifically defined dimensions could drive. It would be highly desirable for this network to include corridors from general stevedoring facilities at major ports to heavy industrial zones and facilities (such as coal mines and power stations.

The framework should also include realistic and consistent guidelines on hours during which over-dimension vehicles can operate. The objective should be to ensure that hours of operation are flexible as they reasonably can be, with any restrictions clearly justified by considerations of the safety and the amenity of other road users

We suggest that the most appropriate body to facilitate these changes would be NTC. In doing so we also suggest that NTC should encourage collaboration among industry and state governments but should also include at the table three other important stakeholder groups:

- ***the local government sector***
- ***police***
- ***public and private sector utility providers and infrastructure owners whose operations are affected by over-dimension vehicle movements.***

9.7 Inconsistent rail regulation

While there have been attempts by regulators to establish a scheme of mutual recognition of accreditation, complex local requirements in relation to technical specifications and safety are still resulting in substantial delays and significant administrative costs. For example variable axle load limits and track capacity standards result in reduced equipment utilization, unnecessary duplication of effort through for example the ARTC and Railcorp carrying out the same tests, and the need to carry an unnecessarily broad range employee competencies.

Recommended way forward

One of the high priorities in overcoming inconsistencies in relation to safety regulations is for federal and state governments to progress the implementation of the Model Rail Safety Bill developed by NTC in 2006. Model regulations to accompany the legislation have now also been endorsed by ATC.

To achieve genuine harmonization of technical operating standards, a high priority will be to support the adoption by state governments of the NTC's Proposed Model Rail Safety Bill regulations, which include nationally approved guidelines and compliance codes intended to assist federal and state-based regulators to avoid jurisdictional differences of interpretation of legislation.

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9.8 Establishing priorities

The resources available to this preliminary review did not permit a detailed analysis of the costs and benefits of the initiatives discussed above. However, to assist ALC I establishing priorities, we have attempted some preliminary, and inevitably subjective, assessments of the ease or difficulty of implementing each of the initiatives, and the scale of likely benefits from doing so. These judgements are summarised in Table 2, which also indicates the key parties whose support would be necessary to implement the proposed changes.

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TABLE 2: PRELIMINARY ASSESSMEN OF POSSIBLE INITIATIVES

Issue	Who controls this?	Suggested way forward?	Who needs to be influenced?	How difficult would it be? What would be the timeframe?	How large is the likely pay-off?
HML	State Road Agencies Local governments	Modifying HML systems in NSW and QLD to align with the Victorian model,	DOTARS NSW RTA QLD Main Roads/DoT Responsible Ministers	Difficult. Arrangements are now embedded in bilateral AusLink agreements between Commonwealth and States; long-term if at all	High
		Streamlining onerous administrative arrangements.	Premiers Depts NSW RTA QLD Main Roads Responsible Ministers	Easy/moderate; short-term	Low/Moderate
		Facilitate HML approvals at local government levels	DOTARS (funding) Local governments Ministers responsible for local government Ministers for roads	Vary greatly with the context; possibility of immediate gains but would be an ongoing process	Moderate

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Issue	Who controls this?	Suggested way forward?	Who needs to be influenced?	How difficult would it be? What would be the timeframe?	How large is the likely pay-off?
		Include vehicle productivity objectives in charters of road agencies	Australian Transport Council; COAG	Difficult; medium term	High
PBS	State Road Authorities; PBS Review Panel; NTC; Local governments	Support streamlined PBS approval process and apply pressure for adherence to timetables for its introduction	Road transport industry and representative organisations; industry associations (BCA, NFF, Minerals Council etc)	Easy; short term	Moderate
		Promote completion of an agreed national road network for PBS vehicles according to planned deadlines	NTC, COAG	Moderate to difficult; short term	Moderate
		Promote completion of detailed PBS rules or standards	NTC, COAG	Easy, short term	High
		Remove unilateral right of state road authorities and local governments to veto applications	NTC, COAG; industry associations (ARTSA)	Very difficult; long-term	High

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Issue	Who controls this?	Suggested way forward?	Who needs to be influenced?	How difficult would it be? What would be the timeframe?	How large is the likely pay-off?
		Raise awareness in local government of benefits of PBS introduction	ALGA; local governments	Easy; ongoing	Low
Fatigue	Road authorities Departments responsible for industrial safety	Ensure a consistent coordinated approach to implementation of model legislation	Australian Transport Council; NTC	Difficult; short-term	High
		Undertake comprehensive ex post evaluation of impacts and make adjustments as required (Assuming legislation is implemented)	NTC	Easy; medium to long-term	Moderate
		Increase provision of rest areas	Road agencies; DOTARS (for AusLink funding)	Easy/moderate; short to medium term	Moderate

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Issue	Who controls this?	Suggested way forward?	Who needs to be influenced?	How difficult would it be? What would be the timeframe?	How large is the likely pay-off?
Over-dimension vehicles	Road authorities; local governments	Harmonisation of dimension limits of given road classes	Road agencies, NTC, industry associations (NFF, Minerals Council etc)	Moderate; medium term	Moderate/High
		Development of a national framework of criteria for generic terrain types and environmental conditions for use by state and local government agencies to assess applications for over dimension vehicles of defined dimensions	Road agencies, NTC	Moderate; medium term	Low/moderate
		Development of national network of roads for over-dimension vehicles	Road agencies, NTC	Moderate; medium term	Moderate
		Increased flexibility of operating hours	Road agencies	Difficult; short term	Low

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Issue	Who controls this?	Suggested way forward?	Who needs to be influenced?	How difficult would it be? What would be the timeframe?	How large is the likely pay-off?
Access to ports	Road agencies Local governments, rail agencies, Departments of Transport/ Infrastructure	Establish national body to develop consistent approach to port-related land use and freight transport	ATC	Very difficult; medium-term	Low in itself, but foundational for other initiatives
		Encourage local government, perhaps through funding incentives, to participate in multi-lateral process to develop guidelines to balance port-related needs with other considerations	State planning authorities, ports, transport operators, local government associations	Relatively easy to establish once previous step is accomplished, difficult to get to deliver meaningful outcomes ; short-term commencement, but ongoing commitment	Moderate if successful
Rail regulation (safety and technical standards)	Rail safety regulators* and rail infrastructure managers	Ensure prompt implementation of and adherence to National Safety Legislation and supporting regulations by state-based rail safety regulators. Developing national legislation for technical operating standards.	Rail operators; rail safety regulators, rail infrastructure managers; NTC	Difficult; short-term	High

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Issue	Who controls this?	Suggested way forward?	Who needs to be influenced?	How difficult would it be? What would be the timeframe?	How large is the likely pay-off?
Access to regional IMTs by overmass vehicles	State Road Agencies, Local Governments	Provide special mass concession for vehicles accessing rural IMTs	State roads and transport ministers; road agencies; affected local governments	Easy/Moderate	Moderate
		Adopt at a national level approach advocated by VFAC to improving the efficiency of access to IMTs	State roads and transport ministers; road agencies; affected local governments;	Moderate	Moderate

** Such as the Independent NSW Transport Safety and Reliability Regulator, NSW Office of Transport Safety Investigations, VIC Department of Infrastructure)*

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