

21 November 2024 Our Reference: CCF/1899 DOC24/43713

Michael Hopkins Chief Executive Officer and Commissioner National Transport Commission Level 3, 600 Bourke Street Melbourne VIC 3000

Dear Mr Hopkins

# Public Consultation: Heavy Vehicle National Law Amendment Bill and Heavy Vehicle National Amendment Regulations – October 2024

Please find attached the National Heavy Vehicle Regulator's (NHVR) submission to the National Transport Commission's (NTC) exposure drafts for the Heavy Vehicle National Law (HVNL) Amendment Bill and Heavy Vehicle National Amendment Regulations.

The NHVR has been an active participant in the review process since its commencement, including undertaking significant technical and operational analysis (which is still ongoing) as well as the contributions by senior staff to key policy discussions in working groups/steering committee meetings and preparing numerous written submissions.

As we have advised previously, the NHVR is concerned that this proactive approach has often not been appreciated and our expert advice to the review has largely been disregarded. This is a disappointing outcome considering our unique role and insights based on direct and daily engagement with the industry including the supply chain, and our first-hand knowledge of the law's limitations.

As an outcome, we believe this approach to the review has in part contributed to delivering piecemeal changes to the legislative structure rather than national reform, and in several cases, while unintended, has resulted in less-than-optimal safety policy outcomes.

The NHVR remains committed to pursuing the safety and productivity betterment of this critical sector and embracing the innovation and investment to support people, safety practices and technologies that we have seen emerge over the last ten years in administering the HVNL.

In this respect and in addition to our response provided at *Attachment A*, I have outlined key areas that should be given genuine consideration in the final stages of the review process.

#### 1. Lifting industry safety standards

We are committed to increasing the number of people who invest in improved safety management practices and that want to work with the Regulator to achieve alternative compliance options to support their business operations.



There has been a strong theme throughout the review that industry safety standards will improve through the introduction of safety management systems (SMS). The NHVR supports the increased adoption of SMS and we have been invested in working with the NTC to develop SMS standards that we hope will achieve an outcomes focused approach to safety activities.

We believe this should support the foundation for alternative compliance accreditation (ACA); however, for the increased uptake of SMS through ACA to be successful, there needs to be appropriate and valuable alternative options available to industry.

With the proposed changes to concessional mass limits, we will see a 40 per cent reduction in the number of National Heavy Vehicle Accreditation Scheme (NHVAS) accredited operators. While we strongly support the implementation of concessional mass limits as the new general limits, this highlights the importance of ensuring that proper consideration is given to the other types of alternative options available to the Regulator.

We have learnt through administering the NHVAS that working with industry to progress alternative compliance results in an ongoing safety investment by industry, encourages a shared responsibility framework within companies and with the regulator and builds a rich data set to contribute to informed safety identification and improvements.

Subject to the outcome of the consultation process of the exposure drafts, it appears that the only real alternative compliance option available to the Regulator is in respect to fatigue management (further information at point 2).

The NHVR would welcome further discussions to ensure that the legislation and associated instruments does not restrict the Regulator from working with the industry in a transparent way to achieve safe and flexible alternative compliance and support greater industry investment.

#### 2. Risk based fatigue management

The NHVR is firmly of the view that performance-based fatigue needs to be based on risk controls and offsets that directly manage individual driver fatigue. Including hard outer limits as proposed in the regulations is fundamentally at odds with a risk-based approach and there is no evidence that it will support improved safety outcomes. This view is supported by Professor Drew Dawson in his response to the exposure drafts.

The risk-based approach used by the NHVR focuses on the principles of fatigue management including work related rest, recovery breaks, and reset breaks to reduce and eliminate fatigue.

Transport operators need to be transparent about the systems and the processes they employ, such as allowing a driver the absolute authority to stop driving, fitness for duty assessments, driver and operator communication practices, and the use of safety technology. This allows the most appropriate and fit for purpose fatigue risk management system to be implemented which is reviewed through regular auditing and reporting.

Introducing hard limits could create a ceiling that encourages a change in behaviour where it is perceived that operating up to the limit is 'safe'. This creates an illusion of perceived safety and takes



the focus away from managing the real risks. It also encourages driving to limits rather than empowering drivers to rest when they need to.

The NHVR has suggested that greater oversight for ministers of the risk-based approach could best be achieved by identifying the risk controls that the regulator should have regard to in approving alternative compliance accreditation. We have previously provided an overview of controls and are willing to continue to progress work with the NTC in this area.

#### 3. Ability for the Regulator to Regulate

We have continued to highlight that the success of a modern and flexible law is that it allows *the regulator to regulate.* This was also a clear and direct message from the recommendations provided by Ken Kanofski's work.

A key driver of the review was the need to reduce the complexity of the HVNL (high level intent in the law and detail in the regulations) which would then ensure greater responsiveness to the industry using instruments that could be made and approved by the Regulator (with appropriate consultation).

The 2020 Productivity Commission report into Transport Reform highlighted the importance of effective safety regulation requiring the capability of regulators to apply a rigorous and outcomesbased approach to safety, including removing excessive prescription from regulation.

The HVNL Review, we believe, has not gone to the heart of providing the ability for the regulator to regulate. While the explanatory document notes that detail has been removed from the legislation to regulations, at most this just seeks to streamline administrative detail. It does not provide greater ability to the regulator to respond in a timely way and at best, the NHVR simply has oversight of guidelines (which exists today).

The reality of the current problems is demonstrated by the lack of maintenance amendments for over six years; this is hardly a good sign for a system that should be flexible and responsible to continuous change.

I am also greatly concerned by the increased inclusion of additional instruments that appear to put more restrictions on the functions undertaken by the Regulator.

The heavy vehicle industry will always find new and innovative ways to undertake business to ensure they remain competitive. If we do not start to recognise the need for the Regulator to be able to respond in an agile way, then as governments we are unable to be active participants in facilitating this innovation.

#### 4. Recognise emerging vehicles and technologies

Changes to the legislation to improve the adoption of safer and more productive vehicles through Performance Based Standards (PBS) have not been considered in the exposure drafts. In addition to the work underway by the Regulator, I understand work is occurring from a non-legislative perspective with the states regarding PBS, and that it will be considered in further HVNL reform in 2025.



I encourage the NTC to work closely with the Regulator in ensuring this achieves our shared industry government goal to increase the number of safer, cleaner and more productive vehicles on the road network.

Providing the ability for the Regulator (through the NHVR Board) to approve changes to PBS Business Rules and Standards is a key area where ministers can ensure that the Regulator has the operational flexibility to work with industry and manufacturers to appropriately respond to vehicle and safety innovations and improve safety outcomes on our roads.

I have provided the NHVR's Roadblocks to Reform paper at *Attachment B* that outlines the key recommendations and amendments that need to be considered in this respect.

As advised at the start of this letter, we remain committed to ensure the improved safety and productivity outcomes of the road transport task. I hope we can work together to ensure we provide a more modern and flexible law that will future proof the safety and success of the vital industry

I am happy to discuss any of the matters raised in this letter.

Yours sincerely

Sal Petroccitto OAM Chief Executive Officer

Enc. (3):

Attachment A: NHVR Feedback - Public Consultation - HVNL Amendment Bill and Regulation 2024

Attachment B: NHVR Roadblocks to Reform

Attachment C: PBS Review Panel Minutes.



Chapter 1 – Preliminary				
Clause	Name	Comment	Proposed Solution	
2	5 Definitions (twinsteer axle group) 5C Twinsteer Axle Groups, MDL Regulation	The NHVR does not support including the proposed definition for 'twinsteer axle group' in s.5 and s.5C. To ensure improved clarity and consistency, the definition should simply refer to the Australian Design Rules (ADR), where the terms are primarily set. Redefining in the HVNL perpetuates the issue that has created the problems we are currently managing around the twin steer definition, as legislation will need to be amended each time there is a change to the ADR.	Consult Parliamentary Counsel on the best way to define the term. Parliamentary Counsel should have regard to the meaning given in <i>ADR – Definitions and</i> <i>Vehicle Categories</i> . Parliamentary Counsel may consider the current definition of <i>complying anti-lock braking system</i> and <i>complying bus</i> (s.5, MDL Regulation), which refers to the ADRs as an example.	
-	- Safety duties			
Clause 14 & 15	Name	Comment	Proposed Solution	
14 & 15	26D Duty of executive of legal entity	The following feedback was provided by the NHVR as part of the HVNL Exposure Draft v4. These changes have not yet been reflected in the Public Consultation Exposure Draft. The NHVR has provided extensive feedback to the NTC regarding the challenges of prosecuting breaches under s26D.	The NHVR is seeking that these matters (maximum penalty, recklessness), be included as part of the planned HVNL reform package in 2025.	
		Although the NTC has made some fundamental amendments to s.26D (e.g. indictability and alternative verdicts), the NHVR emphasises that the following matters still require consideration:		
		<ol> <li>Maximum penalty: Whilst the NTC's proposed changes solve the problem of making it clear that a Cat 1, 2 or 3 maximum penalty can apply to s26D, they do not resolve the problem that the prosecution is required to establish all the elements of a Cat 1, 2 or 3 in addition to s26D elements.</li> <li>Recklessness: The NTC's proposed changes do not resolve the 'recklessness' issue (i.e. to clarify the original policy</li> </ol>		



		intent that recklessness should apply to the executive).		
Chapter 4 - Vehicle operations—mass, dimension and loading				
Clause	Name	Comment	Proposed Solution	
N/A	Increase in the prescriptive length of heavy vehicles from 19m to 20m	The increase in heavy vehicle prescriptive length from 19m to 20m does not appear in the exposure drafts.	Include the increase in prescriptive length for heavy vehicles to 20m.	
		The NHVR's understanding of the June 24 ITMM decision is that the increased length is to be included in legislation subject to the outcome of swept path analysis undertaken by the NHVR. The swept path analysis undertaken by the NHVR and provided to the NTC identified that there are no safety challenges preventing an increase in vehicle length.		
N/A	Changes to prescriptive mass and height	The NHVR queries how the NTC is planning to progress changes to mass and height in 2025. The NHVR has received minimal updates from the NTC and is eager to understand their plans.	The NTC provide an update on their planned changes to prescriptive mass and height.	
35	122 Mass or dimension exemption (permits) for class 1 and class 3 heavy vehicles	The proposed legislation removes the three-year limit for issuing permits in legislation. The NHVR requests that s.122 and its subordinate legislation counterpart (s.31B) include the maximum period a permit may be issued for (i.e. three years), as this is a current requirement in legislation and there is no policy agreement for it to be changed.	Reinsert the three-year limit in s.122.	
Chapter 6 - Y	Vehicle operations—driver fatigue			
Clause	Name	Comment	Proposed Solution	
53	224 Matters court may consider in deciding whether person was fatigued or unfit to drive	As previously suggested in feedback by New South Wales, it is unclear in the proposed s.224 <i>relevant body of knowledge</i> whether a Court may consider <i>any</i> Code of Practice, or whether it should be a Code of Practice registered by the Regulator.	To provide greater prominence to Codes of Practices that are registered by the Regulator (in comparison to other Codes of Practices), the NHVR suggests that a Code of Practice registered by the Regulator be included as a matter for consideration in s.224(1).	



		If it is intended that a Court can consider <i>any</i> Code of Practice, the NHVR suggests that a Code of Practice registered by the Regulator be provided with greater prominence over other Codes of Practice in a Court's determination of the duty. Not to do so, may unintentionally undermine the HVNL power for the Regulator to prepare and register Codes of Practices (s.705).	<ul> <li>For instance,</li> <li>s.224(1)(f) when deciding whether the driver of a heavy vehicle was fatigued or unfit to drive, a court may consider a Code of Practice registered by the Regulator.</li> </ul>
51 to 60	228 Duty of driver to avoid driving while fatigued or unfit to drive	<ul> <li>Clause 55, S.226(1) expands the driver duty for impairment of fatigue or being unfit to drive to all heavy vehicle drivers, not just fatigue regulated heavy vehicle drivers.</li> <li>It is the NHVR's view that the 2023 D-RIS does not contain impact analysis to expand the duty to all heavy vehicles. There also does not appear to be an exemption from conducting impact analysis if its associated regulatory burden is covered by existing legislation.</li> <li>Given the policy change of this expanded duty, appropriate engagement with the heavy vehicle industry should be undertaken so they can provide consideration and feedback. This is particularly important considering the associated penalty is increasing as part of the Penalties Review.</li> </ul>	Undertake engagement with the heavy vehicle industry on the policy change to the duty not to drive while fatigue or unfit to drive and expansion to all heavy vehicle drivers. Should an impact analysis be undertaken it provides an opportunity to revisit the way the duty is described. Consideration should be given to reformulating the provision as a positive duty (a suggested approach could be ss.28 or 29 of the model WHS laws), where the offence provision would treat failure of the driver to use reasonable care/ensure so far as reasonably practicable to avoid impairment/unfitness, as proof of the offence, rather than the outcome itself. This is consistent with the currently approach taken within the primary duty offence and with transitioning the HVNL into a modern law.
68	253 Alternative compliance hours	The following feedback was provided by the NHVR as part of HVNL Exposure Draft v4. These changes have not yet been reflected in the Public Consultation Exposure Draft. The NHVR has provided extensive feedback to the NTC on its position that the HVNL and the FM Regulation do not currently prescribe hard outer limits for AFM accreditation. This includes Kings Counsel advice on the matter of outer limits. Section 257 of the HVNL clearly states that AFM hours are those	Consistent with the existing situation for AFM accreditation, the NHVR's position is that outer limits for alternative compliance accreditation should not be introduced in the HVNL.



111	operations that may be subject to alternative compliance accreditation	maintenance alternative accreditation options.	accreditation is intended to remain an option for heavy vehicle operators, or if it is not intended to be a
	457 Requirements for heavy vehicle	The exposure draft does not contain any provisions to enable	The NTC to clarify whether maintenance alternative
Clause	Name	Comment	Proposed Solution
Chapter 8 Accre	ditation		
		Likewise, the escalated risk contravention tables under Schedule 4 Part 2 Table 1 of the FM Regulation do not set a hard outer limit for AFM hours. Rather, they create the boundaries at which the more serious category of risk contraventions come into effect.	
		The premise of a risk-based safety approach is that it is managed through risk controls and offsets that are employed based on the specific risk profile of the business. This is considered as best practice by transport regulators and other regulators around the world.	
		'stated in the accreditation certificate for the accreditation'. Whilst the HVNL does make restrictions on the Regulator's power to grant accreditation (see s461(1)(d)), there is no prescribed maximum in the HVNL or the FM Regulation. Contrast this with the clear reference to the FM Regulation to establish BFM hours in s253(1) (i.e. The national regulations may prescribe the maximum work times and minimum rest times applying under a BFM accreditation).	

Amendment Regulations advised that the intent was for

for which alternative compliance accreditation can be granted.'If the latter is true, the NHVR requests that the NTCThe removal of a maintenance management option from the law<br/>does not align with earlier guidance from the NTC.If the latter is true, the NHVR requests that the NTC<br/>clarifies the reason for and evidence supporting the<br/>change in policy.Notably, the explanatory document for version 1 of the HVNR



		<i>maintenance alternative compliance accreditation</i> to be retained in the <i>Heavy Vehicle (General) National Regulation</i> (HV(G)NR).	
111	457 Requirements for heavy vehicle operations that may be subject to alternative compliance accreditation 11(3), General Regulations	The exposure draft provides mass accreditation as an Alternative Accreditation option in the General Regulations. However, the latest draft Ministerial Direction (sent to HVNL Working Group members on 22 October 2024) expressly rules out mass as accreditation that can be granted by the Regulator (1.2.2).	The NTC to clarify whether mass alternative accreditation is intended to remain an option for heavy vehicle operators.
113	459 Application for heavy vehicle accreditation Schedule 1, General Regulations	Section 459(2)(b)(iv) currently provides power for the Regulator to apply fees for heavy vehicle accreditation. This would mean that it would encompass both proposed general and alternative accreditation. However, Schedule 1 of the General Regulations only prescribes fees for fatigue and mass alternative accreditation. Therefore, it does not cover general accreditation or any bespoke alternative accreditation options.	To enable the NHVR to appropriately administer heavy vehicle accreditation, it is suggested that the General Regulations: Prescribe fee for alternative accreditation Prescribe fee for general safety accreditation
114	461 Restriction on grant of heavy vehicle accreditation	The Consultation Draft removes the requirement in s.457 that '(a) driver of (a BFM/AFM Fatigue Management System) be in a fit state – to safely perform required duties; and to meet any specified medical requirements.' The NHVR recommends the requirement to be 'in a fit state' is reinserted in legislation. This requirement is prescriptive, providing directions to operators on what needs to be satisfied to obtain accreditation. The absence of this requirement and its associated link in the existing business rules and standards (4)(21) will make it confusing for operators seeking accreditation.	The NHVR suggests that there be consideration towards adding the following requirement in s.461 – ensuring each of the drivers is in a fit state— (i) to safely perform required duties; and (ii) to meet any specified medical requirements



123 to 126	468(1)(a) Driver operating under heavy vehicle accreditation must carry accreditation details – keeping accreditation certificate in the driver's possession.	Under the revised s.468, a driver operating under heavy vehicle accreditation must keep in their possession a copy of their 'heavy vehicle accreditation' certificate. Previously, only a driver holding an AFM/BFM certificate was required to keep in their possession a copy of the accreditation certificate.	The NHVR suggests that the requirement for keeping a certificate <u>only apply</u> to fatigue alternative compliance accreditation.
		Adopting the revised s.468 will require the NHVR to issue certificates for <u>all</u> types of alternative accreditation, not just for fatigue (as is currently the case with AFM/BFM certification). This requirement may pose an issue in the future, should the NHVR decide there are more appropriate forms to evidence alternative accreditation (like a QR Code).	
		In addition, the NHVR queries the general relevance of provisions relating to physical accreditation certificates. Currently, digital accreditation certificates are available on the NHVR's Portal for operators to download. Maintaining that drivers keep in their possession an accreditation certificate is an unduly burden, when a digital version can be downloaded on their phones.	
		The NHVR suggests further consideration into the relevance of provisions relating to physical documents, given the growing prominence of digital documents in the regulatory space.	
		Note: there may be value in the NTC considering recent changes in this space that were adopted by the Australian Skills Quality Authority.	
124	468(1)(b) Driver operating under heavy vehicle accreditation must carry accreditation details - Hold document signed by the operator, meeting the requirements of their accreditation.	Like the requirement to keep a copy of a heavy vehicle accreditation certificate, the NHVR suggests the requirement to hold 'a document, signed by the operator of the vehicle who holds the accreditation' (s.468(1)(b)) is amended to specify that it <u>only applies</u> to fatigue alternative compliance accreditation.	<ul> <li>The NHVR suggests the following change to s.468(1)(b) -</li> <li>(b) a document, signed by the operator of the vehicle who holds the accreditation, stating that the driver—</li> </ul>
			$({ m i})$ is operating under the operator's <del>heavy</del>



		The NHVR also suggests further consideration into the relevance of provisions relating to physical documents for the reasons outlined above.	vehicle accreditation fatigue alternative compliance accreditation; and(iii)meets the requirements relating to drivers operating under the operator's heavy vehicle accreditation fatigue alternative compliance accreditation (if any);
N/A	477 Replacement of defaced etc. accreditation certificate	As outlined above, operators can retrieve their accreditation certificates electronically on the NHVR Portal, rendering this provision redundant.	The NHVR suggests removing the power to apply for a replacement accreditation certificate (s.477).
Chapter 8	General safety accreditation	The following feedback was provided by the NHVR as part of HVNL Exposure Draft v4. These changes have not yet been reflected in the Public Consultation Exposure Draft. As currently drafted, general safety accreditation does not provide any regulatory concessions to accredited participants but still requires compliance with comprehensive standards. Additionally, operators must hold general safety accreditation before being granted alternative compliance accreditation. Although operators could circumvent any duplicative audit requirements by applying for general safety accreditation and alternative compliance accreditation at the same time, many operators may not be in a position to apply for both at once and will therefore be subject to duplicative regulatory burden and costs.	Consideration should be given to an alternative accreditation structure that incentivises the uptake of general safety accreditation. A potential option may include attaching alternative compliance options to general safety accreditation for prescriptive requirements that are easily measurable, relatively universal and do not require bespoke SMS considerations, such as those relating to mass and maintenance.

# NHVR Feedback – HVNL Amendment Bill and Regulation 2024



Chapter 9 Enf	Name	Comment	Proposed Solution
Chapter 9	Division 4: Information-gathering powers ('567 Power to require name, address and date of birth' to '570A Requiring information').	Under the revised s.540, an authorised officer is provided a power to require a driver to stop working, if impaired by fatigue or unfit to drive. However, there is no power for an authorised officer to request information from the driver about whether they are unwell, injured or have taken drugs/consumed alcohol. For example, asking whether they have taken medication or illicit substances.	To enable an authorised officer to request information from a driver in relation to their fitness to drive, the NHVR suggest s.570 is amended to require a responsible person to give information regarding the health and fitness of the driver.
		Without this power, determination of a driver's health fitness will be based solely upon a visual inspection by the officer. There may be instances where a driver's normal behaviour suggests that they are unfit when they are not. For these cases, questioning the driver to determine their health and fitness would be required.	
Chapter 12 A	dministration		·
Clause	Name	Comment	Proposed Solution
159	651B Directions in relation to alternative compliance accreditation	The following feedback was provided by the NHVR as part of HVNL Exposure Draft v4. These changes have not yet been reflected in the Public Consultation Exposure Draft.	Further consideration is required to confirm whether or not s.651B as drafted, meets the original policy agreement.
		The proposed s.651B provides that responsible Ministers may give a direction to the Regulator requiring the Regulator to take or not to take particular action in relation to an applicant/class of applicants or an operator/class of operators holding alternative compliance accreditation.	
		The NHVR queries whether the drafting of s.651B results in a provision that is contradictory to the general Ministerial Direction power (s.651), given it expressly states that a direction to the Regulator cannot be about a particular person, heavy vehicle,	



		application or proceeding (s.651(2)).	
		The NHVR notes that recommendation 3a endorsed by Ministers in the May 2023 DRIS intended for the power to be construed broadly to cover a non-exhaustive range of matters, beyond applications for alternative compliance accreditations (p. 95, DRIS May 2023). Some of the matters envisaged as being covered by the power included directing the regulator to consider the safety standard threshold of an ACO and specifying a data and technology application as a condition of an ACO.	
		The NHVR notes that the explanatory document does not explain the intent behind this provision nor provide any examples of its potential use. It is unclear under what circumstances it would be appropriate for a Minister to provide directions about an individual.	
		Additionally, Kings Counsel advice sought by the NHVR has indicated that ministerial direction which contradicts legislation will be unenforceable.	
Chapter 12	Savings and transitional provisions		
Clause	Name	Comment	Proposed Solution
178	761 Existing heavy vehicle accreditation	s.761 provides that the amendment Act does not apply to heavy vehicle accreditation that is in force before the commencement of the Act and that the current Act would apply to existing	The NHVR requests clarity from the NTC as to how the 3-year transition period will be reflected in the HVNL.
		accreditation until the accreditation expires or is cancelled.	

# NHVR Feedback – HVNL Amendment Bill and Regulation 2024



<ul> <li>Ken Kanofski's recommendation (2022): Three years from the commencement of the new certification.</li> </ul>	
<ul> <li>D-RIS August 2023: Recommendation 6b – That the law ensures a three-year transition period for current NHVAS operators to provide operators adequate time for them to develop the necessary safety management system to qualify for the enhanced scheme. The D-RIS expands that this would be three years from the commencement of the new accreditation scheme.</li> <li>D-RIS June 2024: That operators would have three years from the commencement of the new law to develop an NHVAS-compliant SMS.</li> </ul>	

# NHVR Feedback – HVNL Amendment Bill and Regulation 2024



Heavy Vel	leavy Vehicle National Amendment Regulations 2024				
Heavy Vel	Heavy Vehicle (Vehicle Standards) National Regulations				
Clause	Name	Comment	Proposed Solution		
4	13 Application for vehicle standards exemption (permit)	The following feedback was provided by the NHVR as part of Regulations Exposure Draft v2. These changes have not yet been reflected in the Public Consultation Exposure Draft.	Amend s13 to confirm that a vehicle standards exemption (permit) application must still be (b) accompanied by the prescribed fee for the application.		
		Section 13 does not include the prescribed fee for an application for a vehicle standards exemption (permit).			
		Although a fee is not currently required for a vehicle standards exemption permit application, this may change in the future. If this occurs, an amendment would then be required to the regulations to facilitate this fee.			
5	19 Modifying heavy vehicle requires approval	The NTC's penalties assessment did not assess the penalties for the offences in s.85 of the current HVNL 'Modifying heavy vehicle requires approval' (now s.19 of the FM Regulation). Theses offences were not assessed on the basis that 'it is expected that they will be omitted'. However, these offences were rather moved to the regulations.	The NHVR recommends that the NTC assess the penalties for offences under s.8(1)&(2) against the PAM. The assessment should consider whether these penalties should be consistent with the penalty for s60(1)(a), in that both s.60(1)(a) & s.85(1)&(2) result in non-compliance with vehicle standards. This would result in the penalty amounts for offense under s85 being increased to \$6,000 and as such, it may require these provisions to be moved back into the Act.		
4	20 Approval of modification by Regulator	The following feedback was provided by the NHVR as part of Regulations Exposure Draft v2. These changes have not yet been reflected in the Public Consultation Exposure Draft.	Amend section 20(1)(b)(i) to either refer to emission standards applied by the regulations or by also referencing emissions standards applied via the ADRs (i.e. Schedule 1, sections 1 or 2).		
		Prior to this section moving from the HVNL to the regulations, s87 referred to the regulator approving a modification of a heavy vehicle if satisfied that 'the modified			



		<ul> <li>vehicle will comply with applicable noise and emission standards <u>prescribed by national regulations'</u> [see current s87(1)(b)(i)].</li> <li>The drafting of this new clause has <u>limited</u> this to the regulator being satisfied that 'the modified vehicle will comply with the applicable vehicle standards in <u>Part 8 of</u> <u>Schedule 2'.</u></li> <li>Under the national regulations there are two avenues that noise and emission standards are set: <ul> <li>Part 8 of Schedule 2.</li> <li>The application of ADRs that regulate emissions, including noise, particulates and gaseous, through Schedule 1, s1 or s2.</li> </ul> </li> <li>The drafting of s20 does not capture reference to the ADRs.</li> </ul>	
4	20 Approval of modification by Regulator 19(1)(b)(ii)	The following feedback was provided by the NHVR as part of Regulations Exposure Draft v2. These changes have not yet been reflected in the Public Consultation Exposure Draft.	Amend s20(1)(b)(ii) to refers to 'exemptions' as per the current 87(1)(b)(i) to cover both permits and notices.
		Section 20(1)(b)(ii) states that the regulator may approve a modification of a heavy vehicle if <i>'the Regulator is satisfiedthat the modified vehicle complies with the requirements of <u>the permit.</u></i>	
		This refers specifically to exemption by 'permit'. However, prior to the relocation of this provision from the HVNL, this section referenced the term 'exemption' (not just permits). Noise or emission standards may be granted by the NHVR by both permit and notices under Chapter 3.	

# NHVR Feedback – HVNL Amendment Bill and Regulation 2024



38	Schedule 1, Fees	Schedule 1 of the revised General Regulations only prescribes fees for fatigue and mass alternative accreditation, omitting the future general accreditation and any bespoke alternative accreditation options.	To enable the NHVR to appropriately administer heavy vehicle accreditation, it is suggested that the General Regulations: Prescribe fee for alternative accreditation Prescribe fee for general safety accreditation
Heavy Ver	nicle (General) National Regulation		
Clause	Name	Comment	Proposed Solution
N/A	26(1) Requirement to consult with PBS Review Panel	The NHVR requests that the requirement for the Regulator to consult with the PBS Review Panel in relation to the appointment of a person as a PBS assessor or certifier is removed from legislation (Recommendation 2 in the PBS Roadblock Paper).	Remove s.26 from the General Regulations.
		In the PBS Review Panel meeting of 11 July 2024, jurisdictions agreed to move assessor and certifier appointments fully to the NHVR. The NHVR was accordingly instructed to refer the amendment of s.26(1) to the NTC, as part of the HVNL Review. Minutes from the meeting are <b>attached</b> for the NTC's reference <b>(see Attachment C).</b>	
		The NHVR commends the recommendations in the PBS Roadblock paper, namely, to amend the HVNL and the PBS scheme, to provide a contemporised and more flexible set of arrangements that reinvigorate the innovation potential of PBS.	
7	31B Period for which permit applies	The NHVR requests that s.31B and its primary legislation counterpart (s.122) include the maximum period a permit may be issued for (i.e. three years), as this is a current requirement in legislation and there is no policy agreement for it to be changed.	Reinsert the three-year limit in s.31B of the General Regulations.
		The proposed legislation removes the three-year limit.	



7	31D Amendment or cancellation of permit on application by permit holder	The following feedback was provided by the NHVR as part of Regulations Exposure Draft v2. These changes have not yet been reflected in the Public Consultation Exposure Draft.	Reinsert the requirement for a prescribed fee in s.31D of the General Regulations.
		The Public Consultation Exposure Draft removes the prescribed fee for amendment or cancellation of work and rest hours permit (s.274(2)(c)).	
		Although a fee is not currently required for the application to amend or cancel a work and rest hours exemption permit, the NHVR emphasises that this may change in the future. If this occurs, an amendment would then be required to the regulations to facilitate this fee.	

### Heavy Vehicle (Fatigue Management) National Regulation

Clause Name		Comment	Proposed Solution	
4	9 Application for work and rest hours exemption (permit)	Current s.274(2)(c) of the HVNL states that an application for a for work and rest hours exemption (permit) must be accompanied by the prescribed fee for the application. That requirement is not included in s.9. Although a fee is not currently required for the application to amend or cancel a work and rest hours exemption permit, the NHVR emphasises that this may change in the future. If this occurs, an amendment would then be	Reinsert the requirement for a prescribed fee in s.9 of the Fatigue Management Regulations.	
11	19 Counting periods of less than	required to the regulations to facilitate this fee. The NHVR highlights an issue with counting rest times in 15-	To provide clarity on how to record rest times when a driver starts their rest	
	15 minutes – written work diaries	minute periods (s.19(3)). The current provisions state that rest time of less than 15	break at a time that is not a precise 15-minute period (i.e, 8:00am, 8:15am, 8:30am or 8:45am), the NHVR suggests that an example is included in s.19.	
	minutes must be disregarded (s.19(5)) and that rest periods T		The example should recommend that start/end times are moved backwards	

# NHVR Feedback – HVNL Amendment Bill and Regulation 2024



		must be counted in blocks of time of 15 minutes (s $19/3$ )	or forwards to the closest interval
		<ul> <li>must be counted in blocks of time of 15 minutes (s.19(3)).</li> <li>As written work diaries show four 15-minute periods per hour, a common interpretation of the provision is that a period of rest must correspond precisely with one of those 15-minute divisions in order to be counted.</li> <li>For example, if a driver rested from 8:20am - 8:40am, the 10 mins from 8.20 - 8.30 would be rounded down to zero, and the 10 mins from 8.30 - 8.40 rounded down too, because neither period could count as one of those fifteen min divisions in the work diary. The same logic would apply in counting longer periods of time.</li> <li>This interpretation would be impractical, as drivers do not have control of exactly when they will arrive at a suitable rest location. It may also create an incentive to make inaccurate entries in the work diary.</li> </ul>	<ul> <li>or forwards to the closest interval.</li> <li>For example, <ul> <li>if a driver starts their rest break at 8:20am, the start time that is recorded should be 8:15am (moved backwards to the closest interval).</li> <li>If a driver ends their rest break at 8:40am, the end time that is recorded should be 8:45am (moved forwards to the closest interval).</li> <li>The exact times should be recorded in notes.</li> </ul> </li> </ul>
12	21AA Application for work diary exemption (permit)	Current s.364 of the HVNL states that an application for work diary exemption (permit) must be accompanied by the prescribed fee for the application. That requirement is not included in s.21AA. Although a fee is not currently required for the application to amend or cancel a work and rest hours exemption permit, the NHVR emphasises that this may change in the future. If this occurs, an amendment would then be required to the regulations to facilitate this fee.	Reinsert the requirement for a prescribed fee in s.21AA of the Fatigue Management Regulations.
18	21F Regulator's power to grant fatigue record keeping exemption (permit)	The following feedback was provided by the NHVR as part of Regulations Exposure Draft v1. These changes have not yet been reflected in Regulations Exposure Draft v2. Section 21F has been created through the removal of s383 of the HVNL. Section 383(1) referred to 'a person' whilst	Refer to Parliamentary Counsel to ensure the intent of HVNL s383 is maintained.

# NHVR Feedback – HVNL Amendment Bill and Regulation 2024



		s383(3) specified that the 'regulator may grant a fatigue record keeping exemption (permit) to the operator'. This distinction has not been adopted in the new s21G of the fatigue regulation. This amendment, along with the change of heading, now suggests that this is a record keeping exemption for operators when it is actually an exemption for record keepers.	
13	21G Application for fatigue record keeping exemption [permit]	Current s.384 of the HVNL states that an application for fatigue record keeping exemption must be accompanied by the prescribed fee for the application. That requirement is not included in s.21G. Although a fee is not currently required for the application to amend or cancel a work and rest hours exemption permit, the NHVR emphasises that this may change in the future. If this occurs, an amendment would then be required to the regulations to facilitate this fee.	Reinsert the requirement for a prescribed fee in s.21G of the Fatigue Management Regulations.
Schedule 1 – HV(FM)NR Clause 3	s4A Prescribed operations requirements for driver fatigue	The proposed regulations include a prescribed operations requirements for record keeping or work diaries. This restricts any potential flexibility that an operator could gain under the reformed accreditation scheme, as the proposed prescribed operations requirements only enable work and rest hours alternative compliance options. The omission of record keeping accreditation options limits the reform's ability to allow alternative compliance accreditation to recognise operator diversity, provide flexibility for operators to meet their compliance obligations, and enable performance-based and contemporary compliance solutions.	Enable alternative compliance accreditation for record keeping and work diaries. This could be achieved by expanding the prescribed operations requirement under s4A to include record keeping provisions, or introducing a new prescribed operations requirement for record keeping provisions. By allowing alternative compliance accreditation for record keeping, the NHVR will be able to explore alternative record keeping options, such as the use of existing record keeping technologies (e.g. in vehicle monitoring systems) and novel and performance-based record keeping practices. It will also better enable emerging technologies to be considered in the future.



н	Heavy Vehicle (Mass, Dimension and Loading) National Regulation					
N	N/A	3 Length – Combination or single vehicle 4 Length – Trailers	As outlined earlier, the NHVR understands the required swept path analysis has been undertaken to satisfy the ITMM requirements to include the increase in length in the legislation (and regulations).	Include the increase in prescriptive length for heavy vehicles to 20m.		
		5 Length – Rear overhang				



## PERFORMANCE BASED STANDARDS Removing Roadblocks to Reform

Pathways to greater productivity, safety and sustainability in Australia's heavy vehicle industry

MAY 2024

## **ABOUT THE NHVR**

#### **National Heavy Vehicle Regulator (NHVR)**

### The NHVR is Australia's dedicated statutory regulator for all heavy vehicles over 4.5 tonnes gross vehicle mass or aggregate trailer mass.

#### We were established in 2013 as a statutory authority pursuant to the Heavy Vehicle National Law (HVNL).

### **OUR PURPOSE**

We provide leadership to, and work collaboratively with, industry and partner agencies to drive sustainable improvements to safety, productivity and efficiency outcomes across the Australian heavy vehicle road transport sector.

### **OUR VISION**

Delivering safe, efficient and productive heavy vehicle movements supporting a strong and prosperous Australia.

### **OUR MISSION**

Through leadership and advocacy we administer a national statutory system to deliver streamlined regulatory services and administration to the heavy vehicle road transport sector, minimising regulatory burdens while fostering greater safety and productivity.

## The NHVR's stakeholder profile 200,000 people in the Australian road managers road freight industry<sup>2</sup> under the HVNL 6 HVNI 51,000 Australian road participating

#### Australia's heavy vehicle profile<sup>1</sup>







103,038 articulated trucks



Australian Bureau of Statistics, 2018, 9309.0 - Motor Vehicle Census, Australia, 31 January 2019. Australian Bureau of Statistics, 2018, 6291.0.55.003 - Labor Force, Australia, Detailed, Quarterly, November 2018. Australian Bureau of Statistics, 2018, 8165.0 Counts of Australian Businesses, including Entries and Exits, June 2013 to June 2017. The Australian Capital Territory, New South Wales, Queensland, South Australia, Tasmania and Victoria. 3

jurisdictions<sup>4</sup>

freight businesses<sup>3</sup>

<sup>5</sup> NHVR, 2020, Registration demographics as at January 2020.



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# EXECUTIVE SUMMARY AND RECOMMENDATIONS

Right now in Australia, the safest, most productive and lower emission heavy vehicles face more barriers to get on the road than a standard 'prescriptive' heavy vehicle.

As a result lives are being lost, productivity benefits are being lost and emissions are higher than they ought to be. And despite having statutory responsibilities for the heavy vehicle fleet, the National Heavy Vehicle Regulator can do little to fix it.

This needs to change, and quickly. Key to this is modernising the Performance Based Standards (PBS) scheme and its legislative underpinnings.

When the PBS scheme was launched in 2007 it was the most sophisticated heavy vehicle scheme in the world. The scheme has been effective – over 100 deaths have been prevented, more than 1.2 billion less litres of fuel have been used and 3.2 million fewer tonnes of CO<sub>2</sub> have been emitted.

It has also proven popular, with PBS vehicles being adopted in numbers far exceeding initial expectations. The volume of PBS vehicles on Australian roads continues to grow year on year.

This success is also a sign of the scheme's failings. PBS was meant to be a pathway where a modest number of new innovative designs and technologies could be safely developed and deployed. But instead, the scheme is now dominated by more or less the same vehicles save for minor variations.

There are very few reasons that a vehicle design replicated many hundreds of times, which has proven itself over tens of millions of kilometres of travel, still requires specific approval to be built and a permit to use the road. However, the legislation provides no other pathway for these vehicles.

The cost to industry of getting design approval can be high. And once built, PBS vehicles are required to apply for a permit (or operate in areas defined by a gazette notice) in order to access specified areas of the road network. These upfront and ongoing costs are inevitably borne by the Australian consumer.

#### **Recommendation 1**

Amend the Heavy Vehicle National Law to provide clear pathways for proven designs to exit the PBS scheme, which:

- Allow proven vehicle designs to be built and operated without requiring either a design approval or approval of the 'as built' vehicle within a specified network.
- Allow PBS vehicles which have lesser impact than a prescriptive vehicle to access the general freight network.
- Allow 'template vehicle designs' to be specified by the NHVR, enabling these to be built and operated without a design approval (but still requiring approval of the 'as built' vehicle) within a specified network.

The process for approving vehicle designs needs to be simplified. Legislation requires that the NHVR consult a PBS Review Panel before determining a design application. The design approval looks at whether the technical requirements of the performance standards are met, yet jurisdictional representation on the Panel has tended to come from an asset management rather than an engineering background. While questions of road impacts are central as to whether a vehicle should get access to the road network, it is NHVR's view that views on access should be separate to whether a vehicle meets the performance standards. As it stands, the Panel arrangement adds additional time to the design approval process, without adding significant value from an engineering perspective.

#### **Recommendation 2**

- Amend the Heavy Vehicle National Law to remove the requirement for all design applications to be referred to the PBS Review Panel for advice, and instead provide provisions for the NHVR to consult where it considers additional engineering expertise is required.
- A mechanism, separate to the design approval process, should be established, to provide jurisdictions with the opportunity to comment on potential access impacts associated with a new design.

The standards which underpin the scheme can only be changed by joint agreement of jurisdictional transport agency officials and subsequent approval by all Australian transport ministers. Not only is this counterintuitive given the heavy vehicle mechanical engineering expertise (and statutory responsibility for safety) sit with the regulator, it's also inefficient. For example, the NHVR's attempts to change one of the standards has taken more than four years to progress. Under these arrangements it is impossible for the performance standards to keep up with new technologies and latest research findings.

#### **Recommendation 3**

• Amend the PBS Standards and Vehicle Assessment Rules and other operating documents to transfer decision-making responsibility for changes to the NHVR Board.

The above recommendations are not revolutionary, but nonetheless would be transformative. In fact, these reform proposals are not new and should not be controversial.

The 2022 review of the Heavy Vehicle National Law by Ken Kanofski made similar recommendations. Consistent with the call to 'let the regulator regulate,' Kanofski's recommendations included making changes to PBS governance arrangements, establishing a mechanism to take established designs out of the PBS scheme, and linking of PBS approvals with guaranteed road access.

However, despite Ken Kanofski's recommendations being supported by transport ministers, no progress has been made towards their implementation. The review of the Heavy Vehicle National Law is now in its sixth year, and the Kanofski recommendations are not being adopted and do not appear to be supported by jurisdictional representatives.

Until this changes, there will be road deaths that could have been avoided, prospective productivity gains will not be realised, and efforts to meet Australia's net-zero emissions target will be frustrated.



## INTRODUCTION

#### Freight: Australia's backbone

The Australian economy is heavily reliant on an efficient road freight task. Road freight serves the most remote corners of the country and is integral to regional communities. In serving these vital needs, the process for getting road freight to where it needs to go should be as seamless as possible.

Australia's road freight industry has experienced consistently strong growth in recent decades, and this shows no sign of waning. Statistics show that 96% of the road freight task is performed by heavy vehicles (which represents less than 5% of all vehicles on-road). Between 2020 and 2050:1

- the total freight task is expected to increase 26%, but the road freight task will grow much faster, with 77% growth
- rail freight promises a more modest growth trajectory of 5.7%, reflecting the simple fact that it does not have the reach or flexibility of road freight
- by 2050, over 40% of all freight will be transported by road.

Australia's freight productivity and costs have stagnated since the 1990s.<sup>2</sup> More generally, Australia's productivity growth over the decade to 2020 was the slowest in 60 years. In response, we are seeing a new productivity agenda emerging based around improved service delivery, adoption of new technology and the transition to a net zero carbon economy.<sup>3</sup> Road freight can make an important contribution to this renewed productivity focus, but to fully realise the benefits, the regulation of the heavy vehicle industry needs to change.

In this paper NHVR advocates for a shift in the regulatory environment and calls upon meaningful change to remove roadblocks to the productivity potential of the heavy vehicle industry specifically, and the national economy more generally.

A simplified way for determining what heavy vehicles can go on the road and where they can go, will not only underpin productivity related growth, but it will also create the incentives needed to accelerate the transition to a younger and less polluting heavy vehicle fleet. And even more importantly, it will save lives.

#### A step change in productivity - the Performance Based Standards scheme

The normal rules about heavy vehicle design are called the 'prescriptive' rules because they 'prescribe' what a heavy vehicle can look like and how heavy it can be (e.g. the length, width and mass). The prescriptive rules are set up so that if you fall within the prescribed limits, the vehicle should have the required level of safety for broad use on public roads.

With PBS, we can allow longer and heavier combinations on many of the same roads which we allow prescriptive heavy vehicle combinations. This is because PBS vehicles not only meet but often exceed safety levels compared to prescriptive vehicles.

Under the HVNL, the NHVR is responsible for the administration and oversight of the PBS scheme,<sup>4</sup> which is a national scheme designed to offer the heavy vehicle industry the potential to achieve higher productivity and safety through innovative and optimised vehicle and trailer design.

In simple terms, moving more with fewer, safer vehicles.

Between 2008 to 2022, the freight task performed by 16,000 PBS vehicles would have required 21,400 smaller prescriptive vehicles to complete. This means that PBS vehicles have effectively displaced the need for 5,400 trucks off Australia's roads over the period.

Bureau of Infrastructure and Transport Research Economics (BITRE) 2022, Australian aggregate freight forecasts - 2022 update, Research Report 154, Canberra.

Commonwealth of Australia, 2019, National Freight and Supply Chain Strategy, p. 7

Commonwealth Treasury, 2023, Working Future: White Paper on Jobs and Opportunities, p. 76. For more information on the PBS scheme can be found in the NHVR publication – <u>PBS an Introduction for Road Managers</u> or on the <u>NHVR website</u>.

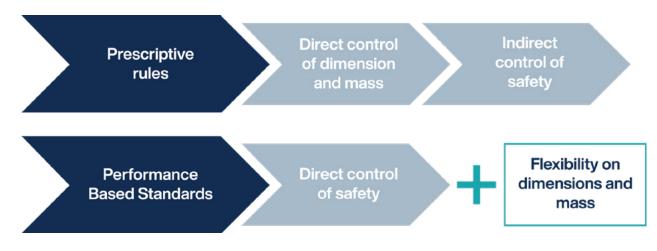


Figure 1. Prescriptive versus PBS rules (Source: Advantia Transport Consulting)

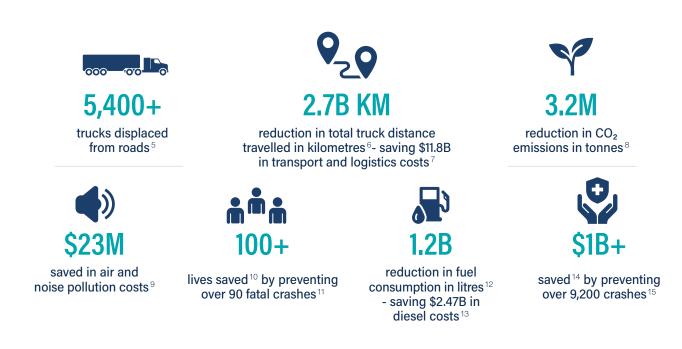


Figure 2. PBS benefits over time

14 Human capital cost approach adopted. 15 As per foot note 11.

<sup>5</sup> Based on nominated vehicle equivalencies. For example, a PBS A-double replaces a conventional B-double and a PBS B-double replaces a conventional semi-trailer etc. 6

Derived from: National Transport Commission (NTC), 2020, Operator Cost Model. Transport and logistics costs saved measured in terms of payload tonne kilometre efficiency. Based on the average cost per tonne kilometre and average payload across all commodities. Source: CSIRO's Supply Chain Transport and Logistics Dashboard. Data sourced on 8 September 2023.

<sup>8</sup> Based on the diesel (L) to CO2 (kg) conversion rate of 2.67. Source: Commonwealth of Australia, 2016, Australian Transport Assessment and Planning Guidelines – PV2 Road parameter values. Canberra.

Defaulted values, Caliberta.
 Commowealth of Australia, 2021, Australian Transport Assessment and Planning Guidelines – PV5 Environmental parameter values, Canberra.
 Lives saved is based on 1.14 deaths per fatal crash. Source: Frontier Economics & Australas, 2023, Decision Regulatory Impact Statement – National Heavy Vehicle Driver Competency Framework, p. 120.

The likelihood of a crash is dependent on the total distance travelled; crash rates per 1 million kilometres (sourced from Austroads and Frontier Economics, 2023, Decision Regulatory Impact Statement – National Heavy Vehicle Driver Competency Framework); and PBS crash factors (derived from The Chartered Institute of Logistics and Transport and NTARC, 2021, Review of Major Crash Rates for Australian Higher Productivity Vehicles: 2015-2019).
 Nominal fuel consumption formulae, inclusive of coefficients and assumptions, was sourced from: Commonwealth of Australia, 2016, Australian Transport Assessment and Dispace Cuidedinger. DV/O Read parameters upluse. Compares

Planning Guidelines - PV2 Road parameter values, Canberra. 13 Based on the quarterly average cost of diesel of \$2.0565. Source: Australian Bureau of Statistics (ABS), 2023, Consumer Price Index, Australia - Automotive fuel prices

increase for both unleaded petrol and diesel for period September quarter 2023

## The pinnacle of progress has become mired in the mainstream

The PBS scheme has widely been hailed as a resounding success and these benefits underscore the positive impact of PBS vehicles in our communities and for our economy. But has the PBS scheme evolved beyond its original purpose? Has the scheme, which was intended to spearhead innovation, now stagnated?

While it is the most sophisticated heavy vehicle scheme of its kind in the world, PBS now largely produces variations of existing designs. It no longer pushes engineering and ingenuity boundaries as much as it once did, and the scheme itself hasn't significantly changed since inception.

In 2023, the NHVR and external stakeholders collaborated to deliver Project London, which involved testing Australianfirst, double stacked B-double and B-triples against the PBS standards. Applying PBS principles, they embody the fundamental intent of the PBS scheme – sophisticated engineering, pushing boundaries and fostering unconventional thinking, to double productivity while maintaining the highest levels of safety.

So, what factors have led to the halt in progress, and what will be lost if action is not taken now?

#### **National challenges**

Australia has benefitted immensely since the introduction of the PBS scheme in 2007 (Figure 2). But while the economic, technological, government and fleet landscape has changed considerably, the PBS scheme to its detriment, has not. The need for reform of the PBS scheme was reflected by Ken Kanofski in his 2022 assessment of the HVNL and its review processes. The Kanofski Review<sup>16</sup> recommended changes to PBS governance arrangements, the elimination of established designs from the PBS process, and linking PBS approvals with networks (i.e., guaranteeing access). Despite the acceptance of these recommendations by transport ministers, reform remains at a standstill. There is an opportunity to expedite the HVNL Review to progress these reforms.

PBS vehicles with a demonstrated and successful track record have earnt the right to operate on Australia's roads, just like prescriptive vehicles. Yet many proven and tested PBS vehicles are denied this right, and must keep jumping through regulatory 'hoops' to use the same roads as prescriptive vehicles despite being better for the environment and safer for communities. This is unnecessary and a drag on national productivity.

Australia is also facing an acute shortage of heavy vehicle drivers. Many trucking enterprises are experiencing considerable financial pain due to being unable to source skilled heavy vehicle drivers, as unused fleet vehicles still incur significant costs, as well as having negative implications for productivity, inflation and the economy. Expediting the removal of proven PBS vehicles from the PBS process can help alleviate this driver shortage by reducing the total kilometres and number of trips travelled by trucks. This reduces the pressure on operators to source additional scarce labour and helps mitigate rising freight costs.

The challenge is to ensure that such mature and proven PBS vehicles are allowed to transition to the prescriptive vehicle fleet. This will help ensure that the PBS scheme remains focussed on more innovative outcomes, as it should be. To this extent, the legislative focus of PBS scheme must be geared towards the exceptions, rather than what has now typically become mainstream within the PBS scheme.





## **CHAPTER 1. OVERVIEW OF THE PBS SCHEME**

#### Australia's heavy vehicle fleet

Australia boasts the world's most diverse heavy vehicle fleet (vehicles over 4.5t), which can be broadly classified into two distinct, yet complementary fleets:

- The prescriptive fleet are vehicles that adhere to the mass and dimension limits outlined in the HVNL and its subordinate regulations. These limits were established by ministers and ensure safe road operation without the need for specific vehicle assessments, essentially representing standard 'offthe-shelf' vehicles.
- The **PBS fleet** are vehicles participating in a voluntary scheme operating alongside the prescriptive system. The scheme enables Australia's heavy vehicle industry to be innovative and creative, designing and matching bespoke vehicles with specific tasks. The bespoke designs offer a high degree of engineering specificity compared to prescriptive vehicles.

PBS is a quid-pro-quo process, where improved productivity is the reward for successfully passing a stringent process to guarantee safety. Although larger and/or heavier, they are designed and built to deliver equivalent or superior on-road performance than their prescriptive counterparts, owing to rigorous assessment against vehicle safety and infrastructure standards (Figure 3).

For example, a 30m PBS Level 2 A-double demonstrates superior low-speed swept path performance compared to a prescriptive 9-axle 26m B-double (8.4m vs. 8.7m). The improved turning capability of the longer 30m PBS A-double is achieved through the inclusion of an extra articulation point between the dolly and rear semitrailer<sup>17</sup> (Figure 4).

#### **Key facts**

For a 10 million km freight task, a PBS A-double can:

- Carry a higher load
- Travel 160,000 fewer kilometres
- Save 64,000 litres of fuel
- Save 170 tonnes of CO<sub>2</sub>
- Has half the crash rate of a prescriptive B-double.



#### What was the original intent of the PBS scheme?

In the late 1990s, Australia witnessed an economic resurgence, having largely overcome the earlier recession. This marked the onset of a new era of business and economic expansion, propelled by low inflation, population growth, and microeconomic reform.

This economic growth and elevated living standards led to a surge in demand for goods. It was within this context of heightened freight demand that the PBS scheme and its underlying policy framework emerged.

The then National Road Transport Commission (now National Transport Commission/NTC), sought to create a more innovative, sustainable and flexible way of transporting the increasing volume of goods by road. This sentiment is reflected in their 2001 submission<sup>18</sup> to the Council of Australian Governments (COAG).

The intent of the scheme "is to develop a performance-based standards approach to dealing with heavy vehicle innovations, through a national and consistent system for the first time ... It provides a better framework than the current conventional approach for much needed innovative solutions across the whole heavy vehicle fleet to meet future freight demands, which are predicted to double over the next fifteen years.

PBS will provide a more comprehensive approach to ensuring heavy vehicles operate safely and that road and bridge assets are protected. It will ensure that poorly performing vehicles are unable to slip through the approval process and build in systems to ensure a high standard of compliance."

#### A revolutionary scheme, with inherent constraints

The PBS scheme and procedures were established prior to the HVNL and existence of the NHVR, to meet the intent of the COAG principles. The NTC, as the national authority at the time, oversaw the administration of these processes with guidance and control from transport agencies.

With the introduction of the HVNL, a comprehensive legislative framework emerged, extending beyond PBS, to harmonise access regulation and processes across jurisdictions. While the fundamental rules and procedures remained largely unchanged, the administration shifted to the NHVR.

The way these rules and processes emerged served a purpose at a point in time, and ensured that concerns that various jurisdictions had about passing responsibilities to a national regulator were addressed. However, they are no longer fit for purpose. The operation of the scheme needs to reflect today's risks and level of the scheme's maturity, not the uncertainties and perceived risks at the time of the scheme's development.

Red tape has been exacerbated because the development of vehicles under the PBS scheme and decisions about where such vehicles can be used have been conflated.

The scheme in its existing state, and the legislation supporting it, need to be modernised. There is a need for a more flexible and responsive framework and a holistic review of roles and responsibilities. The current review of the HVNL should be harnessed to drive these improvements sooner rather than later.

17 NHVR Performance Based Standards, An introduction for road managers May 2019 18 National Road Transport Commission, 2001, Performance-Based Standards Policy Framework for Heavy Vehicle Regulation Regulatory Impact Statement, Melbourne

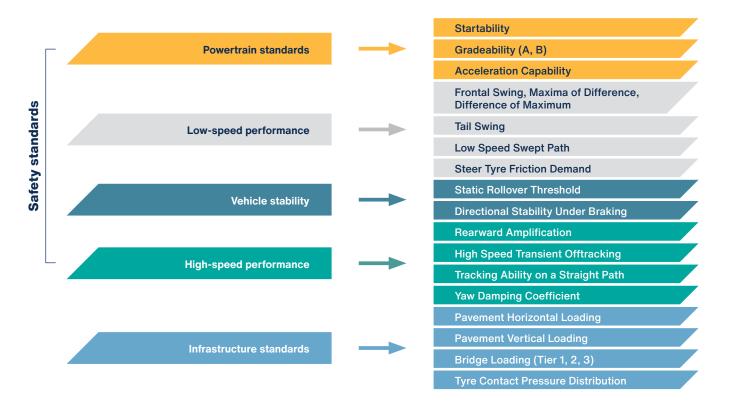


Figure 3. PBS Standards

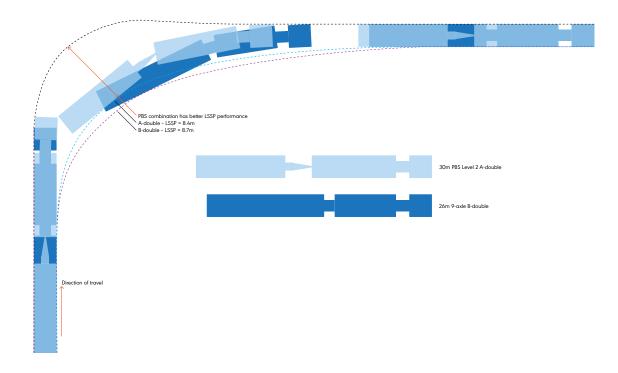


Figure 4. Swept path of a PBS level 2 A-double compared with a prescriptive 9-axle B-double

### Nov 2000

The NTC began drafting the Performance Based Standards Policy Framework for Heavy Vehicle Regulation and finalised this in May 2001, together with the Regulatory Impact Statement, which the Australian Transport Council (ATC) endorsed, along with the adoption of the scheme.



0

## Feb 2006

The Council of Australian Governments (COAG) endorsed the PBS scheme.



1999

The PBS scheme was initiated as a partnership arrangement

between the NTC, Australian Road Research Board (ARRB),

Austroads, Commonwealth,

state and territory transport

To ensure that the developed

with the Australian heavy

vehicle fleet at that time, the NTC commissioned a report on the performance characteristics of the Australian

heavy vehicle fleet.

PBS standards were compatible

agencies, and industry.

Feb 2002

Implementation and administration of the PBS scheme by the NTC.



#### October 2012

PBS scheme incorporated into the HVNL.



## Feb 2014

HVNL commenced, and administration of the PBS scheme transitioned from the NTC to the NHVR.



The NTC PBS Marketplace Review, which evaluated the PBS scheme and provided recomendations for improving its efficiency and effectiveness, was endorsed by the Transport Infrastructure Council (TIC).

Figure 5. Timeline of key events



# CHAPTER 2. WHY SHOULD ANYONE CARE ABOUT PBS?

NHVR believes that the PBS scheme has been popular and operating well. It is broadly achieving the high level 2006 Council of Australian Governments (COAG) endorsed objectives of the PBS scheme:

- Improved freight productivity
- Reduced impact on the environment via lower vehicle emissions and  $\mbox{CO}_2$
- Reduced impact on society due to reductions in road trauma and congestion.

PBS is more than just productivity for industry and contribution to the economy. There is an implicit relationship between road freight activity, and safety and environmental externalities impacting people and the community.

It may be counterintuitive to think that bigger and heavier is safer and more environmentally friendly, but that is the reality of PBS. This Chapter demonstrates the criticality of why Australia should be embracing both uptake of PBS vehicles, and mainstreaming them into the everyday fleet.

#### **Reflecting on our objectives**

#### COAG Objective 1: Improved freight productivity

#### Letting PBS vehicle numbers tell the story of its popularity

In 2022, there were more than 4,000 transport operators in the scheme, with approximately 16,000 PBS combinations in their fleet.<sup>19</sup> This has effectively displaced over 5,400 extra trucks from our roads.

In the five years leading up to 2022, the PBS fleet almost doubled under the NHVR administration, compared to slower growth prior to transition.

In 2023, growth more than doubled compared to the average annual uptake over the previous five years (approximately 4,000 combinations). NHVR believes that a key factor in this record growth is the simplification of tyre management for PBS combinations<sup>20</sup>- the single largest reform to the PBS Scheme since its inception.

There is no doubt that the PBS scheme is being adopted in record numbers. Importantly, the PBS uptake rate is exceeding BITRE's road freight task growth rate, meaning PBS vehicles are replacing the prescriptive fleet faster than expected (Figure 7).

BITRE  $^{21}$  projects the total freight task to grow 25% between 2020 – 2050, with the road freight task to grow by 77%. Table 1 presents a distribution of this task between freight modes.

As of 2022, based on payload and distance travelled, PBS vehicles make up about 6% of the total freight task and 21% of the road freight task.  $^{\rm 22}$ 

There may come a point where combinations that have had their origins within the PBS scheme encompasses the entire fleet. Our challenge is to bring that reality to fruition sooner rather than later, albeit without the arduous PBS approval and permit processes.

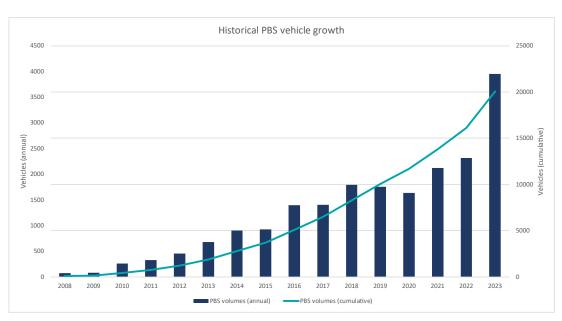


Figure 6. Historical PBS vehicle growth

<sup>19</sup> As of 8 January 2024, there are 20,063 PBS vehicles within the fleet; however, modelling contained within this report has been based off 2022 volumes. 20 Refer to the Generic Tyre Approach on the NHVR website at <u>www.nhvr.gov.au/road-access/performance-based-standards/pbs-review-project/generic-tyre-approach</u> 21 BITRE, 2022, Australian aggregate freight forecasts – 2022 update, Research Report 154, Canberra 22 ABS, 2022, Survey of Motor Vehicle Use, Australia

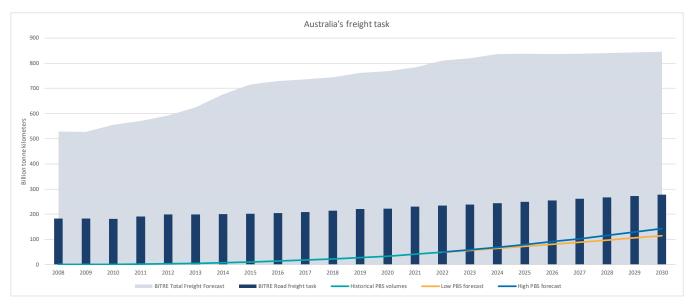


Figure 7. PBS freight task growth in the context of Australia's freight task growth

Table 1. Freight task mode distribution projections 2020 - 2050

Year	Road	Rail	Freight mode Coastal (billion tonne kms)	Air	Total
2020	222.9	433.2	111.4	0.3	767.9
2050	393.7	457.8	110.1	0.6	962.2
Growth	76.6%	5.7%	-1.2%	100.0%	25.3%

#### COAG Objective 2: Reduced impact on the environment in regard to vehicle emissions and CO<sub>2</sub>

For the year to September quarter 2023, the transport sector accounted for 21.2% of Australia's emissions, an increase of 4.5% over the previous year.23 Although road freight constitutes only 4%<sup>24</sup> of all vehicles on Australia's roads it disproportionately contributes 38% of transport emissions,25 and consumes 23% of overall road transport fuel requirements.<sup>26</sup>

Transition to rail will not achieve decarbonisation targets, as rail growth is predicted by BITRE (2022) to grow only 5.7% to 2050 compared to 77% growth for road freight. To achieve Australia's net zero targets, change needs to occur within the heavy vehicle road freight sector. Support and acknowledgement of the role of heavy vehicles in the transition to net zero is vital, and there is the opportunity to get the policy, regulatory and strategic settings correct now to properly support the role of more efficient PBS heavy vehicles in emission abatement activities.

#### **Key facts**

Between 2008 and 2022, PBS vehicles have saved an estimated:

- 1.2 billion litres of fuel and \$2.47 billion in fuel cost
- 3.2 million tonnes of CO<sub>2</sub>
- \$22.5 million of societal costs related to air pollution.<sup>2728</sup>

If PBS operations were to be optimised and barriers removed, we anticipate that the scheme has the potential to save from 2023 - 2030:

- · 3.2 3.8 billion litres of fuel
- 8.5 and 10.1 million tonnes of CO<sub>2</sub>
- \$47.1 \$55.6m societal costs related to air pollution (e.g. health and amenity)

Significant volume of CO<sub>2</sub> also represents a mortality cost. 4,434 tonnes of CO<sub>2</sub> has recently been estimated as representing one life over 80 years. 29 30 31

#### **Key facts**

Between 2020-2030, PBS vehicles are forecast to:

Save up to 2,277 CO<sub>2</sub> related deaths

Save over \$10 billion from a value of statistical life perspective<sup>32</sup>

<sup>23</sup> Department of Climate Change, Energy, the Environment and Water, Quarterly Update of Australia's National Greenhouse Gas Inventory, September 2023. 24 Electric Vehicle Council and the Australian Trucking Association, 2022, Electric trucks: Keeping shelves stocked in a net zero world, p. 4 25 Electric Vehicle Council and the Australian Trucking Association, 2022, Electric trucks: Keeping shelves stocked in a net zero world, p. 4

<sup>26</sup> Department of Infrastructure, Transport, Regional Development and Communications, 2020, Heavy vehicle emission standards for cleaner air: draft regulation impact statement,

p.13, Canberra 27 Cost of air pollution includes health costs, building and material damage, crop losses

<sup>28</sup> Infrastructure and Transport Ministers, (2021), Australian Transport Assessment and Planning Guidelines PV5 Environmental parameter values, Canberra, ACT

<sup>29</sup> Bressler, R.D., 2021, The mortality cost of carbon, Nature Communications 12: 4467

<sup>30</sup> Rose, J., 2023, Estimating mortality cost of dominant cost of  $O_2$  emitted by items, applied to passenger vehicles, Renewable Energy and Environmental Sustainability 8:21 31 Schwartz, J., 2021, A carbon calculation: How many deaths do emissions cause? The New York Times (29 July 2021) 32 Value of statistical life (October 2023), Office of Impact Analysis, Department of Prime Minister and Cabinet, Australian Government

## COAG Objective 3: Reduced impact on society in regard to reductions in road trauma and congestion

In 2021, heavy vehicles were involved in about 15.4% of road crash fatalities, of which 50% were light vehicle occupants and 25% were vulnerable road users such as motorcycles, cyclists or pedestrians.<sup>33</sup> Note the heavy vehicle was not necessarily at fault in most cases, with 70% of fatalities involving a truck and a car being the fault of the car driver.<sup>34</sup>

While there are many factors affecting crashes, there is a relationship between the likelihood of a crash and network exposure.<sup>35</sup> By reducing the number of trucks required for the same freight task, we decrease total kilometres travelled and the frequency of interactions between trucks and other road users.

A joint investigation into major crash rates for PBS vehicles undertaken with the Chartered Institute of Logistics and Transport Australia (CILTA) and the National Truck Accident Research Centre (NTARC)<sup>36</sup> showed that, compared to the prescriptive heavy vehicles they replace, PBS vehicles are safer in every truck category and involved in:

- 60% fewer major crashes per 100 million kilometres travelled (payload agnostic)
- 33% fewer major crashes per 100 million gross tonne kilometres transported (payload dependent)
- Our model estimates that between 2008 and 2022 the PBS scheme has prevented a total of 9,259 crashes, including:
- 91 fatal crashes, saving 104 lives
- 880 hospitalisation crashes
- 1,212 non-hospitalisation injury crashes
- 7,075 property damage only crashes.

Looking ahead to 2030, the PBS scheme has the potential to prevent an additional 26,052 to 30,216 crashes, saving between 293 and 340 lives.

Inaction and suppressing the growth of the PBS fleet may result in an unnecessary additional 4,164 crashes and 47 road fatalities.

33 BITRE, 2021, Road trauma involving heavy vehicles 2021 statistical summary, Canberra, ACT 34 NTI NTARC, 2022, Major Crash Investigation 2022 Report 35 Austroads, 2022, Consultation RIS – National Heavy Vehicle Driver Competency Framework 36 NHVR, CILTA & NTARC, 2021, Review of Major Crash Rates for Australian Higher Productivity Vehicles: 2015–2019

## **CHAPTER 3. LIMITATIONS OF THE PBS SCHEME**

While the PBS scheme has and will continue to deliver on its productivity, safety and sustainability outcomes, it is well known that barriers exist that have and will continue to prevent us from reaching the scheme's full potential.

The scheme cannot truly be successful if it is complicated and cumbersome. Feedback received from our stakeholders is that the current approach is inefficient, and outdated processes are enshrined in the Heavy Vehicle National Law (HVNL) and its subordinate regulations.

This Chapter highlights key issues that the NHVR has experienced and those raised by stakeholders which are inhibiting the PBS scheme's ability to permeate through the entire heavy vehicle fleet.

#### A leader of standards, or lagging behind?

The PBS scheme was intended to push the boundaries of engineering - be a leader in heavy vehicle innovation and inspire the prescriptive fleet to adopt safer and more sustainable designs.

While the performance of the prescriptive fleet has evolved, the technical standards for the PBS fleet by which their performance is assessed have remained largely unchanged, despite significant technological advancements in the overall heavy vehicle fleet in the last few decades.

The key issues are:

- Issue 1: Even as administrators and technical experts, the NHVR still do not hold the authority to amend the PBS Standards
- Issue 2: There are no established processes that enable the NHVR or its stakeholders to efficiently update the PBS Standards
- Issue 3: There is no opportunity to expedite the testing and inclusion of new technologies into the PBS scheme.

#### Issue 1

The Heavy Vehicle (General) National Regulation dictates procedure for granting a PBS vehicle approval.<sup>37</sup> According to the Regulation, <sup>38</sup> the PBS Review Panel (PRP) must have regard to the Standards and Vehicle Assessment Rules when evaluating an application for PBS approval.

The Rules in turn specify that any modifications to them can only be made by the National Transport Commission (NTC) with the approval of responsible ministers, or senior officials of transport agencies for minor administrative amendments.

Despite the NTC transferring its operational and technical matters to the NHVR upon enactment of the HVNL, they have retained their powers to progress standards amendments. Under the current HVNL Review, there is an opportunity to streamline processes and make NHVR primarily responsible for delivering changes to the PBS Standards and Vehicle Assessment Rules. Such reform would help expedite long overdue amendment to current PBS Standards, whilst still ensuring ministerial oversight of significant reforms.

#### Issue 2

In the 16 years since inception, there has been minimal change to the PBS Standards. The introduction of the revised approach to tyre management in 2022 was the first wholesale change, resolving an issue which existed for more than a decade. The NHVR believes this is a key factor in the sharp rise in PBS Vehicle Approvals issued over the past 12 months.

To ensure ongoing evolution of the PBS Standards, we need efficient processes that enable the NHVR and stakeholders to put forward proposals to update entire standards or an aspect of a standard, or to introduce new standards. As noted in the following case study, it has taken four years to get agreement on changes to the standard related to pavement horizontal loading impacts. Such processes are a clear handbrake on productivity.

#### Issue 3

The innovative nature of the PBS approach means vehicles do not always have to comply with the standards and regulations applied to prescriptive vehicles.

The granting of exemptions from certain standards and regulations, such as those contained in the Australian Design Rules and HVNL subordinate regulations, allows for innovation and unique vehicle designs.

To further spur innovation, the range of exemptions available to PBS vehicles could be broadened, where it can be demonstrated that safety will not suffer.

#### Case Study 1 - Four Years to amend a Standard: Pavement Horizontal Loading

When the PBS standards were first established, a performance-based approach for assessing the pavement horizontal loading standard (PHLS) did not exist. The original PHLS is a prescriptive assessment method based on the mass of a vehicle (i.e. contrary to the performance aspects of PBS).

In 2019 NHVR proposed setting the PHLS back onto the right path by making it a performance-based measure. Following a two-year development process, involving transport agencies and industry, NHVR's proposal received in-principle approval from transport ministers in May 2021, pending one jurisdiction being satisfied with the approach. This led to a further two years of engineering analysis and technical evaluation, after which NHVR's proposal was validated without amendment. The final stage of formal acceptance was completed in April 2024 - four years after work commenced

For PBS vehicles to remain at the forefront of innovation, the scheme MUST be supported by dynamic standards. In this context, a four-year process to reach agreement, on a proposal which did not change, to significantly evolve the standards, is far too long.

<sup>37</sup> Part 2 of the Heavy Vehicle (General) National Regulation 38 Part 2, Section 5 of the Heavy Vehicle (General) National Regulation

### The PBS cost barrier is a significant participation deterrent

Our stakeholders have told us the costly PBS scheme is an obstacle to broader take up of PBS vehicles across the freight industry.

The prescriptive fleet is much cheaper and easier for operators to navigate. Vehicles are available somewhat 'off-the-shelf' with access arrangements known in advance. The vehicle may not be ideally suited to an operator's particular task, it may cost more to run over the long term, create more  $CO_2$  and have fewer safety features, but it is a readily available and well understood option.

On the other hand, PBS vehicles have to go through a costly design and approval process, and there is usually no guaranteed access to the road network. This happens even if it is the 100th iteration of a vehicle previously approved under the scheme.

And the costs can be significant. For example, the cost of engaging someone to design a PBS A-double variant that is largely the same as a previous design, is in the order of \$8,000-10,000. For exceptionally innovative vehicles<sup>39</sup> the design costs can exceed \$120,000.

Compounding the situation is a lack of access certainty. Industry therefore wears the risk of upfront investment and potentially having an asset parked in a yard, unable to move and generate revenue. Even though the vehicle meets performance standards, its usage may be restricted by road managers who have an obligation to protect and prolong the life of their road assets and public safety, and may not grant access.

The overall cost and commercial risk discourages smaller operators from participating, leaving PBS predominantly a scheme for the 'big end of town'. Transitioning well proven vehicles out of the PBS process, and guaranteeing access based on existing vehicle access, minimises these deterrents.

# PBS access requirements impose costs on industry, governments, and ultimately, consumers

Under the HVNL, a heavy vehicle must obtain a permit to access the road network. A Notice serves as an instrument that provides access to a certain class/type of vehicle without the need to obtain a specific permit. PBS vehicles are designed and built to operate on networks appropriate for their level of performance, with access arrangements determined accordingly. For example, a 20m long truck and dog combination would be afforded greater levels of access compared to a 60m long BAB Quad road train (i.e., the truck and dog is a better performing combination from an access perspective compared to the BAB Quad).

But there is little incentive for industry to participate if they cannot reliably obtain access. Most PBS vehicles require access permits to use the road network, and the rigmarole and uncertainty associated with obtaining a permit can be discouraging for many operators.

PBS access permit data from FY19 to FY23 indicates:

- 61,710 access permit applications submitted by industry (63,590 for non-PBS freight vehicles)
- **191,760** consent requests to road managers to assess access (162,060 for non-PBS freight vehicles)
- 12.9 days average road manager turnaround (8.8 days for non-PBS freight vehicles)
- 7.5% refusal rate (4.2% for non-PBS freight vehicles).

Obtaining an access permit can take anything from a few weeks to several months, or even years in some cases. It must be acknowledged that some delays are for good reasons, such as a road manager wanting a structural assessment of a bridge they control before they decide whether it can accommodate a particular vehicle. This is good asset management practice.

However, the number of well understood PBS vehicles needing access permits to travel well understood roads remains high. This imposes unnecessary costs on industry, on the NHVR in administering access permits, and road managers which must consider each application and make an access decision. These productivity losses can be minimised and in many cases avoided all together.

### Key facts

Between 2023 - 2030 the NHVR estimates there could be:<sup>40</sup>

- Up to 140,000 access permit applications submitted
- Up to 452,000 consent requests to road managers
- Almost 1.2 million hours spent by industry and road managers on permit administration
- Up to \$9.2 million Net Present Value (NPV) spent by industry on permit fees
- Up to \$67.5 million spent by industry and road managers on labour costs.

Despite far fewer PBS vehicles compared to the prescriptive fleet, PBS represents a disproportionate amount of access permits and their associated administrative processes and costs.

As PBS grows in popularity, the regulation and processes must be changed to ease the economic burden. The larger prescriptive vehicles used to be treated differently, and they are now mostly incorporated into law and supported by numerous access instruments. We need to achieve the same outcome for PBS vehicles, especially where PBS vehicles have a lesser impact than prescriptive vehicles yet don't have access to the general freight network.



<sup>39</sup> NTC, 2017, Assessing the effectiveness of the PBS scheme Discussion Paper, Melbourne

<sup>40</sup> Assumptions: Base year applications: 16,200, Road manager multiplier: 3.23; Base permit fee: \$83; Permit admin. time: 2hrs; Permit avoidance rate: 0%; Discount rate: 7%; Industry labour wages: ABS (AWOTE) Transport, Postal and Warehousing; Road manager labour wages: ABS (AWOTE) Public Sector.

# CHAPTER 4. WHAT IS STANDING IN THE WAY OF REFORM?

From its inception, the PBS scheme was a world first, with an ambitious agenda that sought to deliver innovative, industry-led solutions and efficiencies that maximised the delivery of freight across Australia.

More than two decades on from its original policy intent, it's fair to say that the PBS scheme has lost its edge.

### So what's gone wrong with the PBS scheme?

While the intent of the PBS scheme was transformative, the regulatory and procedural mechanisms have increasingly proven not to be fit for purpose, much to the frustration of all parties.

While technically robust, the operational limitations meant that the PBS scheme was destined to increasingly struggle as the scheme grew in popularity, both in terms of meeting its objectives and fulfilling its potential with industry.

Further, efforts to reform the PBS scheme have been met with obstacles, many of which persist to date. Even modest proposals for changes to the scheme have proved problematic. Some jurisdictions are more in favour of reform than others, and industry in general would like a much more ambitious agenda. NHVR believes that the productivity, environmental and safety benefits of reform are too important to be waylaid by a slow and incremental approach to change.

#### **Unburdening tried and tested PBS vehicles**

There are few compelling reasons why tried and tested PBS designs need to be captured within the costly and time-consuming PBS scheme. As already noted, navigating the scheme means taking on the risk that access for a PBS vehicle may be more constrained than a prescriptive vehicle that has greater impact on roads, is less safe and emits higher levels of CO<sub>2</sub>.

Some stakeholders have a preference for remaining within the PBS scheme given it carries a certain industry cache around performance. And the current constraints in the scheme's operations does create a market for the relatively small cohort of PBS designers and assessors. However, maintaining the status quo is a lost opportunity.

Transitioning PBS vehicles out of the PBS process to form the backbone of a higher performing conventional fleet - this is the vision to which we should all aspire.

A key reason for why the PBS scheme has not evolved to allow transition to occur is the difficulty in reaching agreement across the various stakeholders. Too often the focus is on the 'how' rather than the 'why', and hence there is not enough impetus to enable:

- Agreement on the exact vehicle designs that should be removed from the PBS process
- Development of a supporting access network tailored to the vehicle design
- Major amendments to the HVNL, and its subordinate regulations, to support the approach.

From NHVR's perspective, detail is not required at this stage. The outcomes above are not controversial and have already been endorsed by transport ministers following the Kanofski Review. At this time, the task is to ensure there is clear commitment to achieving these objectives.

In line with the Kanofski recommendations, the only realistic option is for proven mature and safe combination types to no longer be subjected to the PBS process. Major amendments to the HVNL must occur to enable this in a manner which does not impact upon existing PBS participation and access arrangements previously agreed by road managers.

PBS must be the bastion of the 'rare, weird and wonderful', while proven, safe and mature vehicles are considered the everyday and should be removed from the PBS process.

# Case Study 2 – Removing Truck and Dogs from the PBS process

The National Class 3 20m Long 3-axle Truck and 4-axle Dog Trailer Mass and Dimension Exemption Notice 2022 (No.2) serves as the case study of our first attempt to effectively take combinations out of the PBS process and into the 'normal' regulatory framework. The reform reflects the maturation of the PBS scheme.

Taking these common and well-understood truck and dog trailer combinations out of the PBS process, reduced the regulatory and cost burden for industry, and has allowed PBS to focus on new vehicle innovation.

For the truck and dog Notice to work, rigorous, tried-andtested templates (a range of vehicle schematics) were developed, learning from designs transacted through the PBS scheme. The combinations operating under the Notice are required to use these templates. Industry and transport agency agreement for new templates is a critical milestone for fleet exiting.

However, existing HVNL provisions are not sufficient to support an efficient removal of proven combinations from the PBS process. Legislative limitations meant established access arrangements for PBS truck and dogs did not seamlessly transition to combinations removed from the PBS process, thus resulting in a burdensome process to re-seek consent for the same combinations on the same networks from road managers.

For removal of common and well-understood combinations from the PBS process to occur effectively, pre-existing access arrangements must be preserved. The NHVR is working on A-double templates, a far more complex task than truck and dogs, with larger network risks and implications. In order to preserve existing network access arrangements, these templates are being specifically developed to align to the requirements stipulated in the National Class 2 Performance Based Standards (High Productivity) Authorisation Notice 2022 (No.3).

Outcomes of this work will serve a valuable case study for how the NHVR will address the rest of the fleet.

### The right levers for the right problem

It is recognised that the PBS scheme provides benefits that go beyond its primary purpose. For example, by requiring vehicles to pass through the PBS approvals and permit processes, road managers have a level of confidence that their road networks are being managed appropriately.

Data generated, as a by-product of these processes, can be used to inform maintenance schedules and infrastructure improvements (i.e., be used as a proxy for traffic counts).

Is this an appropriate use of the PBS scheme? Are there alternative means of providing road managers with a similar sense of comfort without the associated time and cost implications and loss of safety, productivity and environmental benefits?

We need to be using the right levers to solve the right problems. Exploring alternatives must be a policy imperative. In line with the Kanofski recommendations, the NHVR advocates for modernised governance arrangements to protect the integrity of the PBS scheme as the innovation test-bed for the next generation of safer and more productive heavy vehicles.

### **Road manager considerations**

Road managers are both access decision-makers and asset managers. In FY21, \$31.7b was spent on road-related construction and maintenance. Despite overall funding growing 27% over the last 10 years, local government funding has decreased by 8% in the same period.<sup>41</sup>

It is understandable that, given roads are a consumable and come at a cost with every pass of a vehicle, that road managers would take a cautious approach to access for heavier PBS vehicles. The natural outcome, from their perspective, is a desire to leave PBS vehicles within the PBS scheme.

Some states and territories have applied additional (in some cases conflicting) requirements on PBS vehicles by way of additional operating conditions such as reduced payload and time of travel. This has led to a fragmented access environment, which contributes to reducing the capacity for vehicle manufacturers to provide more innovative and productive heavy vehicles nationally.



Local governments have a responsibility to ensure that routes are suitable for heavy vehicle access. They are responsible for assessing and providing consent to the 'first and last mile' local roads, which represents a key part of the end-to-end route that vehicles use to access pick-up or delivery points. Given the limited resources, most local councils have conflicting priorities and also generally demonstrate a very cautious approach towards PBS vehicles, due to concerns about public safety and protection of their road assets and infrastructure. Their cautious approach has a relationship to their limited funding for infrastructure.

There is a general lack of understanding within local councils about PBS vehicles, and this can often lead to an emotional rather than an informed response when granting PBS vehicle access. It is often assumed that bigger unknown trucks will cause greater infrastructure wear, and this assumption is often based on the lack of knowledge about the benefits of PBS vehicles, the lack of guidelines on how to assess a PBS vehicle access application, resource limitations, and a reluctance in decision making due to the perceived risks.

This has led to localised decision-making, and inconsistent route and bridge assessments being undertaken across jurisdictions, often to the frustration of industry and distrust towards the PBS system.

Without a greater appreciation of PBS vehicles and consistency in their treatment by road managers from an engineering perspective, networks cannot be developed with the sufficient range and speed in order to support a transition of mature PBS combinations to the prescriptive fleet (i.e. access is a fundamental part of transition).

### A reluctance to let go

Despite outperforming most of the prescriptive fleet, PBS vehicles still predominantly operate under access permits – effectively a de facto traffic count. Keeping the PBS status quo provides road managers, who have a responsibility to protect their assets and therefore can be risk averse, with greater control over the vehicles operating on their roads.

Jurisdictional support for the scheme has always been conditional on the premise that state road managers have the power to conduct appropriate checks and balances to ensure their road assets are not degraded, along with safety considerations for PBS access.

The scheme is just as much about policies and procedures, and not just the technicalities of vehicles and access. Transport agencies have a dual role, as both policy makers and access decision-makers. These lines have become blurred, with the PBS Review Panel, comprising members from transport agencies, often deliberating matters unrelated to bettering the PBS scheme and therefore not advancing safety, productivity and sustainability.

These additional steps, as shown in Figure 8, have become the new-normal, causing the scheme to stray from its original intent by giving road managers discretionary authority on the direction of the scheme by using access consent as a veto power against change they are uncomfortable with.

This role and expanded PBS process became enshrined in the HVNL, however in doing so, it was never evaluated from the point of view of meeting the original PBS policy intent as devised long before the HVNL.

41 BITRE, 2022, Australian Infrastructure and Transport Statistics - Yearbook 2022, Canberra, ACT

### **Unnecessary layers of bureaucracy**

As a further hangover of these processes being enshrined in the HVNL, unnecessary layers of bureaucracy are a legacy where decision-making authority ought to have been devolved. For example:

- 1. The blurred lines of the PBS Review Panel
- Legislation requires that the NHVR consult the PBS Review Panel before determining a design application. The design approval looks at whether the technical requirements of the performance standards are met, yet jurisdictional representation on the Panel has tended to come from an asset management rather than a heavy vehicle engineering background.
- 2. Ministerial oversight of operational matters
- Existing guidelines for the appointment of PBS assessors and certifiers have limited scope for the management of assessors and certifiers where a regulatory response is required. This inflexibility in operational aspects of the scheme, can only be changed by agreement of transport ministers. In line with the Kanofski recommendation to 'let the regulator regulate' decision-making authority to manage operational aspects of the scheme should be vested in the regulator.

# Reform has been agreed, yet has stalled

A clear focus on returning the PBS scheme to its original objectives is required. The need for this reform measure has already been agreed to by transport ministers following the Kanofski Review. While agreement has been reached, the reform process has stalled, having become captive to the broader review of the HVNL.

Our vision for a reimagined PBS scheme is aligned to recommendations of the Kanofski Review as accepted by transport ministers:

- 1. Recommendation 2.8. That PBS approvals be better linked with access to networks:
- · Provide certainty of access for PBS Design Approvals.
- Recognise common and proven PBS combinations under gazette or in regulations and provide certainty of access through designated networks (i.e. take them out of the PBS process).

- 2. Recommendation 2.10. Proposed improvements to the PBS Scheme:
- Update PBS standards to reflect learnings over the last 20 years and recognise technologies where appropriate (NHVR has started this work it should accelerate if possible).
- Streamline governance of PBS scheme (nearer term) and continue to gazette networks for PBS vehicles, until online notices are developed.

However, the journey will not be easy. There will be obstacles and vested interests that stand in the way. Working together with our stakeholders is central to overcoming challenges and achieving the direction accepted by ministers

#### Case Study 3 - Review of the HVNL: Six years and counting...

In May 2018, the Transport Infrastructure Council endorsed a first principles review of the HVNL. A two-year consultation process resulted in no changes being made to the HVNL.

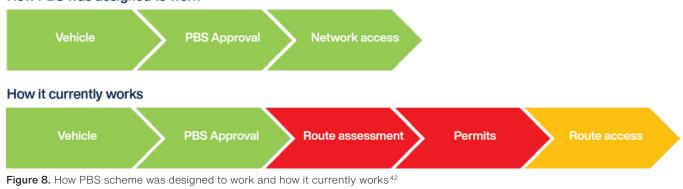
In 2020, and in lieu of substantive progress by the NTC, ministers appointed Ken Kanofski to undertake an independent review of the law-review process. Various legislative and non-legislative recommendations were made by Mr Kanofski, including item 2.10, which suggested improvements to the Performance Based Standards (PBS) approval process to maximise opportunities for safer and more productive vehicles. When the report was provided in 2022, transport ministers agreed to:

:...a package of propositions recommended by Mr Kanofski that will improve safety and productivity in the heavy vehicle sector. Ministers resolved to consider further advice from officials on the best mechanism to efficiently deliver this package of reforms across all jurisdictions.

However, this has not been reflected in the subsequent work on the review of the HVNL. In fact, some jurisdictional representatives have continued to argue that the ministerial communiqué did not constitute endorsement of the Kanofski recommendations.

As at March 2024, there has only been agreement to progress a minimal reform package for the HVNL Review, and this does not consider proposed improvements to the PBS scheme. Any potential PBS scheme-related amendments have been deferred to an unknown date in the future.

It is disappointing that after six years, changes to the HVNL that could save lives, increase productivity and reduce emissions remain nowhere in sight.



# How PBS was designed to work

42 NTC, (2017), Assessing the effectiveness of the PBS scheme Discussion Paper

# **CHAPTER 5. WHAT NEEDS TO CHANGE?**

# In its current iteration, the PBS scheme has hit its ceiling

Three things need to happen for the PBS scheme to be the spearhead of heavy vehicle innovation:

1. Well established designs need to be taken out of the PBS process. These vehicles have proven themselves over an extended period and there is no justification for continuing to subject these designs to a costly approval process and cumbersome access arrangements.

2. The standards underpinning the scheme need to be dynamic and reflective of new technology. The proven inflexibility in setting new standards or adjusting existing standards is a handbrake on innovation.

3. Usage of the PBS scheme for extraneous purposes must be discouraged. Where the current arrangements are used by road managers to achieve policy objectives unrelated to the PBS scheme (e.g. via the PBS Review Panel), NHVR need to help them find alternative mechanisms to meet these same outcomes.

### Failure to act is a choice to accept more deaths on roads, more pollution and ignoring the potential for improved productivity.

### What needs to be done

As the national regulator, we have canvassed the opinions of the broadest range of stakeholders on how to improve the PBS scheme. Reflecting on our role as the independent regulator and objectively assessing the merits of various positions to improve safety and productivity, we believe legislative reform to give effect to the Kanofski recommendations is required.

As such, and in-line with the Kanofski theme of 'let the regulator regulate', the NHVR recommends the following:

### **Recommendation 1**

Amend the Heavy Vehicle National Law to provide clear pathways for proven designs to exit the PBS scheme, which:

- Allow proven vehicle designs to be built and operated without requiring either a design approval or approval of the 'as built' vehicle within a specified network.
- Allow PBS vehicles which have lesser impact than a prescriptive vehicle to access the general freight network.
- Allow 'template vehicle designs' to be specified by the NHVR, enabling these to be built and operated without a design approval (but still requiring approval of the 'as built' vehicle) within a specified network.

These changes will enable mature combinations to transition to the normal regulatory framework and preserve existing Class 2 access arrangements while reducing regulatory impost on industry and road managers.

The process for approving vehicle designs also needs to be simplified. Legislation requires that the NHVR consult a PBS Review Panel before determining a design application. The design approval looks at whether the technical requirements of the performance standards are met, yet jurisdictional representation on the Panel has tended to come from an asset management rather than a heavy vehicle engineering background. The NHVR contends that views on access should be separate to whether a vehicle meets the performance standards. The NHVR therefore recommends:

## Recommendation 2

- Amend the Heavy Vehicle National Law to remove the requirement for all design applications to be referred to the PBS Review Panel for advice, and instead provide provisions for the NHVR to consult where it considers additional engineering expertise is required.
- A mechanism, separate to the design approval process, should be established to provide jurisdictions with the opportunity to comment on potential access impacts associated with a new design.

In addition to the above recommended changes to the HVNL, the NHVR recommends that:

# **Recommendation 3**

• Amend the PBS Standards and Vehicle Assessment Rules and other operating documents to transfer decision-making responsibility for changes to the NHVR Board.

Transferring responsibility, inclusive of statutory requirements for the NHVR to consult stakeholders, will allow the standards, and their management, to more expeditiously reflect contemporary best practice. As safety is paramount, this will ensure the performance standards keep up with new technologies and latest research findings

To support these recommendations, and ensure the PBS scheme is best positioned for ongoing success, state and territory governments must work with the NHVR and industry to:

- Reset the PBS scheme's policy settings to align with original COAG-agreed principles while incorporating current national economic, environmental and road safety objectives
- Update the PBS Standards by capturing the lessons of the last 20 years and removing unnecessary barriers to innovation either in the standards or associated regulations (safety and environmental)
- Develop appropriate policy settings and associated frameworks as appropriate levers to manage the impact of PBS vehicles on the road network (i.e., the PBS scheme, and permits associated with PBS access are not utilised as the mechanism to control non-PBS related problems).

Ambitious timeframes for these reform measures to be implemented are required. Industry confidence in the PBS scheme is vital not only for industry sustainability and national productivity growth but also for road safety and environmental targets to be met. A failure to act upon these reform measures is acceptance of the perverse outcome.

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# PBS REVIEW PANEL – MEETING # 68

# Thursday 11 July 2024 – Day 1 of 2

Date and Time	Thursday 11 July 2024 – 1300hrs to 1700hrs AEST		
Venue	NHVR Offices, Level 3, 76 Skyring Terrace, Newstead & Microsoft Teams		
Attendees	Neil Findlay (Deputy Chair)	Paul Langton (QLD)	
	Reuben John (NSW) – Observer (T)	Rod Paule (ACT) (T)	
	Sam Palermo (VIC)	Brent Thurley (TAS) (T)	
	Carlo Anzellotti (SA) (T)	Rich Bain (WA) (T)	
	Paul Sariban	Stuart Fyfe	
	Les Brusza	Josh Diyn (T)	
	Robert Gibson	Elle Petlivanova	
	Scott Britton	Gary Aguiar (T)	
	Matthew Mah	Jessica Wu	
	Toby Pickering (T)	Elnaz Pardis (T)	
Apologies	David Anderson (Chairman)	Gareth Prosser (Cwlth)	
	Scott Greenow (NSW)	Brett Graham (NSW)	
	Bryce Davy (ACT) – Observer	Rose Manuel (NHVR)	
	Daniel Stojicic (NHVR)		

(T) Participated remotely via MS Teams



# 1. INTRODUCTION

Acting Chairman Neil Findlay opened the meeting at 1:00 pm (AEST), welcomed all attendees, and noted the apologies from the above-listed members.

The agenda was reviewed and adopted without any modifications.

The minutes from PRP Meeting 67 for Day 1 were reviewed and approved by the panel, with a proposed amendment to for the Day 2 minutes to be discussed on Day 2 of Meeting 68.

Open action items from the Register of Actions from Meeting 67 were discussed,

# Action 1.1 – Meeting 66 NHVR will follow up on any research to do with tri-steer vehicles and if or when it becomes available present it to a future panel meeting or circulate it.

- NHVR (Rob Gibson) provided an update. Currently no additional literature or research data has been found dealing with the pavement impacts of tri-steer axle groups. The most recent relevant information comes from a 2016 AusRoads study into the pavement impacts of single and twin steer axles and tyre sizes.
- NHVR has extrapolated the results of this study to conclude that a tri-steer configuration will continue the trend to provide improvement in PVL impact per tyre – this position has not been validated. PHL impacts with twin and tri-steer configurations is still unknown.
- Item to be 'Closed' as there is no more information available.

Item	Action	Responsible Entity	Status	
Meetir	Meeting 66: Thursday 13 July 2023			
Agenda	Agenda Item 1 – Introduction			
1.1	NHVR will follow up on any research to do with tri-steer vehicles and if it becomes available, present it at a future panel meeting or circulate it. 11/07/2024 - Austroads study Research Report AP-R505-16 National Steer Axle Mass Limits covers twin steer but not tri-steer. Update provided to the Panel in Metting 68. No other research information available.	NHVR Robert Gibson	CLOSED No info available	

# • Action 3.3 – Meeting 66

NHVR to pursue a solution in the interest of safety that does not at this stage involve limiting the length of a draw bar in the hope that we can both improve more bridge access and provide safety for other road users.

- NHVR (Rob Gibson) provided an update. NHVR has found that there are no actual studies regarding accidents involving combinations with excessive drawbar length. NHVR is conducting a literature search and VA database screening to identify combinations with drawbar lengths exceeding 6m and cross reference VINs with known accident history.
- QLD advised that in their view longer drawbars do present as a safety risk, particularly where the ADR limit is exceeded.
- VIC advised that possibly additional lighting is required to indicate excessive drawbar length.
- Additional research and crash data required.

Item	Action	Responsible Entity	Status		
Meetin	Meeting 66: Thursday 13 July 2023				
Agenda	Agenda Item 3.3 – Combinations with Excessive Drawbar Length				
3.3.1	NHVR to investigate accident rates associated with drawbars exceeding 6m. 11/07/24 –NHVR is conducting a literature search and VA database screening to identify combinations with drawbar lengths exceeding 6m and cross reference VINs with known accident history.	NHVR Les Bruzsa	<b>ON-GOING</b> Require more Research and Crash data		



# • Action 1.1.2 – Meeting 67

# NHVR investigate how the new 2.55m ADR width standard is to be managed

- NHVR (Elle Petlivanova) advised that guidelines have been published to specify how over width vehicles are to be documented in VA applications by Certifiers,
  - Width documented in Certifer's Certificate and is then recorded on VA
  - Specific note added to drawing identifying over 2.5m in width
- Item to be 'Closed'.

Meeting 67: Friday 24 November 2023			
Agenda Item 1.1 – Over-width dimensions in DA and VA			
1.1.2	NHVR investigate how the new 2.55m ADR width standard is to be managed and if action should be taken against Smedley Engineers RE incorrect width in certification and link between certifier and assessor.	VIC Sam Palermo	CLOSED

## 2. DISCUSSION PAPER

### 2.1 PBS Removing Roadblocks to Reform

Paul Sariban (NHVR) provided the panel with progress of removing the roadblocks to reform of the PBS Scheme:

The paper was developed due to stalled progress on reform of the PBS scheme. It emphasises that failing to reform the PBS scheme will lead to increased road trauma, deaths, lost productivity opportunities, and unfavourable environmental outcomes.

The paper presents three key recommendations:

- Amend the HVNL to allow established designs to exit the PBS scheme easily, general access for low impact PBS vehicles and allowance of template vehicle designs.
- Amend the HVNL to allow the NHVR to consult on design applications where it deems necessary, eliminating the mandatory PBS Review Panel referral. A separate mechanism for jurisdictions to assess new design access impacts would be established.
- Transfer decision-making authority for changes to the PBS Assessment rules, and other operating documents, to the NHVR Board.

### The next step is -

The next step involves implementing an engagement strategy to broaden the discussion of PBS reforms beyond transportation, making it central to debates on productivity and environmental impact. This includes launching a series of informative social media posts highlighting the reforms' importance, sending letters to key officials such as Premiers, Treasurers, and Ministers of Transport and Environment, and participating in speaking engagements to advocate for support and understanding across various sectors.

### The paper proposes changes related to the PBS Review Panel -

- Remove the requirement for NHVR to consult the Panel before issuing a Design Approval under the HVNL.
- NHVR would consult the Panel only when specific engineering issues require further expert input.
- Establish a separate mechanism for early consideration of access decisions independently from the Design Approval process.

### The rationale for changing the HVNL includes –

- The inclusion of the Panel in the HVNL reflected a level of jurisdictional skepticism and mistrust towards the new regulator when it was established. The regulator has now been established for 10 years and the scheme is functioning effectively, which makes this the initial skepticism difficult to justify today.
- The Panel was intended to offer expert advice on interpreting and applying standards, necessitating expertise in mechanical engineering.



# The interim steps for the PBS Review Panel include -

- Any changes to the HVNL may take some time to finalise. Therefore, other options will be explored as part of a governance review of the Panel, such as:
  - Revising the PRP Business Rules to mandate that representatives possess mechanical engineering expertise for input during Panel deliberations.
  - o conduct and attendance protocols for Panel meetings.
  - letters to Ministers informing them of any upcoming changes and requesting representation of mechanical engineering expertise on the Panel.

## Discussion

- The key question is what is the focus of conversation with the PRP regarding applications? Is it about access issues or the meeting of the PBS standards?
- QLD, NSW, VIC and ACT expressed concern about specifying for PRP members to be professional engineers. They advised that access and technical requirements of PBS applications are linked, and that some PRP members bring many years of experience in the heavy vehicle industry, and are able to adequately address access/technical queries. Additionally, jurisdictions may not like restrictions/minimum requirements for their PRP representative and that this representative will ultimately be up to the jurisdiction.
- Deputy Chair It is expected that the role of the Panel would evolve over time as the NHVR and scheme matured. While it may be beneficial to have more engineering representation on the Panel. However, careful consideration must be given to ensure that the current level of industry experience and advice is not lost.

Meeting 68: Thursday 11 July 2024				
Agenda	Agenda Item- 2.1 Roadblocks to Reform			
2.1	NHVR to investigate changes to the PRP business rules that may be needed to streamline the operation of the Panel.	NHVR Paul Sariban	OPEN	

# 3. PBS OPERATIONAL UPDATES

### 3.1 PBS Vehicle Approvals Update

Elle Petlivanova (NHVR) provided a detailed update on the status of PBS vehicle approvals (VA). Key highlights are:

- NHVR has approved 21846 PBS combinations into the scheme.
- 4299 VAs issued year to date. A significant increase from 3590 VAs in the previous financial year.
- 36% increase in the number of unique VINs 8819 to 11950.
- Large increase in approvals for B-Triples and AB-Triples. The combinations were added to Victoria's HPFV Notice allowing the operation of B-Triples up to 135 tonnes.
- Truck and Dog combination numbers grew at a slower rate compared to the previous financial year.

### 3.2 PBS Assessor and Certifier Update

Paul Sariban (NHVR) provided the panel with an update on the PBS Assessor and Certifiers:

The NHVR has undertaken a thorough review of its Assessor and Certifier process with the assistance of Ernst & Young. The audit revealed some areas for improvement that were already known, and now the NHVR is moving forward with implementing changes based on these findings.

Specifically, the focus is on reviewing the Assessor Sign Off (ASO) processes, particularly around certification and the balance between desktop assessments versus in-person evaluations.

Additionally, Ernst & Young has been tasked with developing an assurance framework. This framework aims to establish a structured approach to ensure that the regulator has adequate assurance processes in place across different areas of its operations.



Looking ahead, there is anticipation of significant work in this area over the next 3-6 months.

# 3.3 PBS Designs Update

Robert Gibson (NHVR) provided the panel an update on Design Approvals (DA):

- 374 DAs have been issued year to date, and increase on the same time last year
- Turnaround time has increased slightly due to ongoing issues with the portal
- PBS Assessors
  - 16 Assessors Active, 1 Application Incomplete, 0 Renewals & 0 renewals required the next 12 months
- PBS Certifiers
  - 38 Certifiers Active, 1 Withdrawn, 1 Changed Employer, 3 New and 10 Renewals with 2 renewals required in the next 12 months

Meeting 68: Thursday 11 July 2024			
Agenda Item– 3.3 PBS Desings Update			
3.3	NHVR to refer changes to section 26(1) of the General Regulation to NTC as part of NVNL review. RE: Moving Assessor and Certifier appointment fully to NHVR.	NHVR Scott Britton	OPEN

# 4. TRANSPORT FOR NEW SOUTH WALES – PBS Reference Vehicles

# 4.1 Development of PBS reference vehicles based on maturing designs

Reuben John (NSW) provided members with reference vehicles based on maturing designs:

The discussion aims to explore incorporating common maturing designs into access notices. Agencies like Transport for New South Wales (TfNSW), VicRoads, and TMR have used existing designs to create reference vehicles for access instruments.

The main goal of the discussion item is to decrease the number of PBS cases requiring access approval by identifying commonalities in vehicle designs, similar to how A-Doubles were handled under the high productivity notice. At its core this could be done just for axle spacings to give a reference specification for minimum spacings that could be used as a baseline for network access consideration.

The NHVR is encouraged to proactively engage in this process, leveraging the insight it has into upcoming combination designs. The aim is to collaboratively develop reference vehicles, enhancing access and streamlining approval processes within the NHVR PBS team.

Meeting 68: Thursday 11 July 2024			
Agenda Item- 4.1 Development of Reference Vehicles based on maturing designs			
4.1	NHVR to convene a meeting with interested PRP members to provide overview of A-double axle spacings from as-built data and how this has been evaluated in the A-double template work.	NHVR Scott Britton	OPEN

# 5. APPLICATIONS FOR CONSIDERATION (Design Approval Application)

# 5.1 V240322 – Transport for NSW - BAB Quad

The Panel discussed the NHVRs recommendations for application V240322 – BAB-Quad (3-4-3-3-4). This application required both Section 8 and Section 9 exemptions for Startability, Gradeability (A, B), PVL and PHL.

The Panel recognised the complexity of this application due to it being a livestock transporter, higher mass limits and required exemptions. It was noted that the combination addresses stability issues with livestock transporters by utilising wider track widths and super single tyres. The super single tyre size was noted as being unusual and may be an issue for supply.



It was noted that this application was related to a similar combination that had been voted for by the Panel using the online voting system. Due to the detailed nature and specific requirements of the application, it was agreed that further review and detailed scrutiny were necessary. The panel decided to defer the final decision to Day 2 for more comprehensive evaluation and to allow time for members to consider the specifics overnight.

With regards to SS tyres, the report from HVSI testing of SS tyres and pavement impacts conducted in 2023 has been received by the NHVR. The findings of this report will need to be evaluated and compiled into a case/project for eventually updating the MDL to accommodate SS tyres at higher masses.

# 5.2 V240327 – Transport for NSW - AB-Triple (4-2-3-3)

Similar to V240322, PBS Application V240327, an AB-Triple combination, was also discussed. This application required both Section 8 and Section 9 exemptions for Gradeability (A), PVL and PHL. More in-depth discussions were planned for Day 2 to ensure all technological compliance and safety standards were met.

# 5.3 Tiger Spider (B-double with SPV Trailer)

The Tiger Spider application involving a Special Purpose Vehicle (SPV) trailer was reviewed briefly. Concerns were raised around the vehicle's classification and how it fits into the PBS framework. It was noted that the vehicle falls outside the typical regulatory masses. The combination being set up as a B-double with an SPV trailer makes its classification within PBS challenging.

Meeting 68: Thursday 11 July 2024			
Agenda Item- 5.3			
5.3	NHVR to confirm legal interpretation of class 1 vehicles (and like) operating within the PBS Scheme (RE: Section 23 (6) of the Law) to clarify this situation so that it is useful for road managers and industry and provides certainty for processing DAs and VAs.	NHVR Les Bruzsa Robert Gibson	OPEN

# **MEETING CLOSE OF DAY 1**