NHVR Response – Impacts of Heavy Vehicle Reform – Interim Report

Information Request	Response
Information request 1.1 The PC is seeking evidence and views about how the package of heavy vehicle reforms examined in this study may impact: - different cohorts, including by age, gender, income and education, and any other relevant demographic classification (including impacts on Aboriginal and Torres Strait Islander people) - consumers, including in ways that may be difficult to quantify, such as improved quality of service or wellbeing, or greater choice.	• The NHVR does not hold relevant data in respect of impacts of reforms on different cohorts. • In a general sense, there is benefit in looking at the reform package through a transport-system lens. Access, mass, digital and driver reforms may improve freight efficiency, service reliability and consumer outcomes where they reduce unnecessary trips, delay and administrative burden. These benefits could be reduced where crashes, asset degradation, network closures, congestion, detours and incident response costs affect network availability or reliability. • Those impacts may ultimately be experienced by consumers and communities through delays, reduced service quality, higher costs and less resilient supply chains. Impacts may also vary by geography, corridor, industry and community exposure to freight activity.
Information request 2.1 The PC is seeking feedback on how proposed reforms to the Heavy Vehicle (Mass, Dimension and Loading) National Regulation (expected to commence on 1 July 2026) will affect access. These reforms include uplifting General Mass Limits to Concessional Mass Limits, increasing general length limits from 19 m to 20 m and increasing general height limits from 4.3 m to 4.6 m. - What implications would these reforms have for high productivity and heavy zero emissions vehicles? - Will these reforms create any unintended consequences? What effect will they have on the interoperability of heavy vehicles with existing trailers, equipment and loading infrastructure?	• The proposed MDL reforms may improve access for some vehicles by expanding the prescriptive mass, length and height envelope. However, the practical access benefit will depend on whether the revised limits are already reflected in existing road manager decisions, such as via notices, or where existing concessions already provide benefits above the MDL reforms. • For high productivity vehicles, the direct benefit may be limited as existing PBS vehicles' approved masses and dimensions are already specified in their vehicle approvals. However, some vehicles that are currently in PBS, solely because they exceed the 19 metre general length limit, may be able to operate under the prescriptive framework. • For HZEVs, the increased length and height limits may assist some configurations where additional space is required for batteries, hydrogen storage or related zero emission components. The GML to CML uplift may also support some HZEV applications by reducing the effect of additional tare weight. • Overall, the proposed MDL amendments may have only a limited effect on access permit volumes. Few current permits are issued solely because of length and the reforms may therefore slightly reduce permit demand in some cases, but are unlikely to remove the broader role of permits where access risks relate to mass, route suitability, infrastructure limits or multiple dimensional factors. • The reforms are unlikely to remove the need for PBS approvals, or permits for PBS and non-PBS vehicles where access risks relate to physical constraints like bridge capacity, swept path and route geometry. • Interoperability issues may arise where vehicles meet the mass, length or height limits but still face constraints associated with logistics compatibility, such as physical capability to utilise existing loading docks, depot layouts, terminal access, and loading equipment.

	• It is noted that the revised MDL will clarify axle mass transfer arrangements for Euro VI vehicles. The NHVR has highlighted that the interaction of the Euro VI mass concession and the PBS scheme create challenges as adding a Euro VI prime mover to an existing PBS Vehicle Approval triggers a requirement for all associated access permits to be reassessed. This acts as a brake on the take-up of Euro VI vehicles within the PBS scheme.

Information request 2.2
The PC is seeking feedback on how the Performance-Based Standards (PBS) scheme can be improved and enable greater as-of-right access for PBS vehicles over time. We are also interested in views around how the Australian Government can best support this process.
- Could there be any unintended impacts arising from not requiring the PBS Review Panel to provide advice on all PBS design applications? What types of PBS design applications should still require panel advice?
 	
The PC is also seeking feedback on implementation issues, including how a pathway to add eligible PBS vehicles to existing notices (with in-principle road manager consent) could be embedded in legislation.
- How should the mechanism be designed and implemented? Why?
- What amendments to the Heavy Vehicle National Law or related regulations would be required?
- Are amendments to the PBS classification system required?
- How should amendments be implemented to ensure eligible PBS vehicles can be added to existing notices without having to get access approvals, while ensuring existing access arrangements previously agreed by road managers are preserved?
- What criteria should PBS combinations fulfil to be eligible to be added to existing notices? Which specific PBS combinations should be prioritised? On what basis?
	Role of the PBS Review Panel (PRP)
	• Under the HVNL, the PRP does not determine the outcome of a design or vehicle application but provides advice to inform the NHVR's decision making.
	• The PRP does not currently review the majority of design applications and does not review any vehicle approval applications. Instead, the PRP has provided the NHVR with a standing pre-agreement for all vehicle approvals and for specified combination designs. Removing the review function of the PRP would only impact the remaining cohort of design applications.
	• The PRP provides useful feedback on specific applications. In the absence of a formal PRP arrangement that requires applications to be considered by the panel, the NHVR would still seek the views of jurisdictions where contentious or complex applications arise.
	• In considering the role of the PRP, it is important to note that a design or vehicle approval is separate to decisions on road access. These decisions, regardless of whether a design or vehicle approval has been issued by the NHVR, remain strictly at the discretion of road managers. Further, the HVNL provides Ministers with the power to prohibit an approved PBS vehicle from operating on their road network.
	
	Access to notices
	• The PBS scheme was developed around the principle that access should be determined by on-road performance, rather than solely by vehicle configuration. To enable this, PBS levels are aligned with existing network types:
	  ○ Level 1 to General Access,
	  ○ Level 2 to B-double routes,
	  ○ Level 3 to Double Type I road train routes,
	  ○ Level 4 to Triple Type II Road train routes.
	  PBS Level 1 applies to vehicles up to 20 m in length, while higher PBS levels and access networks apply to longer combinations.
	• On that basis, all Class 2 notices could be reviewed against equivalent PBS vehicle levels to determine whether PBS vehicles present an access risk profile that is equivalent to, or lower than, the prescriptive vehicle types already authorised under each notice.

- What safeguards, monitoring or review mechanisms would be required to ensure the approach maintains road safety and protects infrastructure?	• The reform could establish PBS Level 1 at 20 m as the minimum access floor for Class 2 notice equivalence. Where a Class 2 notice authorises a prescriptive vehicle class with an access risk profile equal to or greater than a PBS Level 1 vehicle, a PBS Level 1 vehicle up to 20 m would not be excluded merely because it is a PBS-vehicle, subject to posted restrictions and road authority conditions. • This would not mean unrestricted access for all PBS vehicles. Default inclusion for PBS Level 1 vehicles could apply only to PBS vehicles that meet all applicable PBS standards, are not operating under a PBS standards exemption, and operate at mass limits supported by Tier 1 bridge assessment unless the notice expressly provides otherwise. • For PBS vehicles above this minimum risk profile, including vehicles operating at PBS Level 2 or higher, access could be determined by matching the vehicle to the equivalent or appropriate Class 2 notice category. For example, a notice authorising 26m B-doubles could be assessed against PBS Level 2A, while, longer or higher-productivity combinations could be assessed against the relevant PBS Level 2B, 3A, 3B, 4A or 4B classification. This approach would be expected to only apply to PBS vehicles which met all PBS standards at the target level, were managed under Tier 1 bridge assessment (unless the notice expressly allows for it), and did not have any exemptions from the PBS standards. • Future work to develop an automated access framework could increase the flexibility enabled by this approach, especially for vehicles operating under Tier 2 or Tier 3 bridge assessment. In respect to the questions raised in the PC's email of 28 April, please note the following: • It is possible to determine PBS networks across jurisdictions via the NHVR National Network Map, although this information is structured on a 'per notice' basis. Attached is a map of National Notice PBS Level 2B networks to illustrate variation across jurisdictions. Also attached is a high-level estimation on payload productivity change across jurisdictions based on evaluation of ABS Survey of Motor Vehicle Use data for articulated vehicles. • Also find attached PBS access permit data for 2021 to 2025, including number of applications, road manager consents, registered hauling units that appear on a PBS vehicle approval (i.e. a proxy for how many unique PBS vehicles might be in operation at a point in time) and distance of networks by jurisdiction based on PBS level and reference vehicle type). • Costs associated with PBS approvals: o the average time for a PBS design approval to be considered by the panel (separate to the NHVR's processing time) is approximately 15 business days currently. o the approximate additional time spent processing a design approval that requires PRP consideration would be 3-4 hours of effort. Note that the PRP Chair and Deputy Chair are also reimbursed for the time spent on reviewing applications and providing comment.

	○ for operators, holding costs associated with longer approval time is difficult to calculate, but the NatRoad's submission notes this is around $700-$1200 per day for a truck (but may be greater for a larger, more costly, PBS combination). For calculating lost revenue, published freight rates (e.g. https://www.couriersandfreight.com.au/blog/current-full-truck-load-rates) suggest Melbourne to Sydney rates of about $2000-$2500 per day for a B-double in foregone revenue. Larger combinations would therefore be expected to forego even more revenue (noting that this revenue would need to be adjusted for operating costs). PBS access permit and network data - 7 land payload changes PBS 2B network map
Information request 2.3 The PC is seeking feedback on implementation of a nationally-consistent mass concession for electric heavy zero emissions vehicles (HZEVs). How should a concessional mass limit to overcome the current payload gap between comparable diesel and electric HZEVs be implemented? What are the expected impacts of applying the mass concession? -	• A nationally consistent mass concession for electric HZEVs could help address battery-related payload penalties and reduce a barrier to early uptake. • However, payload parity is not a uniform issue across all HZEV applications. In urban freight, vehicles are typically volume constrained rather than mass constrained, meaning the additional tare weight of zero emission vehicles is less likely to materially reduce usable payload. The issue is more relevant for long haul and higher productivity freight, where vehicles are more commonly mass constrained. For these applications, targeted mass concessions are already in place and being trialled by jurisdictions (on the steer and drive axles generally in the region of an extra 1-3 tonnes, which is where the added electric battery mass affects tare and GCM), and are helping to mitigate payload gaps to the extent safely supported by the road network. • Any long-term concessions, in a future state where HZEVs achieve critical mass (noting there are very few in operation presently), should be designed to maintain safety and asset protection. This would need to include clear interaction with the PBS scheme, existing permits and notices, and should apply only where the additional mass reflects the electric drivetrain or battery-related payload gap and where the vehicle and route are suitable. It should not automatically override bridge, pavement, axle loading, swept path or other infrastructure constraints. • Where residual payload gaps remain, they are more likely to reflect infrastructure and access limitations than the underlying capability of the vehicle technology. This includes cases where bridge, pavement, axle mass or route constraints limit the extent to which mass concessions can be applied consistently across jurisdictions. • The NHVR notes the work undertaken by Austroads under research project NEF6392 which investigated a series of mass concessions and their impacts to Australia's road network.
Information request 3.1	

The PC is seeking evidence and views about how the National Automated Access System can be designed to improve the consistency and quality of local governments' access decisions. Is guidance and improved road asset data adequate, or are broader reforms needed to optimise decision making by local governments?	• It may be useful to distinguish consistency of process from consistency of outcomes. NAAS can support a more consistent assessment process, but access outcomes may reasonably continue to vary. Different road managers may have different risk appetites, asset lifecycle expectations, maintenance capabilities and local policy considerations. Local policy settings may also need to address matters that sit beyond asset capacity, such as managing interactions between large trucks and vulnerable road users near schools, residential areas or activity centres. These factors may justify different access outcomes even where infrastructure appears similar. • Infrastructure capability will also vary materially across local government areas due to differences in environment, topography, geology, infrastructure age, construction methods, construction quality and maintenance funding. As a result, two apparently similar bridges or road sections may produce different access outcomes under NAAS. This variation should not necessarily be treated as inconsistency or failure, where it reflects genuine differences in asset capability, local context or risk settings. • The final report could distinguish process efficiency from risk exposure. NAAS can optimise access within existing asset constraints but cannot change bridge strength, pavement capacity or the physics underlying the interaction between these and heavy vehicles. Approximately half of Australia's bridge stock was designed before 1976, based on design assumptions equivalent to a nominal 33-tonne vehicle. Broader reforms may therefore be relevant where local governments lack current asset data, engineering capability or confidence that automated decisions can appropriately protect assets and road users. • Within this context, it is still recognised that NAAS could improve access decision-making by applying consistent, rules-based and engineering-informed logic across networks. Its value lies in improving decision architecture, rather than relaxing physical asset limits. In practical terms, NAAS assesses whether the physical characteristics of road infrastructure can safely accommodate the physical characteristics of a restricted access vehicle, including matters such as bridge loading, gradients, swept paths, road width and vehicle stability. • Depending on the outcomes of applying rigorous assessment of restricted access vehicles against asset capability and the minimum "access floor" that a road manager accepts, the NAAS may increase access, reduce access or confirm existing settings. It should not be assumed to uniformly expand access. Rather, it may produce different outcomes depending on the condition, design and capability of specific assets, the vehicle configuration involved and the policy settings applied by the relevant road manager. • Guidance and improved asset data are necessary but may not be sufficient on their own. Consistency and quality could also be supported by common data standards, transparent engineering rules, road manager confidence, appropriate governance and capability support for local governments that lack current asset information or specialist engineering resources. In local government, infrastructure checks are not always applied consistently when assessing access applications, partly due to constraints in time, resourcing and technical capability. An automated

	system that applies these checks more consistently could therefore improve the rigour and transparency of access decisions. • Further technical work may also assist the development and calibration of NAAS over time. In particular, a large-scale study of heavy vehicle mass compliance, traffic composition, vehicle behaviour and bridge safety could help calibrate the assumptions used in structural assessment modules, including allowances for overloaded vehicles. This could support more consistent decision-making while maintaining appropriate protection for infrastructure and public safety. Done well, this evidence base may help identify where access can be safely unlocked without increasing unacceptable asset or safety risk.
Information request 3.2 What are the factors affecting implementation of the National Automated Access System? What are the main resource constraints (for example, skilled people, data and information or equipment), and what parts of the implementation do they affect? What would be the best way to accelerate rollout of the National Automated Access System? If more funding is needed, where should it be directed and what should it be spent on?	• The NAAS relies on having access to a consistent range of data points for each road asset in order for an asset assessment engine (such as HVSAPS or the infrastructure modules in HVAMS) to make a determination on access. • As such, key implementation constraints may include access to skilled engineering resources, bridge and pavement assessment capacity, quality and completeness of asset data, inconsistent data standards, systems interoperability, local government capability, governance arrangements and third-party approvals outside the HVNL. • Acceleration of NAAS would involve a building out the foundations that make automation reliable: asset assessment and digitisation, common data standards, engineering capability, system interoperability, governance, and upfront network definition. • In terms of how the Strategic Local Government Asset Assessment Project could directly support acceleration, the key critical gaps are: - The need to complete the task of collecting data on local government bridges and culverts; and - Providing the systems and support to enable local government to integrate into the relevant asset capability modules. • There have been three phases on SLGAAP funding to date. The first two of these pre-dated the NAAS and involved more detailed assessment of bridges and culverts (that is, doing the work of what will be undertaken by assessment engines within the NAAS). Given the intensity of that task, coverage of existing local government bridge stock was relatively modest. Phase 3 has focussed on collecting the data points required to make an asset assessment via an assessment engine. This has significantly accelerated coverage, with data on more than 1,500 assets collected during Phase 3 to date, with the expectation that more than 6,000 will be collected by the end of the funding round. • As the NAAS matures, additional assessment engines are expected to address other elements of the access equation, such as road geometry and road surface condition. This will also require intensive data collection activities and support for their use by local governments.
Information request 4.1	

How much would draft recommendations 4.1 and 4.2 reduce administrative and regulatory barriers to heavy zero emissions vehicle charging infrastructure and what implications would this have for project costs?	• The draft measures associated with items 4.1 and 4.2 could reduce administrative and regulatory barriers by improving early site selection, reducing uncertainty about planning pathways and allowing investors to better assess whether a site is technically and legally suitable for heavy vehicle charging. • The mapping tool could be more useful if it included granular electricity network capacity, freight locations and movements, heavy vehicle access, zoning and planning-permission information, and exportable data. Land-use definitions could explicitly recognise charging at bus depots, freight centres, freight nodes and heavy vehicle rest areas, with proportionate exemptions for straightforward installations that are consistent with existing land use. • The expected effect may be primarily reduced uncertainty, duplicated assessment and delay rather than a large reduction in total project costs. Major costs are still likely to be driven by electricity network connection and augmentation, site layout, charger capacity, land tenure and commercial factors. • The draft report does not quantify cost reductions, so the final report could frame impacts qualitatively unless project-level evidence is available. A useful point may be that planning and mapping reforms could prevent avoidable administrative barriers from slowing investment once market, technology and grid conditions support rollout.
Information request 4.2 What regulatory or administrative actions should governments take (if any) to facilitate private investment in charging infrastructure at state and territory government-provided heavy vehicle rest areas?	• The HNVR does not have specific views on this question, but supports a national coordinated strategy to imbed EV charging stations for heavy vehicles in appropriate locations along freight routes.
Information request 5.1 The PC is seeking information on the prevalence of curfews. How widespread are local government restrictions through local planning rules? What are the typical terms of these restrictions? If they exist, what are the typical reasons (noise or other reasons)?	• The NHVR does not have specific information on the prevalence of, or details concerning, curfews.
Information request 5.2 The PC is seeking information to illustrate the costs and benefits of reducing curfews on heavy zero emissions vehicles and the costs and benefits of possible approaches to reform, along with their implementation. -	• The NHVR does not have specific comments on this point.
Information request 6.1 The PC is seeking information on:	

- the potential size of the costs and benefits, including the productivity effects, arising from the National Heavy Vehicle Driver Competency Framework reforms and if there are any costs and benefits not identified in this report - how the costs and benefits of National Heavy Vehicle Driver Competency Framework reform might be distributed across the workforce, including by age, gender, income and education, and any other relevant demographic classification (including impacts on Aboriginal and Torres Strait Islander people).	• Driver competency reforms are expected to support safety, national consistency and productivity by improving the quality and consistency of training, assessment and licence progression. More competent drivers can reduce crash risk, incident-related delays, investigations, closures, detours and secondary supply-chain disruption. Reforms may also support workforce supply and progression to higher productivity vehicles where competency-based pathways operate effectively. These benefits could be understood as part of the same productivity-safety system: long-run productivity depends on competent drivers, compliant operators and investment in workforce capability. • Where possible, benefits could be valued using crash-cost evidence and ATAP freight travel time and reliability values for avoided delay and disruption. NHVR economic cost of heavy vehicle crashes analysis can provide a basis for explaining the economic materiality of safety outcomes.
Information request 6.2 The PC is seeking feedback on future reform directions for the National Heavy Vehicle Driver Competency Framework, including: - weight concessions in Australian licence classes to create parity between payloads for electric and diesel heavy vehicles and any safety implications of such a concession - recognition of the credentials, skills and experience of drivers with overseas heavy vehicle licences within Australia's licensing system, considering the effects on safety, driver supply and productivity.	• Licence-class weight concessions for electric heavy vehicles could be considered to ensure the battery-related payload penalty does not create unnecessary licensing barriers to equivalent freight tasks. • Recognition of overseas heavy vehicle licences could assist driver supply, provided it is based on robust equivalence assessment, competency verification, bridging training where needed, supervised transition arrangements and nationally consistent standards. Reforms could support supply without diluting safety or competency expectations. • Useful additional detail may include license-equivalence criteria, assessment pathways, supervision requirements, treatment of countries with materially different operating environments, and how electric vehicle weight concessions could interact with vehicle class, mass and PBS settings.