Australian Industry Group

Submission on Impacts of Heavy Vehicle Reform

December 2025

EXECUTIVE SUMMARY

Australia's freight demand is growing rapidly and will continue to accelerate across all modes. The Bureau of Infrastructure and Transport Research Economics (BITRE) freight projections indicate that road freight will grow 77% between 2020 and 2050.1 Yet key elements of the regulatory framework remain anchored in administrative practices that constrain efficiency, investment and productivity.

The existing heavy vehicle regulatory framework is not keeping pace with the needs of modern supply chains, high-productivity vehicles, zero-emissions vehicle deployment, or digital access management. Reform is essential to maintain competitiveness, reduce emissions, and ensure the resilience of national freight movements. We welcome this study and strongly support the intention to modernise the system across all five focus areas.

Key recommendations

- Ensure the National Automated Access System (NAAS) is underpinned by harmonised mass and dimension limits, uniform pavement and bridge assessment methodologies, and robust digital mapping data across all jurisdictions.
- Complement the national access reform with predictable maintenance funding mechanisms and transparent road user charging flows to local governments and tools and other resources for councils to assess road strength and asset life.
- Accelerate implementation of the National Heavy Vehicle Driver Competency Framework and establish consistent, Australia-wide pathways for overseas-qualified heavy-vehicle drivers from jurisdictions with equivalent standards to demonstrate their competence and obtain Australian licences without reliance on arbitrary tenure- or time-based requirements, or mandatory car-licence holding prior to heavy-vehicle licensing.
- Propose streamlined planning and grid-connection processes for heavy vehicle charging infrastructure, and a clear legislative guidance for battery electric vehicle deployment and charging infrastructure.
- Evaluate the most impactful financial mechanisms and other strong incentives to address the "green premium" for SMEs and bridge the upfront cost differential between diesel and zero-emission heavy vehicles, while simplifying approvals and reducing regulatory overhead to enable uptake of electric heavy vehicles.
- Reform curfew arrangements to adopt performance-based regulation using objective noise criteria rather than time-based restrictions, with a national standard defining "quiet freight vehicle" eligibility to enable 24/7 access for vehicles that demonstrably meet noise limits.
- Support council-led pilot projects to test acoustic measurement methods, community engagement approaches, and operational impacts, with results informing a national framework for consistent curfew exemption decisions.

[1] The Bureau of Infrastructure and Transport Research Economics (BITRE), https://www.bitre.gov.au/sites/default/files/documents/bitre_rr154_summary_report.pdf

National Automated Access System

Given the projected growth in the national freight task of 77% between 2020 and 2050, manual, paper-based or ad hoc electronic permitting systems are unlikely to scale without imposing significant delays and administrative costs. Full deployment of an automated national system, underpinned by robust digital mapping and engineering data, represents the only realistic path to managing future access requests at scale while maintaining safety and infrastructure protection.

The current patchwork of access rules amounts to a de facto "productivity tax" on operators. Industry experience clearly shows that the current access and permitting system is slow, unpredictable, and inconsistent across jurisdictions. One operator recently reported that a standard Adelaide-Sydney movement required over 16 weeks of approvals, including numerous road access applications and alignment with multiple technical requirements as a result of the different state-based rules.

Similarly, on a local level productivity is also hindered due to unclear processes, expensive, and time-consuming approvals that often exceeding the claimed 30 days timeframe and sometimes stretching beyond three months. As reported by the Truckvolt Project in relation to battery electric vehicles, permits restrict alternate routes during congestion or accidents, and applying for network-wide access risks rejection based on a single non-compliant road, triggering lengthy negotiations. This leads to operations under standard mass limits (CML/GML) instead of higher mass limits (HML).[2] Operators can choose to avoid the endless and risky permit process, but the resulting payload reductions directly limit productivity and slow the broader uptake of these vehicles.

A national automated system would therefore greatly reduce the "uncertainty tax" that currently applies to access decisions. When operators receive near-instant, predictable answers on where and when vehicles can operate, they can:

- Bid for contracts with greater confidence regarding delivery times and costs
- Invest in safer and greener fleets with greater certainty
- Reduce administrative overheads associated with repeated, jurisdiction-specific permit applications. NAAS should allow operators to reuse past applications and vehicle configurations

Data quality and harmonisation requirements

The Australian Industry Group strongly supports the agreement by all Australian jurisdictions for the creation of the National Automated Access System (NAAS), which will be based on the Tasmanian Heavy Vehicle Access Management System (HVAMS).

However, the system will be only as good as the data available and fed into it.

Councils should be empowered to develop, maintain, and expertly evaluate the roads as part of the network. Some local governments face gaps in road and bridge asset data, due to uneven data-collection practices, inconsistent condition-assessment methodologies, and limited engineering capacity in many regional councils.

[2] Toll Group, Truckvolt Project - Lessons Learnt Report, Milestone 2, https://arena.gov.au/knowledge-bank/toll-group-project-truckvolt-lessons-learnt-report/

A national access framework should rely on harmonised mass and dimension limits to ensure that, for example, a vehicle beginning its route in South Australia is technically sound for finishing the trip in New South Wales. There should also be uniform pavement and bridge assessment methodologies to ensure all local government engineers are employing the same evaluation approach and feeding the road data into the national NAAS.

Such a uniform approach will ensure the required predictability and certainty. Otherwise, this will continue to be a major obstacle. As a reminder, in 2018 the National Transport Commission identified the industry's uncertainty as to whether a vehicle will be approved by road managers to access the relevant route as the single biggest barrier to take up of the Performance Based Standards scheme.[3]

> **Recommendation**: Ensure the National Automated Access System (NAAS) is underpinned by harmonised mass and dimension limits, uniform pavement and bridge assessment methodologies, and robust digital mapping data across all jurisdictions.

Funding certainty for local government

Certainty is also needed for councils, particularly certainty about future funding required to support increased heavy vehicle access. Local governments manage around 80% of Australia's road network by length.[4] The Australian Local Government Association reports that the replacement cost of sealed roads in poor condition is $19.2bn and the replacement cost of unsealed roads in poor condition, many of which are in regional, rural, and remote areas, is $3.9bn.[5] This situation already reduces productivity in the freight sector.

Without transparent funding mechanisms aligned with road use and vehicle impacts, councils may restrict access or even remove roads from the functional freight network due to cost pressures.

The Commission should examine how national access reform will be paired with:

- Predictable maintenance funding and transparent road user charging flows to local governments
- Tools for councils (e.g. for council engineers to assess road strength and asset life) and local capability building

> **Recommendation**: Complement the national access reform with predictable maintenance funding mechanisms and transparent road user charging flows to local governments and tools and other resources for councils to assess road strength and asset life.

[3] National Transport Commission. (2018). Reforming the Performance-Based Standards scheme. https://www.ntc.gov.au/sites/default/files/assets/files/NTC-Policy-Paper%20-%20Reforming-the-PBS-scheme.pdf
[4] Office of Road Safety, Local Government Network Risk Assessment Frameworks Report 2024, https://www.officeofroadsafety.gov.au/sites/default/files/documents/local-government-network-risk-assessment-frameworks-report.pdf
[5] ALGA, National State of the Assets Report 2024, https://alga.com.au/wp-content/uploads/2025/04/ALGA-National-State-of-the-Assets-Report-2024-final.pdf

National Heavy Vehicle Driver Competency Framework (NHVDCF)

The Australian Industry Group supports immediate implementation of reforms towards development of competency-based progression. The current heavy vehicle licensing system is time-based and acts as a passive barrier to workforce entry and progression, focusing on "time served" rather than demonstrated skill or competency.

Addressing the driver shortage

Australia faces a severe driver shortage, with projections of 70,000 vacancies by 2030. The average driver age (53-56) and very low female participation exacerbate the issue. This age profile implies a high retirement risk over the coming decade, at a time when freight demand is rising and competing industries (such as mining and construction) are also seeking experienced heavy vehicle operators.

A competency-based licensing model would make the licensing system a more efficient pipeline for talent by allowing safe, well-trained drivers to attain higher licence classes in line with demonstrated capability, rather than waiting out fixed calendar periods. Properly implemented, this can be achieved without any dilution of safety standards.

Recognition of overseas qualifications

Competency should be tested for overseas drivers but without time-based limitations. Under a competency-based system, overseas-qualified drivers would not have to undergo lengthy and complicated bureaucratic processes for proving the time spent since they obtained their licence, but rather demonstrate their capability and obtain an Australian licence.

To assist in addressing current and projected driver shortages, there should be a clear pathway for obtaining licences for migrant drivers with overseas experience from jurisdictions meeting agreed criteria (for example, comparable licensing standards and enforcement systems).

Furthermore, we note that transport ministers decided not to proceed with requiring a full/open car licence before entering heavy-vehicle licensing in the NHVDCF - after consultations showed it would create unnecessary barriers to workforce entry and worsen driver shortages. The same logic applies to overseas-qualified heavy-vehicle drivers. The concerns raised by industry during consultation, including reduced access to new entrants and inefficiencies caused by arbitrary time-based rules, apply equally to experienced overseas drivers, who already face additional administrative hurdles when converting their licences. Since the NHVDCF is shifting Australia toward a competency-based system rather than a tenure-based one, it is consistent, efficient and fair to ensure that overseas-qualified drivers from jurisdictions with equivalent standards can demonstrate competence without being subjected to car-licence prerequisites or other time-based limitations that ministers have already deemed unnecessary for domestic drivers.

> **Recommendation:** Accelerate implementation of the National Heavy Vehicle Driver Competency Framework and establish consistent, Australia-wide pathways for overseas-qualified heavy-vehicle drivers from jurisdictions with equivalent standards to demonstrate their competence and obtain

Australian licences without reliance on arbitrary tenure- or time-based requirements, or mandatory car-licence holding prior to heavy-vehicle licensing.

Barriers to availability of EV truck charging infrastructure

Infrastructure scale and grid connection challenges

When discussing decarbonisation of the heavy vehicle sector it is worth noting that the scale and profile of electricity demand for battery electric trucks differ materially from light vehicles. Analysis funded by the Australian Renewable Energy Agency (ARENA) on electrifying road freight has identified the need for on the order of 165 high-capacity heavy vehicle charging hubs across key freight corridors to support a viable national battery electric truck network.[6]

The power draw of a high-capacity truck charging hub, particularly one designed to support multiple simultaneous rapid charges for long-haul vehicles, can reach several megawatts of peak demand, roughly comparable to the load associated with a small town. This places considerable demands on local distribution networks and could require connection upgrades, long lead times for approvals, and substantial capital investment in grid infrastructure. Without streamlined planning and grid-connection processes, the deployment of heavy-vehicle charging infrastructure will stall and should therefore be investigated.

International and domestic lessons learnt

We recommend the Commission evaluate international case studies on how to de-risk and establish such networks, including the need for adequate legislation. Specifically, investigate the early lessons learned internationally by the Milence model and domestically by the Toll Group project in cooperation with ARENA.

In Europe, Milence, a joint venture between Daimler Truck, Traton Group and Volvo Group, has been capitalised with approximately €500 million to develop at least 1,700 high-performance public charging points for heavy vehicles by 2027, focused on major freight corridors. This model combines manufacturer commitment with scale, long-term planning and shared risk, underpinned by policy and regulatory support in the European Union for decarbonising freight.

In Australia, Toll secured $9.02 million in funding in partnership with ARENA's Driving the Nation Programme to deploy 28 heavy electric vehicles, supported by a return-to-base charging model. As noted in their Lessons Learnt Report, with no established legislation guiding the implementation of battery electric vehicles or charging infrastructure, additional costs may arise from the due diligence required to manage the deployment of this new technology. The ambiguity by either broad guidelines and best-practice advice leads many stakeholders to commission extra risk assessments, analyses, and approvals to ensure they have covered all potential issues. While understandable, this due-diligence approach adds unnecessary cost to an already expensive technology, making the electric vehicle adoption even less viable for many freight companies.[7]

[6] ARENA Electrifying Road Freight Report, https://arena.gov.au/knowledge-bank/aecom-electrifying-road-freight-report/
[7] Toll Group, Truckvolt Project - Lessons Learnt Report, Milestone 2, https://arena.gov.au/knowledge-bank/toll-group-project-truckvolt-lessons-learnt-report/

Recommendation: Propose streamlined planning and grid-connection processes for heavy vehicle charging infrastructure, and a clear legislative guidance for battery electric vehicle deployment and charging infrastructure.

The SME investment gap and the "green premium"

Approximately 98 per cent of Australian road freight businesses are small and medium enterprises (SMEs), often operating with fewer than 20 employees and thin margins. Over 56 per cent of trucking businesses are non-employing businesses (owner-drivers).[8] For these operators, the capital cost differential between a new diesel prime mover and a battery electric or hydrogen fuel cell equivalent, the "green premium", remains prohibitive without targeted support.

In this environment, even if charging infrastructure becomes available along key routes, many SMEs will be unable to adopt zero-emission trucks at scale without specific financial mechanisms or strong incentives to bridge or offset upfront cost differentials during the early years of technology deployment. Simplifying approvals, reducing regulatory overhead, and providing clarity on network planning are also critical to enabling uptake.

This is not an issue for SMEs only, but the upfront and operational costs will guide the adoption speed across the sector. Part of the lessons learned by Toll Group's Truckvolt Project is that the network for BEVs is not that developed (due to the heavier weight of these vehicles) and the permit application process can easily be a $3,000+ exercise in the simplest applications for a basic three-day run schedule. In addition, it is also noted the possibility of introducing a road usage tax for heavy electric vehicles. Any additional costs applied to BEV heavy-vehicle operators must be outweighed by the benefits (e.g. improved network access) to ensure the technology remains attractive and adoption continues to grow.[9]

In summary, ensuring EV truck charging infrastructure availability and EV heavy vehicle and operations affordability must therefore be addressed in tandem to avoid stranded or underutilised assets.

Recommendation: Evaluate the most impactful financial mechanisms and other strong incentives to address the "green premium" for SMEs and bridge the upfront cost differential between diesel and zero-emission heavy vehicles, while simplifying approvals and reducing regulatory overhead to enable uptake of electric heavy vehicles.

Curfews for EV trucks

Performance-based regulation instead of time-based restrictions

Where zero-emission vehicles and low-noise technologies can demonstrably meet stringent noise criteria, there is a strong case for reforming curfew arrangements to enable off-peak operations, spreading the freight

[8] ABS Data quoted by NatRoad. https://www.parliament.nsw.gov.au/lcdocs/submissions/81952/0015%20NatRoad%20(National%20Road%20Transport%20Association).pdf

[9] Toll Group, Truckvolt Project — Lessons Learnt Report, Milestone 2, https://arena.gov.au/knowledge-bank/toll-group-project-truckvolt-lessons-learnt-report/

task more evenly across the 24-hour day and reducing pressure on peak-hour road capacity. This would deliver benefits not only for operators but also for commuters and businesses reliant on timely deliveries.

Existing curfew arrangements are typically framed as "time restrictions" (for example, no trucks after 22:00), often embedded in local planning instruments that predate the emergence of electric and other low-noise heavy vehicles. Testing by the Fraunhofer Institute for Material Flow and Logistics IML has shown that electric trucks can operate at external noise levels close to those of passenger cars (only 1 dB 'louder' than a car).[10] Therefore, a modern, performance-based approach would instead regulate on the basis of objective environmental criteria, for example, "no trucks exceeding a specified decibel threshold at defined measurement points", irrespective of time of day.

Regulatory alignment across government levels

It is important to note that this would work if all planning instruments across the three levels of government are aligned. For example, where Environment Protection Authority's (EPA) noise thresholds and council standards differ, it creates confusion for operators and local regulators. Instead, the EPA-set noise limits flow through to the local councils and empower them to have a uniform approach and application of the rules.

A national standard defining "quiet freight vehicle" eligibility would support consistent exemption decisions. Where a heavy vehicle demonstrably meets strict a nationally agreed noise limit (a set dB(A) or lower under defined test conditions), it could be granted 24/7 access to loading docks and certain urban freight routes, regardless of legacy curfew conditions, subject to appropriate land use and amenity protections. This would create a direct commercial incentive for operators to invest in quieter fleets in exchange for increased operational flexibility.

> **Recommendation**: Reform curfew arrangements to adopt performance-based regulation using objective noise criteria rather than time-based restrictions, with a national standard defining "quiet freight vehicle" eligibility to enable 24/7 access for vehicles that demonstrably meet noise limits.

Evidence from COVID-19 temporary relaxations

Removing curfews improves productivity and reduces congestion:

- During COVID-19, National Cabinet removed noise curfews to enable 24/7 deliveries, which improved the flow of goods and helped supply chains meet demand, demonstrating tangible benefits when curfews are lifted.
- Jurisdictions that extended temporary relaxations reported minimal impacts on communities, reinforcing that benefits can be maintained in perpetuity without significant downsides.
- The Australian Logistics Council conducted a community sentiment survey. Once curfews were reinstated, only 1 in 7 felt transport noise increased since COVID-19, and just 2% attributed any

[10] MAN, 2023, https://press.mantruckandbus.com/corporate/man-etrucks-only-about-half-as-loud-as-comparable-diesel-trucks/

increase to freight trucks, indicating curfew relaxations did not materially worsen noise for most people.11

Curfew exemptions for EVs would unlock similar benefits permanently.

Pilot projects to guide national principles

Council-led pilots should test:

- Acoustic measurement methods
- Community engagement approaches
- Night-time safety and visibility requirements
- Operational efficiency impacts

The results should inform a national framework enabling councils to apply curfew exemptions consistently.

> **Recommendation**: Support council-led pilot projects to test acoustic measurement methods, community engagement approaches, and operational impacts, with results informing a national framework for consistent curfew exemption decisions.

CONCLUSION

Australia's freight sector stands at a critical juncture. The substantial projected growth in freight volumes demands a regulatory framework capable of supporting modern, efficient, and sustainable operations. The Australian Industry Group welcomes the Commission's comprehensive study and strongly supports reform across all five focus areas identified in the scope of this inquiry.

Australia requires bold, coordinated action across all levels of government to modernise heavy vehicle regulation and ensure our freight networks can meet the demands of the coming decades. We stand ready to work with the Commission, government, and industry stakeholders to deliver these critical reforms.

[11] Australian Logistics Council, Curfews and Supply Chain Operability, https://austlogistics.com.au/media-centre/curfews-and-supply-chain-operability/

About Australian Industry Group

Australian Industry Group is the nation's largest and most experienced industry association, representing the interests of more than 60,000 businesses across a broad range of sectors.

Together with our partners organisations, we help members boost productivity, navigate change and deliver growth through expert advice, advocacy, training and policy influence.

We represent businesses across manufacturing, construction, technology, defence, care, logistics and more. Our cross-sector expertise allows us to influence policy and shape the landscape that Australian businesses operate in.

Our purpose is clear - to empower Australian industries. We offer practical, independent support in workplace relations, compliance, legal matters, skills development and apprenticeships.

Whether it's advising on workplace regulations or cleaner technologies, to helping shape national skills policy or exploring robotics, AI and quantum technology — we help businesses grow and succeed.

We are deeply connected to the real challenges businesses face. As Australia confronts the demands of global competition, digital disruption, workforce reform and sustainability imperatives, our role is more vital than ever before.

With the scale, experience and capability to support businesses of all sizes, we're ready for business - so you're ready to thrive.

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