



January 2025

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Web and Submissions: <https://www.infrastructure.gov.au/have-your-say/adr-harmonisation-review-2024-25>

**Subject: The Truck Industry Council's response to the 2024/25 Australian Design Rule
Harmonisation Review**

The Truck Industry Council (TIC) is the peak industry body representing manufacturers and distributors of heavy commercial vehicles (that is, with Gross Vehicle Mass above 3.5t) or "trucks" in Australia. TIC members are responsible for producing or importing and distributing 17 brands of truck for the Australian market, totalling over 51,000 trucks in 2024. In 2024 TIC members supplied to market over ninety-eight (99) percent of all new on-highway trucks above 4.5 tonne Gross Vehicle Mass (GVM) sold in Australia.

Further, TIC also comprises of two dedicated engine manufacture members and two dedicated driveline manufacture member who supply major engine and driveline systems for both on highway and off highway "truck" applications.

A current list of TIC members can be found at the end of this submission.

Please note that this is TICs preliminary submission, a more detailed submission will be provided by mid-February 2025.

The National Road Safety Action Plan:

This strategic document was in the past the cornerstone of road safety in Australia for a couple of decades now. However, recent versions of the Australian National Road Safety Action Plans have lacked the detail and direction that the automotive industry and heavy vehicle operators alike, required for the future planning of vehicle research and development resources, new model product development, and for operators, the information on new safety and environmental technologies that are in the ADR pipeline to enable better truck purchases and fleet replacement strategies. A decade ago, the Australian National Road Safety Action Plan reviewed in detail Australia vehicle crash types across all on-road vehicle categories and set out in the Action Plan the strategies and technologies (new vehicle regulations/ADRs) that would be examined, developed and introduced over the course on the current Action Plan (typically over a five year Action Plan timeline). This gave all parts of industry, as well as all levels of government, a specific set of guidelines to implement, in a given timeline. The absence of this detail in recent National Road Safety Action Plans is a fundamental failing on the Action Plan and those responsible for its development/approval.

TIC calls on the Department of Infrastructure and Transport and the ITMM transport ministers (Infrastructure and Transport Ministers' Meetings) to develop future Australian National Road Safety Action Plans based on the latest Australian crash data and provide clear proposals for ADR development and implementation that will mitigate these major crash types.

ADR harmonisation with Global Regulations:

As signatories to the 1958 Agreement, the Australian government has responsibilities to introduce UN-ECE regulations in Australia, as vehicle ADRs, where these regulations are 'fit for purpose' in the Australian road safety and environmental context. While aligning with these UN-ECE regulations is acknowledged by industry as suitable/best practice (as opposed to Australian unique regulations, for example), there can be no doubt that alignment with solely these UN-ECE regulations is a commercial advantage for European vehicle manufacturers.

The MAJORITY of new trucks sold in Australia are not sourced from Europe. In fact, less than 20% of trucks sold in Australia above 4.5t GVM come from Europe. Please refer to the *truck sales by source market* table in the section below titled: *ADR Implementation Timelines*.

Local Australian truck manufacturers, Japanese, Korean and USA are at a commercial disadvantage, required to test and certify perfectly viable, safe and environmentally acceptable vehicles to these UN-ECE regulations, rather than being able to provide certification/test evidence from their domestic market regulations.

TIC acknowledges some ADRs allow alternative international standards that provide a similar in-service outcome to the relevant UN-ECE regulation. A good example of this is the ADR80/xx series of heavy vehicle engine emission regulations that specify equivalent Japanese and USA-EPA regulations as an alternative pathway to the base UN-ECE regulation detailed in the ADR. However, the number of ADRs that allow alternate international regulations to be accepted, is minimal. TIC notes that the Road Vehicle Standards Act (RVSA) Concession Pathway allows second hand vehicles to be imported, registered and used on Australian roads whilst accepting less evidence and allowing alternative, domestic market, standards. Truck manufacturers using the RVSA Type Approval pathway cannot utilise these alternative regulations to certify vehicles for Australia. This is a double standard, allowing vehicles to operate on Australian roads using certification standards that are not equal for all vehicle manufacturers/importers.

TIC calls upon the Department of Infrastructure and Transport to work with industry to expand the use of alternate international standards in existing and newly developed ADRs. Specifically, the allowance of European Commission (EC), USA FMVSS and Japanese MLIT/JIS regulations MUST be considered in ADRs where applicable. A few examples of appropriate alternative regulations:

- USA FMVSS Light performance
- USA FMVSS Rear view mirror reflectivity performance
- USA FMVSS Brake deceleration test results

These are examples where FMVSS regulation/test evidence should be allowed as an alternative to UN-ECE regulation requirements specified in the relevant current ADRs.

Australian unique heavy vehicle operating requirements and suitability of European regulations:

In the development of heavy vehicle ADRs, the Department of Infrastructure has historically recognised industry's calls to acknowledge Australia's unique heavy vehicle operating requirements, for example: multi-trailer combinations, Performance Based Standards heavy vehicles, multiple in-service mass management and dimensional schemes, etc. These heavy vehicles do NOT exist in other global markets and operate beyond of the regulatory requirements found in other countries, including Europe.

Also, Australia takes trucks from Australia (local manufacturers), China, Europe, Japan, Korea and USA manufacturers/markets in both cab-over and conventional (bonneted) truck configurations. Hence numerous European UN-ECE regulations are not "fit for purpose" in Australia. Or only viable with change, sometimes requiring substantial revisions. As a Contracting Party to the 1958 Agreement, the Australian Department of Infrastructure and Transport MUST work with European authorities to ensure that new and amended UN-ECE regulations are developed for global markets, including Australia. Euro centric regulation development must be avoided if UN-ECE regulations are to be adopted in Australia. Failure to undertake this necessary UN involvement by the Australian

Department of Infrastructure and Transport will delay the adoption of new UN-ECE vehicle regulations in Australia, as these regulations may require changes/modifications to ensure that they are 'fit for purpose' in Australia. This issue is particularly important for heavy vehicles (trucks and trailers) due to Australia's unique heavy vehicle and multi-trailer combinations.

A specific example of unsuitable/unsafe harmonisation with European regulations were the changes made in ADR 35/05 – Heavy Vehicle Braking Systems. The /05 version of this braking ADR allowed significant harmonised with the UN-ECE R13 brake regulation. This created an in-service safety issue when the parking brakes of Australian heavy trailers were not activated by a truck's parking brake system (if the truck's brake system was manufactured and certified to a particular clause in UN-ECE R13). Several reports of trailers 'rolling away' in-service prompted a revision of ADR35 to reinstate the trailer park brake requirements in the previous versions of ADR35 (and in-service trucks had to be recalled to have their brake systems modified to meet the ADR requirements). While there were no reported deaths or serious injuries, this aligning with UN-ECE regulations clearly showed that a 'blind faith' approach to harmonisation cannot be taken and that each UN-ECE regulation must be carefully scrutinised by government and industry, before committing to ADR implementation.

TIC does acknowledge that over the last 12 months (from late 2023) the Australian Department of Infrastructure and Transport has taken a more active role, in working with the European regulators in the development of some new UN-ECE regulations. TIC supports and applauds this action. However, the Department needs to be across all new UN-ECE regulation development that will potentially be implemented as ADRs in Australia. These future/pending vehicle regulations/technologies should be flagged in the Australian National Road Safety Action Plan, hence another justification of why a strong, proactive and evidence based National Road Safety Action Plan is required.

TIC calls on the Department of Infrastructure and Transport to continue to acknowledge that it is NOT possible for Australia to harmonise with all UN-ECE heavy vehicle regulations, as Australia has unique operating conditions and significantly different heavy vehicle combinations. Any UN-ECE regulation being considered for adoption as an ADR in Australia must be closely reviewed by government in conjunction with industry (Peak Bodies, such as TIC) to determine its suitability for use in Australia. TIC also supports the Department's continued involvement with UN-ECE regulation development as a primary mechanism to ensure that UN vehicle regulation development takes into account unique Australia issues.

The Regulation Impact Statement (RIS) process:

The Regulation Impact Statement, or analysis, (RIS) for the justification of new, or modified ADRs is fundamentally flawed. With cases in the past few years where ADR regulations have been introduced against the RIS justification that clearly showed a significant financial impost to industry for no safety benefit to road users, or the general public.

An example of this was the implementation of ADR108/00 - Reverse Technologies. ADR108/00 will add considerable cost to each new heavy vehicle (between \$500.00 and \$2000.00 per truck) all for NO safety benefit (as was detailed in the government's own ADR108 RIS). There were also considerable in-service issues and costs (\$) associated with this ADR and the systems/technologies that need to be used to meet the ADR requirements in Australia. These issues were raised by industry, including TIC. These concerns were NOT addressed by the Department in the ADR108 RIS, nor in any communications/consultation with industry/TIC by the Department. For some truck applications such as, tippers, concrete mixers, waste trucks, etc, the annual maintenance costs for these systems will be upwards of \$2000.00. Australia already has one of the oldest truck fleets in the developed world, at 14.8 years average age (total truck life approaching 30 years). Adding unnecessary cost (unjustified by a RIS assessment) to a new truck and/or adding annual service/repair costs to maintain a poorly conceived, or poorly applied ADR technology, is a SIGNIFICANT deterrent for an operator to purchase a new truck. Without new truck sales, the Australian truck fleet gets older and the uptake of new trucks with worthwhile (RIS justified) ADRs slows even further and the Australian truck fleet on average, becomes less safe. This is a perverse safety outcome driven by poor ADR choice and poor industry consultation.

Equally, there have been ADRs developed that have the full support of governments, Federal, State, Territory and Local, vehicle manufacturers, users and operators alike, yet due to a marginal, or

slightly negative cost-to-benefit RIS assessment, the ADR is not implemented, or a significantly delayed ADR implementation transpires.

An example of this was ADR 80/04 – Euro VI and Alternatives. This ADR was difficult to justify (developing a positive RIS cost versus benefit outcome) because Australia does not have significant air quality (health) issues associated with vehicle pollution. It took the Department some 8 years to find a means to RIS justify the implementation of ADR80/04. During the latter few years, there was wholesale agreement by all levels of government, vehicle manufacturers and operators, that ADR80/04 implementation was ‘a good idea’, yet due to a negative RIS analysis the Department/government could not justify the ADRs implementation. Finally introduced, ADR80/04 will come into effect 18 years after the equivalent regulation was enforced in the USA and 14 years after Europe introduced Euro VI (the base regulation of ADR80/04).

TIC calls on the Department of Infrastructure and Transport and the ITMM transport ministers to work with industry (Peak Bodies, such as TIC) to develop specific “rules” that can be applied to a RIS assessment of a new, or modified, ADR. These “rules” must take into account the cost versus benefit of ADR change/implementation, however also have the ability to significantly simplify, or even delete, the RIS analysis when all effected parties (all levels of government, vehicle industry, operators, etc) agree on an ADRs worthwhile implementation, irrespective of a RIS cost analysis.

Vehicle Type Approval (VTA) timelines:

Whilst this ADR harmonisation review is not tasked with reviewing the RVSA as such, there are some failings of the RVSA that lead to undue delays in vehicle approvals and add to the effective introduction timings for new ADRs and vehicle models. Once such area is the legal maximum approval timeline specified in the RVSA of 60 working days for the Department to grant a complying VTA application, an approval. 60 working days is effectively 3 months. This extended period of time is unheard-of in the vehicle regulatory space in Europe, Japan, Korea, etc. The Department’s own VTA approval time statistics show an average approval time of less than 15 days. However, vehicle manufacturers cannot work on an ‘average’ approval time when planning new model production schedules. These vehicle manufacturers require a timeline based on regulated certainty (but require that to be well less than 60 working days). Without a shorter regulatory period for VTA approvals, vehicle manufacturers have no other option at present, than to build a 60 working day timeline into their product development timings for VTA approval in Australia. Hence delaying the introduction of vehicles with the latest ADR features. Australian truck sales account for less than 1% of global truck manufacturing. Due to those low production volumes, Australian truck models already take a ‘back seat’ in global truck production. Having an effective 3 month approval timeline simply further delays Australian truck model production and introduction.

TIC calls upon the Federal Government to make the required amendments to the RVSA to shorten the legal maximum approval period of a compliant VTA application, from 60 working days, to 20 working days (still greater than the Department’s own VTA approval time statistics, hence a 20 working day maximum is well within the Department’s current approval capacity).

ADR Determinations under the RVSA:

Again, whilst this ADR harmonisation review is not tasked with reviewing the RVSA as such, there are some failings of the RVSA that lead to undue delays in vehicle approvals and add to the effective introduction timings for new ADRs and vehicle models. TIC notes one such issue is that the Department of Infrastructure and Transport does not currently have the ability to provide vehicle manufacturers, or industry, with ‘interpretations’ of ADRs under the current legal provisions in the Road Vehicle Standards Act 2018 (RVSA). In practice this means that a vehicle design feature/concept cannot be determined to be compliant with an ADR until a Vehicle Type Approval (VTA) application is made. A VTA application is typically made potentially two or more years AFTER the design concept is established, and long after a vehicle manufacturers investment in design, development, tooling, manufacturing preparation is complete. This lack of objective advanced consideration of a design concept is not in keeping with European (UN) precedent and is inconsistent with the practices of Approval Authorities and their Designated Technical Services in other Contracting Parties who are able to provide this service. Further, under the previous Motor Vehicles Standard Act 1989 (MVSA)

legalisation in Australia, the Department of Infrastructure and Transport was able to and did, provide legally binding 'interpretations' of ADRs.

The current situation under the RVSA stifles innovation and limits product availability to the Australian market of technologies (rather than allowing more advanced vehicle development as seen in other global vehicle markets).

TIC calls upon the Federal Government to make the required amendments to the RVSA to allow the Department of Infrastructure and Transport to provide legally binding 'interpretations' of ADRs to allow vehicle manufacturers, system and component suppliers certainty for their design concepts. This RVSA ADR 'interpretations' function should work in a similar, legally binding, manner to an Australian Taxation Office 'ruling/judgement'.

Meaningful Government and Industry ADR Consultation:

In far too many instances over the past five years, the level of consultation between the Department and Peak Industry Bodies, such as TIC, has been lacking. With industry concerns, proposals and recommendations all too often being ignored. Effective consultation means working through all the issues, concerns, recommendations, etc that are raised by all parties during the ADR development process. ALL issues MUST be addressed and clear answers must be given by the Department. There have been far too many instances in recent times where industry's concerns have been ignored by the Department and ADRs have been developed/finalised in isolation. This has led to strong industry pushback and Ministerial intervention that has led to ADR implementation delays. Delays that could have been avoided if the Department had entered into effective consultation with industry.

A good example of delayed implementation due to poor consultation with industry was the development of ADR99/00 - Lane Departure Warning.

Good examples of expedited implementation due to good consultation with industry were the developments of ADR108/00 and /01 - Battery Electric Vehicle Safety and ADR110/00 - Hydrogen Vehicle Safety.

TIC call upon the Department of Infrastructure and Transport to develop with industry (Peak Bodies, such as TIC) clear process and practices for the development of new ADRs and ADR revisions. These process and practices MUST include meaningful consultation with industry to clearly respond to industry concerns and communicate the action/s, or non-action/s, to be taken to finalise an ADR, or ADR changes.

Department of Infrastructure and Transport resources:

TIC has witnessed that with the Department's increased role in working with the European regulators on the development of UN-ECE regulations (this work is very much applauded by TIC, ensuring that the Australian government has direct involvement with UN-ECE regulation development to ensure those regulations are suitable for use in Australia and are not a European centric regulation), that local ADR development and maintenance work is suffering, due to an apparent lack of resources in the Department to undertake this expansive work program.

A few examples where there has been no apparent action by the Department of Infrastructure and Transport in well over 12 months are:

- ADR 13/00 - Installation of Lighting and Light Signalling Devices on other than L-group Vehicles. The mandating of a reverse light for heavy trailers was supposed to be an outcome of the ADR108/00 – Reverse Technologies development/RIS in 2022. Further, a 2011 QLD Coronial Inquest detailed that this regulation change would increase safety around vehicles and save lives. Still not implemented by the Department.
- ADR35/07 – Heavy Vehicle Braking Systems. Incorrect definition of "off road" vehicle. Correct in all previous versions of ADR35/xx. Openly acknowledged by the Department as an error in the ADR (once flagged by TIC in mid-2022), this has still not been corrected. Forcing truck manufactures to request an M&I approval by the Department, because their trucks, while technically correct, do not meet the incorrect requirements specified in the ADR! This is a cost to industry that simply should have been corrected by the Department two and a half years ago.
- ADR 42/05 - General safety requirements. This ADR covers numerous aspects of both light and heavy vehicles. The section that specifies truck and trailer lighting connectors relating to

heavy vehicles is out of date with references to incorrect Australian Standards. An issue flagged by industry to the Department +3 years ago now.

- ADR 97/00 – Automatic Emergency Braking Systems. Incorrect definition of “off road” vehicle. Openly acknowledged by the Department as an error in the ADR (once flagged by TIC in mid-2022), this has still not been corrected. Forcing truck manufacturers to request an M&I approval by the Department, because their trucks, while technically correct, do not meet the incorrect requirements specified in the ADR! This is a cost to industry that simply should have been corrected by the Department two and a half years ago.

TIC calls upon the federal government and the Transport Minister, to suitably resource the Department of Infrastructure and Transport with additional competent staff to undertake the required work at UN-ECE level as well as the domestic workload of ADR development and maintenance.

ADR Implementation Timelines:

ADR implementation timelines (applicability dates) must allow for the introduction of the relevant vehicle regulation in major markets of Europe, Japan, Korea and the USA, not just the implementation in Europe. Allowance must also be made for the local Australian truck manufacturers who need to perform local testing and certification. Invariably with limited, or no test facilities. In the latter case Australian test facilities need to be developed prior to commencement of ADR certification testing. This can delay Australian certification of trucks from a few months, potentially up to one to two years. It is critically important that the Department of Infrastructure and Transport consider the ability for local test facilities when a new ADR is being developed and work with Peak Bodies such as the TIC to ensure the ADR implementation timelines (applicability dates) reflect the ability for truck manufacturers to develop, test, certify and provide to market the required vehicles. In 2024 Australian heavy vehicles (trucks and vans) over 4.5t GVM sold in Australia were sourced from the following regions.

Australian new truck sales by source market – 2024:

Japan	54.4%
Australia (local manufacture)	24.4%
Europe	18.8%
USA	1.7%
Korea	0.6%
<u>China</u>	<u>0.1%</u>
<u>TOTAL</u>	<u>100.0%</u>

For government to only consider the regulatory timelines for new vehicle regulations in Europe (less than 20% of heavy vehicle sales in Australia), when developing new ADRs, jeopardises both, suitable product (truck) availability from the other major import markets, as well as local manufacturing, collectively providing over 80% of new trucks sold to the market in Australia.

Truck manufacturers require a MINIMUM of 2 full years for the introduction of NEW models for new ADRs from the gazettal date of the ADR and a FURTHER 1 year (3 years total) for the introduction of ALL model ADR applicability.

Examples of ADR development that worked (from TICs industry viewpoint):

- ADR80/04 – Euro VI and alternative engine emission standards (unfortunately delayed by previous Coalition Government inaction. No reflection on the Department or industry)
- ADR109/00 – Battery Electric Vehicle Safety
- ADR110/00 – Hydrogen Vehicle Safety

Examples of ADR development that did not work (from TICs industry viewpoint):

- ADR108/00 – Reverse Technologies
- ADR99/00 – Lane Departure Warning

Lack of Australia Test Facilities:

As touched on above, new ADRs are being developed and introduced, seemingly, without consideration by the Department/government for the ability for local and USA truck manufacturers

to undertake testing in Australia. This puts locally and USA manufactured vehicles (and potentially some Japanese truck models developed specifically for Australia) at a commercial disadvantage to European manufactured trucks.

Examples of recent ADRs that have been introduced that currently cannot be tested in Australia due to no suitable test facility being available are:

- ADR99/01 - Lane Departure Warning (inability to test to Australian line markings)
- ADR105/00 - Blind Spot Information Systems (inability to undertake the very complex European test method in Australia)
- ADR113/00 - Silent Road Vehicles (inability to find a suitable test pavement in Australia)

TIC calls upon the Department of Infrastructure and Transport to ensure that Federal and/or State and Territory governments develop, or support funding to private industry to develop, suitable test facilities for all new ADRs that are introduced. The development of suitable Australian test facilities must form part of the Department's ADR development process.

Further, TIC notes that Australia is not an Approval Authority or a Designated Technical Service recognised under the UN WP.29 processes. Australia, as a Contracting Party (with increasingly active participant within the UN in Europe), TIC believes that it is appropriate for Australia to establish itself as an Approval Authority and Designated Technical Service. This would make Australia more attractive for local vehicle manufacturing, as well as investment in vehicle component design, testing, certification, distribution and export.

Co-ordination of ADRs with the in-service standards:

States and Territory legislation takes over from the ADRs once RVSA approved vehicles enter into service (provided to the market). This commonly takes place at the point of vehicle registration and after any approved vehicle modifications are completed. In most States and Territories (except NT and WA), for heavy vehicles, in-service regulations are administered by the National Heavy Vehicle Regulator (NHVR) who enforce the Heavy Vehicle National Law (HVNL). The responsibility for development of and revisions to, the HVNL is that of the National Transport Commission (NTC). There is an increasing disconnect between the ADRs and the in-service regulations developed by the NTC. With changes to existing ADRs and new ADRs, not being reflected in the HVNL by the NTC, either in a timely manner and/or technically correctly.

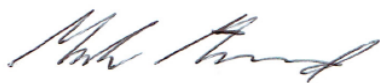
The interaction of the ADRs and the in-service standards (HVNL) MUST be streamlined, allowing changes in the ADRs (the higher level of vehicle regulation/law in Australia) to be automatically accepted in the in-service (HVNL) regulations.

TIC calls upon the ITMM transport ministers to instruct the NTC to make the necessary changes to the HVNL to automatically accept new ADRs and ADR amendments. Noting that ADRs are a higher level of regulation/law in Australia when compared with HVNL regulations.

I trust that you find TIC's submission acceptable and that the issues that have been raised in this submission will be considered as part of the Australian Design Rule Harmonisation Review.

Please contact the undersigned, on 0408 225212 or m.hammond@truck-industry-council.org for any questions about this submission, or should you require more details/information of the issues raised in this submission.

Yours faithfully,



Mark Hammond
Chief Technical Officer

Truck Industry Council member Brands:

Allison Transmissions Australia

Eaton Transmissions Australia

Cummins Engines

Detroit Engines

DAF Trucks

Dennis Eagle Trucks

Foton Mobility Trucks and Vans

Fuso Trucks and Busses

Freightliner Trucks

Hino Trucks

Isuzu Trucks

Iveco Trucks, Busses and Vans

Kenworth Trucks

Mack Trucks

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Mercedes-Benz Vans

Scania Trucks and Busses

UD Trucks

Volvo Trucks and Busses

Western Star Trucks