

ADR Review MTAA submission

January 2025





Introduction

The Motor Trades Association of Australia (MTAA) welcomes the opportunity to contribute to the Australian Design Rules Harmonisation Review 2024-25. As the national peak body representing the retail, service, and repair sectors, MTAA advocates for a regulatory framework that supports safety, innovation, and market access while minimising unnecessary compliance.

Australia's automotive sector operates within an increasingly global market, where harmonisation with international standards is critical to maintaining competitiveness and consumer choice. While Australian Design Rules (ADRs) play an essential role in ensuring vehicle safety and performance, some regulations impose additional compliance requirements that create barriers to market entry, restrict the availability of certain vehicle models, and delay the introduction of new technologies.

A more efficient and globally aligned regulatory approach is needed to ensure Australia does not fall behind key automotive markets. A more efficient system would also offer a wider choice of vehicles to the consumer without any compromise to the safety outcomes as required under the current system.

This submission highlights several areas where regulatory misalignment is impacting the industry. For instance, the requirement under ADR 34/03 for child restraint anchorages in all rear seats has limited the availability of European Whole Vehicle Type Approved (WVTA) vehicles from key right-hand-drive (RHD) markets. Similarly, electric vehicles (EVs) face regulatory challenges related to axle mass and vehicle length, which hinder their adoption and delays the transition to cleaner transport solutions.

To support a more effective regulatory framework, Australia must strengthen its commitment to international harmonisation by actively engaging in WP29 working groups and adopting global standards in a timelier manner. Strengthening technical expertise within regulatory agencies and fostering more structured collaboration with industry stakeholders—similar to the approaches seen in the European Union—will be essential to improving efficiency, reducing approval delays, and ensuring that ADRs remain fit for purpose in a rapidly evolving automotive landscape.

MTAA remains committed to working collaboratively with the Department of Infrastructure, Transport, Regional Development, Communication, and the Arts (the Department) and key stakeholders to address these regulatory challenges. By refining Australia's approach to vehicle standards, fostering industry engagement, and aligning more closely with global best practices, the country can enhance consumer choice, drive investment in emerging vehicle technologies, and secure the long-term sustainability of the automotive sector.



About the MTAA

As the national automotive industry body, MTAA represents the unified voice of Australia's automotive industry, identifying and monitoring issues across all sectors, advising governments on industry impacts and trends, and actively participating in the development of sound public policy. Our focus encompasses the retail motor trades, the Australian vehicle fleet, and the mobility of local communities.

We represent over 15,000 businesses ranging from dealers to repairers, tow truck operators to service station businesses and every automotive retail business in between. These organisations make up a critical backbone of the Australian economy, selling, servicing, repairing, refuelling and maintaining Australia's 21.2 million strong motor vehicle fleet. Together, the sector contributes approximately \$39.35 billion to Australia's GDP annually (or 2.1%)¹.

Our recommendations

MTAA's recommendations to improve the effectiveness, flexibility, and global alignment of the ADR process while addressing Australia's unique regulatory needs are presented below.

1. ADR Source

- Maintain a transparent and collaborative relationship between the Department and industry stakeholders to identify and address Australia's specific regulatory needs without creating unnecessary divergence from international standards.
- Manage ADR implementation to cater to the unique aspects of the Australian heavy vehicle market while ensuring compliance with WTO Technical Barrier to Trade (TBT) obligations.

2. Engagement with the 1958 Agreement

- Monitor and evaluate ECE Regulations to ensure they align with Australia's interests and avoid unnecessary adoption of requirements solely suited to the EU market.
- Strengthen industry involvement in WP29 discussions through improved communication and feedback mechanisms with the Department.
- Ensure Australia does not adopt costly or ineffective regulations that do not benefit Australian consumers or manufacturers.

3. Participation in the 1998 Agreement

• Continue active engagement with WP29 under the 1998 Agreement to influence the development of Global Technical Regulations (GTRs) that reflect Australian market needs.

¹ MTAA. (2021). *Directions in Australia's Automotive Industry – An industry report 2021*. Available at: https://vacc.com.au/Portals/0/Publications/Industry%20Report%202021/2021%20Directions%20in%20Austral ias%20Automotive%20Industry_pp.pdf?ver=2021-05-20-14 (Accessed: 14 October 2024).



• Leverage the participation of major global markets such as the US, China, and India to ensure GTRs are widely applicable and beneficial to Australian vehicles.

4. Voting Considerations

- Utilise Australia's consensus-based voting power under the 1998 Agreement to ensure regulations do not disproportionately favour EU-specific requirements.
- Advocate for regulations that promote global harmonisation while considering the specific needs of the Australian market.

5. Adoption and Implementation of UN ECE Regulations and GTRs

- Ensure that GTRs are considered for ADR adoption via the 1958 Agreement as a UN ECE Regulation whenever they offer equivalent or superior safety, environmental, or performance outcomes.
- Recognise the role of GTRs in bridging the gap between different regulatory regimes (e.g., ECE Regulations, FMVSS, JIS, GB standards).
- Address the current low adoption rate of UN ECE Regulations by developing a clear policy on their implementation within the ADR framework.

6. Alternative Standards for ADR Compliance

- Expand the recognition of alternative international standards such as FMVSS, CMVSS, JIS, and GB standards where they provide equivalent safety and performance outcomes.
- Reintroduce alternative standards into existing ADRs, such as FMVSS 214 for Pole Side Impact protection (ADR 85/00).
- Develop a framework for evaluating and approving alternative standards to reduce regulatory burdens on manufacturers while maintaining safety and compliance.

7. Addressing Unique ADRs and Market-Specific Barriers

- Review unique ADRs that pose challenges to vehicle imports and consider alignment with international regulations where appropriate.
- Conduct a specific review of ADR 34/03 (Child Restraint Anchorages) to determine its impact on the availability of new vehicle models in Australia.
- Evaluate the necessity of ADRs that impose significant compliance costs without proportional safety benefits, particularly those that affect vehicle supply.

8. Enhancing Regulatory Efficiency and Technical Capability

• Improve the Department's technical expertise and resources to provide better support and engagement with industry on regulatory matters.



- Establish a technical authority or advisory body similar to the EU's Type Approval process to facilitate ADR compliance discussions.
- Modernise the regulatory framework to allow for more agile adoption of international vehicle standards, particularly for emerging technologies like EVs.

9. Keeping Pace with International Vehicle Regulations

- Improve Australia's responsiveness to global regulatory changes by actively tracking developments in WP29 working groups and major markets.
- Reduce the time lag between regulatory advancements in international markets and their adoption in Australia.
- Ensure that Australia's regulatory framework remains competitive by adopting best practices from leading automotive markets like the EU and the US.

Overview

Vehicle standards in Australia have a long and rich history, with the country being one of the first markets to have vehicle safety standards. Only the US had started the application of vehicle safety standards as "Federal Motor Vehicle Safety Standards" (FMVSS) as a result of various campaigns led by Ralph Nader and the publication of his book "Unsafe at Any Speed".

Early ADRs were based on US FMVSS before the application of some unique ADRs deemed unique to Australia. For many years ADRs were a mix of local, FMVSS, EU Directives and UN ECE Regulation sources.

Trans-Atlantic Business dialogue

The US Reagan Administration and the UK Thatcher Government held discussions under the banner of the Trans-Atlantic Business dialogue. The purpose of which was to reduce unnecessary bureaucracy and streamline regulations in several areas. The success of these discussions led to a wider discussion covering many disciplines in numerous markets. A task identified during these discussions was the identification of peak bodies that had the necessary oversight over such market requirements.

United Nations - Working Party 29 (UN WP29)

For vehicle regulations, the United Nations Working Party 29 was identified as the peak body that had the necessary attributes considered essential to address the intent with respect to the potential for standards harmonisation with respect to vehicles.



At the time this was identified (early 1990s) there was one agreement in place administered by the Administrative Committee (AC1), being the United Nations 1958 Agreement.

At that time the main Contracting Parties (CPs) were the European Union members only.

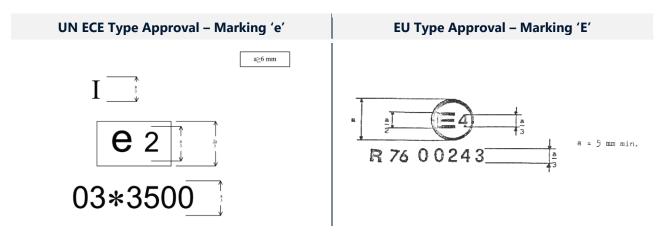
The European Union had its own vehicle certification process and had a significant number of the EEC Directives covering:

- Vehicle Safety
- Vehicle Emissions
- Vehicle Anti-Theft

Generally, WP29 followed EU Directives and created ECE regulations.

The two regimes had two Type Approval systems. The EEC Type Approvals could be identified by its use of a small "e" and the ECE Type Approvals utilised a large or capital "E".

The Type Approvals for were identified as per the below.



UN 1998 Agreement - 'Global Agreement'

'Agreement concerning the establishing of global technical regulations for wheeled vehicles, equipment and parts which can be fitted and/or be used on wheeled vehicles'

The early 1990s saw several interested parties attend the main UN Working Party 29 (WP29) sessions in Geneva. This was as a result of the discussions post GATT Dialogue. Given WP29 had been identified as the



single entity for the pursuit of standards harmonisation for vehicles, new attendees came to discuss the best way forward. At this stage there were few mature vehicle regulatory markets with the US, Europe and Japan leading the way with Australia and South Africa following at a distance.

Originally the intent was for all concerned to look at becoming Contracting Parties to the 1958 Agreement ('58A). However, after initial studies, it was soon identified that the US could not become a Contracting Party to the '58A. This was due to the included *Mutual Recognition Agreement* (MRA) contained within the agreement. US legislation does not allow for such MRAs to be part of its regulatory process.

The US Department of Transport requires direct contact with vehicle manufacturers at all times in relation to vehicles offered for sale or sold in the US market. The '58A MRA allows for Government-to-Government interaction in relation to ECE Type Approvals issued prior to any interactions with the vehicle manufacturer.

At the same time a number of studies were undertaken to look at differences and commonalities between USA FMVSS and ECE Regulations (including EEC Directives). The result of these studies determined that there were some wide differences in each regime that could not be aligned under the '58A.

As a result of further studies by other governments at this time it was concluded that a new agreement should be created to look at 'Global Technical Regulations' under the auspices of global harmonisation of vehicle regulations. This process took several years but it finally gave way to the 1998 Agreement. One of the more contentious issues was a 'certification' mode. It was finally concluded that any certification mode should be done at a national level and not form part of the agreement.

Hence there is no certification mode under the '98A.

The '98A under the control of the Executive Committee (EC2) came into force after Russia became the 8th Contracting Party in July 2000.

Since then, the '98A has had the largest number of Contracting Parties (signatories) and includes non '58A CPs like China, India and the US.

Since its inception there have been numerous working groups looking at all vehicle regulations, and despite the intent to take on some 'low hanging fruit', it took over two years to get the first Global Technical regulation (GTR) – GTR No. 1 - Door locks and door retention components.

To date there are 24 GTRs and the list continues to grow.

As new GTRs are created they have been reformatted and added as UN ECE Regulations under the '58A. This has allowed those CPs wanting to adopt and apply these new regulations utilising the MRA and the Type Approval system to allow the trade in vehicles between CPs and other markets that accept ECE Regulations as a form of demonstration of compliance.

Example of GTRs that became other regulations:



GTR 8 - Electronic Stability Control Systems

- UN ECE R140 Electronic Stability Control
- US FMVSS 126 Electronic Stability Control
- China GB 21670-2008 Electronic Stability Control

GTR 9 - Pedestrian Safety

- UN ECE R127– Pedestrian Safety
- China GB/T 24550-2009 Pedestrian Safety
- India Draft AIS100 Pedestrian Safety
- US NPRM in progress (based on GTR No. 9)

The advent of the '98A and the success in the push for harmonisation of new regulations has seen most of WP29s activities done through the '98A forum and not the '58A AC1 umbrella.

WP29 – Working Groups (GRs)

- Working Party on Automated and Connected Vehicles (GRVA)
- Working Party on General Safety (GRSG)
- Working Party on Lighting and Light signalling (GRE)
- Working Party on Noise and Tyres (GRBP)
- Working Party on Passive Safety (GRSP)
- Working Party on Pollution and Energy (GRPE)

The majority of WP29 new activities pertaining to new vehicle standards are conducted under the auspices of the 1998 Agreement.

Only changes to UN ECE Regulation updates (Corrigendum, Amendments & Series) are conducted under the 1958 Agreement via AC1.

Therefore, it is essential that any participation for all new vehicle regulations must be by way of participation to both the '58 and '98 Agreement forums at WP29.

Note this would also include GRs.

Australia became a CP to the 1998 Agreement on 7 June 2008. C.N.272.2008.TREATIES-1, 10.04.2008



Australian Design Rules (ADRs)

ADRs have been a part of the modern Australian automotive industry since 1989 when the Motor Vehicle Standards Act 1989 was published.

These early ADRs were a mix of various requirements of US FMVSS, EU Directives and local requirements.

Since signing the 1958 Agreement as a Contracting Party on 20 March 2000 with the application coming into force on 25 April 2000, it was some years before the first ECE regulations were adopted.

The affect of this signing had little effect on the applications of ADRs with the exception of a clearer focus on any new ADR candidates having their basis on UN ECE Regulations for any new vehicle regulatory subject matter. However, this was not a fixed norm. This is particularly the case with Motorcycles and Heavy Goods Vehicles.

Australia did not adopt its first UN ECE regulation until 31 July 2010.

Australia adopted a number of ECE Regulations as per:

Qty	Date	Qty	Date	Qty	Date
28	31 July 2010	1	5 October 2016	5	22 January 2021
2	17 November 2012	4	22 January 2017	2	10 June 2021
2	9 July 2013	3	19 July 2018	4	30 September 2021
2	15 June 2015	2	2 January 2019	1	14 October 2021
1	20 January 2016	1	15 November 2019	1	19 January 2023
2	24 June 2016	1	23 January 2020	2	8 June 2023

Total 63 ECE regulations adopted

Note: Adoptions made from 15 November 2019 had 45/A under "Designated Type Approval Authority" However, the listing for Australia shows 'data missing':

Extract from latest status of the '58A



The above has denied local test entities from being approved as 'Designated Technical Services' (DTS) under the E45 CP status.

To date any local manufacturer must utilise overseas DTS to secure an ECE Type Approval.



ADR format

The format of an ADR is one of the best instruments utilised by any Type Approval system. There are few such vehicle standards that offer the potential for flexibility. Malaysia and South Africa may be the closest, but that has more to do with the overall certification process as opposed to the actual vehicle standard.

The ADR that utilises a UN ECE regulation has in general the following attributes:

0.1. NAME OF STANDARD	3
0.2. COMMENCEMENT	
0.3. REPEAL	3
1. FUNCTION AND SCOPE	3
2. APPLICABILITY AND IMPLEMENTATION	3
3. DEFINITIONS	4
4. REQUIREMENTS	5
5. EXEMPTIONS AND ALTERNATIVE PROCEDURES	5
6. ALTERNATIVE STANDARDS	5
APPENDIX A	3

This generally transpires to having the Technical Requirement as an ADR requirement devoid of the UN ECE Type Approval administration.

The requirement for the demonstration of compliance would be to have the following:

- UN ECE Type Approval as issued by a CP to the '58A (TA number e.g. E4 43R-12345)
- A Test Report to the technical requirements issued by an approved DTS
- A Test Report to the technical requirements issued by an approved Test Facility with a TFA No.

In some instances, there may be exemptions listed in Section 5 that are deemed not a requirement for Australia.

By contrast there may be additional technical requirements that are considered unique to Australia, e.g. ADR 35/07 for HGVs.

ADRs post the signing of the '58A

In the early 2000s with a thriving automotive manufacturing industry, the discourse between the Australian Vehicle Regulator (the Department) could be considered robust but very transparent. The level of interactions mirrored what was the norm in most other CP markets i.e. discussions between the EU Commission and the automotive industry association, ACEA.

At a country level there were similar discussions between each EU Departments of Transport and country automotive associations, e.g. Germany VDA with KBA, SMMT with VCA/ UK DoT, CAAM with CATARC in China, NAAMSA with SABS in South Africa etc.



These discussions and interactions held under GATT/WTO norms were essential to avoid delays in vehicle regulatory development.

The peak automotive industry body at WP29 were OICA (Auto Manufacturers Assoc.) and CLEPA (Vehicle Component Manufacturers Assoc.)

Discussions between the Australian industry and the Department at this time addressed WP29 issues and the path to adoption of UN ECE Regulations under Australia's CP status.

Eventually the first tranche of ECE regulations were adopted and came in force on 31 July 2010. Since then, there have been others added to the list.

ECE R135 Pole Side Impact

It is worth noting that Australia led the Working Group for GRSP development of Pole Side Regulation. This became UN ECE R135 – Pole Side Impact.

Australia took on the adoption and application of ECE R135 and created ADR 85/00 in 2015, the same year as it was approved by WP29.

The application of this ADR although commendable was considered premature as most other '58A CPs and vehicle source countries had not applied the regulation. This resulted in vehicles being removed from the Australian market and delayed vehicle launches into the Australian market. The EU only took on the application of ECE R135 as per:

UN R135	Pole side impact	New types: 07/07/2024 New registration: 07/07/2026	New types: 07/07/2024 New registration: 07/07/2026
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Smart ADRs

Smart ADRs contained exemptions that did not make sense for Australian conditions. They also had alternative standards that allowed a less cumbersome form of compliance demonstration. This was the result of both industry and the Department having the deep understanding of what constituted the necessary intent of the ADR without any compromise on the intended safety for the consumer. Such ADRs have been used by other regulatory regimes to show the flexibility of vehicle and system compliance without the burden of the extensive administration of UN ECE Type Approvals.

Post the adoption of the first tranche of UN ECEs in 2010, the adoptions that followed progressed slowly. Also, at this time, candidate ECE regulations for ADRs did not have the same level of flexibility as previous ADRs. Fewer alternative standards were considered or included in ADRs issued post 2010 to date.

It should be noted that like most Australian government departments, personnel changes and leadership changes occur. Significant structural changes at the Department occurred during the period when '58A was signed and especially when the '98A was negotiated when Australia had a leading role in the '98As formulation.



With the benefit of hindsight, the 'smart' additions to ADRs had ceased and had been replaced by a rigid application of a standard listing of ADR format inclusions.

While the regulatory impact statement process was followed it did not delve any further into 'smart ADRs'. An example of this was the application of UN ECE R135 Pole Side Impact as ADR 85/00 in 2015. Despite evidence provided by industry to align the application closer to that of the EU and Japan, the resultant market disruption could have been avoided. The resultant ADR also did not consider alternative standards in line with earlier ADRs.

Going forward – ADR source, input, alternative standards and implementation

ADR Source

It is clear that as a Contracting Party to both the 1958 and 1998 Agreements any new ADR candidates must come from the United Nations Working Party 29 forum. This is based on the original intent of the Agreements to avoid a CP creating a unique requirement for a subject that is already contained in the compendium of available ECE Regulations and Global Technical Regulations.

However, this needs to be managed for the Australian market. Also, there are some unique heavy vehicle combinations in Australia that will require a local requirement. It is vital that such a requirement does not fall foul of WTO Technical Barrier to Trade (TBT) obligations.

1958 Agreement

Australia has a single vote against the majority vote of the EU under the '58A. We have seen that ECE Regulations suited for the EU may not be in the best interests of Australia. This is especially the case with the lack of agility with later ADRs, post 2010, that have demonstrated a steadfast format application with no flexibility as to the demonstration of compliance.

As the Department is the sole representative at WP29 and at working groups, the Department should be aware of any industry position that has an Australian point of difference.

At no stage should we be looking for a unique Australian outcome, but we need to ensure Australia is not encumbered by requirements that are unique to Europe with no benefit or worse, being encumbered with a requirement that is costly or ineffectual to the end users in Australia.

A closer and transparent working relationship based on WTO norms between industry and the Department is essential.

1998 Agreement

The '98A is the main forum at WP29 where most new vehicle regulations will be created. The fact that the '98A has more members and has a wider global input and attendance makes the forum truly global.



The working groups have changed and evolved to adapt to what the vehicle regulatory challenges are and what is required going forward.

The inclusion of the US, China and India as non-'58A members is an essential factor for its success.

The majority of new regulations have been formulated under the '98A as Global Technical Regulations (GTRs) and then reformatted as UN ECE Regulations to allow the '58A Type Approval process to be utilised.

The success of the '98A and its output has seen a level of harmonisation between a number of differing regulatory regimes. Some US FMVSS, ECE Regulations, Japanese JIS and Chinese GB standards have been created on the basis of GTRs. While the number of such achievements are small, the pathway going forward is clear to ensure most, if not all, new vehicle requirements are harmonised and have input from all interested and affected parties.

Vote

Australia has a single vote under the '98A but the voting is a consensus voting procedure. This has avoided the EU with a majority vote under the voting process. To date this voting process has worked well and has been embraced by all CPs.

Global Technical Regulations (GTRs)

As mentioned, the '98A does not have a certification mode, unlike the '58A which has its MRA that allows trade to take place between CPs and other markets that recognise UN ECE Regulations as acceptable for a compliance demonstration.

GTRs are different to ECE Regulations. There are options provided in some GTRs that may be applicable to one region but not to another region, e.g. an environmental test for the Middle East region may not be a requirement for the UK. Also, some less mature regulatory markets with limited resources may apply an alternative or reduce the form of compliance requirement.

Not many CPs have adopted and applied GTRs to date. Given the equivalent requirements are available in the '58A compendium of the regulations, most CPs have used the '58A process to fulfill their requirements.

Given the profile of the 1998 Agreement under the United Nations Working Party 29 forum, Australia's participation as a Contracting Party is essential.

Most product destined for the Australian market will come from markets whose governments will have a connection to the UN WP29 process

The above is a statement that reflects the only real pathway forward that will ensure Australia is not out of step with the global vehicle regulatory harmonisation advancement.

Further ADRs must have the clear connection to the WP29 process. This will ensure:



- 1. The current extent of ADR harmonisation with international standards
- 2. Opportunities for further ADR harmonisation with international standards along with principles to prioritise further work and outline any risks presented

Opportunities for further ADR harmonisation with international standards was already a feature of early ADRs. The opportunities could be described as:

- 1. Alternative standards to demonstrate compliance
- 2. Exemptions to requirements that do not serve a purpose in the Australian market

Alternative Standards

There are a few ADRs that have Alternative Standards listed as part of the ADR format. As previously mentioned, it is (was) and attributed that they could be classified as being part of a "smart ADR".

ADR and their application as a certification mode

It should be understood that ADRs, like any vehicle standard, are the instrument by which the regulator demands a demonstration of compliance for required vehicle attributes. Although the review does not cover the Australian RCVS and ROVER process, it is vital to understand the attribute an ADR makes to the process.

The Australian vehicle regulatory regime is a "Type Approval" process. This means that the vehicle must be approved before it is offered for sale in the market. It is a system that is common in many markets world-wide.

There are several Type Approval regimes operating in other markets but the most copied and held as the standard bearer is the European Union (EU) Type Approval process.

The EU process is called a 'Whole Vehicle Type Approval' (WVTA) and has been in operation since the 1970s with several iterations that has seen it evolve as a fairly robust 'halo' system.

While Type Approval under the EU process is considered one of the most robust, it should be noted that the process of 'Verify & Trust' has not always been one that has identified some high-profile non-compliances.

The US system, which is not a Type Approval system, has been responsible for the most high-profile non-compliances. The resultant discoveries and subsequent recalls have had repercussions world-wide.

The most notable instance being the VW diesel emissions non-compliance. The US operates a system of Trust and Verify. The verification process is continuous and operates for the life of the vehicle in the market.



EU WVTA – a world standard Type Approval

As Australia is a Type Approval scheme, it is fair to compare the process. The EU WVTA is an administratively complex scheme when compared with the Australian scheme.

Considering the EU covers over 27 countries and is accepted in other markets outside the EU, the value of the EU WVTA is significant.

Engaging with the EU process is very transparent and well documented. The usual route for vehicle manufactures is to engage with a 'Designated Technical Service'. They in turn act on behalf of a Type Approval Authority.

This process allows the manufacturer to have direct contact with an entity who can offer advice, direction and interpretation in an open environment. There are free and paid for that offer regulatory interpretation from a design proposal to an off-tool production proposal.

As the EU makes use of UN ECE Regulations and EEC Directives, vehicle manufacturers need open interactions to proceed in their business of vehicle design, manufacturing and final offer for sale to the consumer in their markets.

Such a process did exist in Australia since the start of the ADR process, but it is fair to say that there is no such process in existence today. ADRs are issued but there is little or no facility to interrogate a compliance with a 'Designated Technical Service' equivalent in Australia.

While the review only looks at the ADR process, it is vital to look at the opportunities that allow for an open and transparent process, making the demonstration of compliance to the ADR less cumbersome given the limited technical capability provided by the Department when compared to the transparency offered to the EU based or EU WVTA customers.

Alternative Standard Regimes

Since the first ADRs were published to current ADRs, there are vehicles standards requirements operating in a number of markets that would satisfy the intent of the current batch of ADRs.

The major vehicle regulatory regimes in operating today are:

- 1. EU Whole Vehicle Type Approval UN ECE, EEC Directives,
 - a. National Road Rules for vehicles
- 2. United Nations ECE Regulations with ECE Type Approvals
- 3. USA Dept. of Transport Federal Motor Vehicle Safety Standards (FMVSS) and US State Laws
- 4. Canada MVSA, Motor Vehicle Safety Regulations (CMVSS)
- 5. Japan UN ECE, JIS
- 6. India Auto Industry Standards (AIS) and Indian Standard (IS)
- 7. China GB and GB/T standards, China Compulsory Certification (CCC)



- 8. Brazil CONTRAN, CONAMA, DENTRAN Ordinances
- 9. South Africa S A National Standards (SANS)
- 10. Gulf States GSO and GCC standards.
- 11. ASEAN ASEAN MRA (UN ECE regulations)

There are many more, but most would be utilising similar attributes for vehicle standards to protect the consumer and end users.

Since the early 2000s there has been an exponential increase in vehicle certification/homologation regimes globally. They continue to increase and the UN WP29 forum is pivotal as it offers a global attendance and a broad spectrum under both the 1958 and 1998 Agreements.

Alternative Standards - ADR Candidates (See Appendix I)

When considering alternatives standards for ADRs going forward, it is essential that the alternative fully satisfies the intent of the regulation.

Knowledge Vs Wisdom
Knowledge is knowing tomato is a fruit.
Wisdom is not putting it in a fruit salad.

The current ADR process is narrowly focused on written content under the UN ECE process supported by the Australian Test Facility process. This has removed the ability to be wise about alternatives.

There are clear alternatives that need to be considered. They are:

- EEC Directives Approvals and/or Test reports
- USA Federal Motor Vehicles Safety Standards (FMVSS)
 - o Canada CMVSS

Other test reports from PR of China, Japan or any other '58A CP member has the same UN ECE Regulation equivalent to the ADR.

EU Directives

The EU gave up on most of its vehicle safety directives in favour of UN ECE Regulations. However, some EU directives remained due to administrative requirements.

The directive requirements where the technical requirements remain identical to the UN ECE are clear candidates.



EU Directives that have a direct equivalence in their technical requirements are also processed by the same 'Designated Technical Services' as listed in the 1958 Agreement – **Status of the agreement, published by the Inland Transportation Committee of WP29.**

As a result, there is no compromise on the outcome of compliance to the ADR technical requirements.

USA – Federal Motor Vehicle Safety Standard (FMVSS)

The USA has without comparison the most stringent vehicle regulatory regime. The adversarial legal system in the USA prevented it from signing the '58A as was its desire in the early 1990s. At that time the US was often referred to as a 'Self-Certification' scheme. This was due to the fact that there was no approval process for vehicle safety requirements before a vehicle was offered for sale in the market. However, there is a clear undertaking within the process for a compulsory undertaking by Manufacturers to NHTSA regarding compliance.

A study of the US system would show that it is better described as a "Conformity Compliance Verification" process.

US Government authorities test vehicles sold to the public for compliance and require manufacturers to report promptly possible non-compliance. Government entities also closely monitor the performance of vehicles in use and require manufacturers (legal obligation) to report on any safety-relevant issues.

The National Highway Transportation Safety Administration (NHTSA) under the Department of Transport, is an enforcement agency charged with establishing requirements and ensuring that manufacturers meet or exceed the requirements and throughout the life of the vehicle.

Manufacturers are responsible for testing their vehicles to ensure compliance and ultimately bear responsibility. The NHTSA-automakers' relationship means that manufacturers are free to innovate in their testing and have an incentive to test including a 'margin for error' well above the requirements.

Compliance with FMVSS minimum requirements by manufacturers is usually not an option. The usual practice is to test against values that are clearly above the minimum requirements to ensure compliance to any FMVSS is well above 'margin of error'.

It should be noted that vehicle emissions in the US have the most stringent approval processes overseen by the US Environmental Protection Agency (EPA) and California Air Resources Board (CARB).

Cognisance also needs to be taken of the US THRED Act. This requires all US based manufactures with vehicles in overseas markets similar to that sold on the US market to report any defects to NHTSA for a range of actions up and including recalls.

ADRs – Include FMVSS

Some ADRs have FMVSS as an alternative but it is clear that the application or inclusion has reduced post 2010.



An example of the above is ADR 85/00 which is an overwritten UN ECE R136 Pole Side Impact. A study between FMVSS 241 and ECE R135 would show that the FMVSS 214 requirements are more stringent to that of ECE R135.

It is evident that post the last ADR in review in 2011, the appetite for FMVSS inclusion was vastly diminished despite the FMVSS process having evolved as the most stringent certification process in operation today.

The upheld notion that FMVSS as administered by the NHTSA is little more than a self-certification process is flawed in the extreme. As previously mentioned, the US process has been responsible for more recalls and technical non-compliances that any other scheme and as such is considered by most vehicle manufacturers to be the most onerous in terms of vehicle regulatory compliance.

Unique ADRs

It is noted that the review does not cover specific ADRs or technicalities, but given the impact of the ADR process, impacts the intended outcome to the end user/consumer.

ADR 14/03* - Devices for Indirect Vision

ADR 29/00 - Side Door Strength

ADR 34/03 – Child Restraint Anchorages and Child Restraint Anchor fittings

ADSR 42/05 - General Safety Requirements

ADR 43/04 - Vehicle Configuration & Dimensions

ADR 44/02 - Specific Purpose Vehicle Requirements

ADR 45/01 - Lighting & Light-signalling Devices not covered by ECE Regulations

ADR 57/00 - Special Requirements for L-Group Vehicles

ADR 61/03 - Vehicle Marking

ADR 62/02 - Mechanical Connections between Vehicles

ADR 63/00 - Trailers Designed for Use in Road Trains

ADR 64/00 - Heavy Goods Vehicles Designed for Use in Road Trains & B-Doubles

ADR 81/02 - Fuel Consumption Labelling for Light Vehicles

*ADR 14/03 Application for 2nd Stage Manufacturing restrict the installation of "Electronic mirrors".

The above is a selection of unique ADRs that are part of the wider vehicle regulatory framework. While some are absolutely necessary to allow approved vehicles to be fit for purpose and final registration, there are other ADRs that need to be reviewed, or the content reviewed to align better with source markets. However, some ADRs have a direct impact on supply given the unique content that is either too unique or expensive to achieve compliance.

The New Vehicle Efficiency Standard (NVES) – Impact of a unique ADR

There were several justifications for the NVES requirement as a new Australian regulation. One outstanding justification was that Australia did not have a vehicle efficiency standard, which was required if Australia was to be served by the growing list of the vehicles available overseas that were not scheduled for sale in the country.



Now that Australia has a New Vehicle Efficiency Standard it is hoped more fuel efficient, and the latest Battery Electric Vehicles (BEVs) will make their way to the market.

An alternative barrier to Australia not receiving such vehicles may have more to do with EU WVTA Type Approved vehicles not being in a position to efficiently make the transition to an Australian Type Approval.

One particular barrier to this is ADR 34/03 - Child Restraint Anchorages and Child Restraint Anchor Fittings. This unique ADR requires that each rear seating position has an upper Child Restraint Anchorage. This requirement has a significant impact on vehicle source markets for Australia.

The number of EVs available world-wide has grown and continues to grow at an exceptional rate. This in turn should see such vehicles available to Australian consumers as those in other Right-Hand Drive (RHD) markets. However, this is clearly not the case.

Model variants available in other markets but not Australia

Data received from Jato, a provider of automotive market intelligence, on vehicle availability from Right Hand Drive (RHD) markets of the United Kingdom, Japan and New Zealand show that a significant number of these vehicles cannot be made available to Australia as they do not have the ability to comply with the requirements or ADR 34/03. This can be due to no centre top tether, or compliance demonstration.

The number of model variants available in the UK, Japan and New Zealand but not Australia is presented below.

	Total number of model variants available in other markets but not in Australia	Great Britain	Japan 90	New Zealand
4	Battery electric	74	19	10
A+	Extended range electric vehicle	2		
64	Hybrid	118	32	4
0\$	Mild hybrid	25	26	2
464	Plug-in hybrid	20	13	5

Source: JATO



Keeping up to Date

The application of regulations in many markets usually follows development and innovations by vehicle manufacturers. The EU Commission through the WP29 forum and the US Department of Transport through NHTSA will embark on the creation of regulations to make compulsory vehicle enhancements, like AEB, Lane Keep Assist, Electronic Stability Control (ESC) etc. To this end we have seen that most new regulations issued by WP29 are mostly emanating from Industry and made a requirement by the regulators.

The advent of EVs has added a level of complexity to some regulations. Apart from vehicle safety requirements, most major jurisdictions identified the need for dispensations for EVs on the road. This is especially true for heavy EVs. Axle masses increased and, in some cases, lengths were altered for such vehicles. However, the Australian regulatory regime was very slow in the adoption of such changes. This puts Australia behind the rest of the world.

It is essential that the discussions and activities at the WP29 working groups are known and acted upon in a timelier manner. It is to Australia's disadvantage to have to wait for a myriad of Government departments, both Federal and State to have the necessary discourse to arrive at the same decision as the EU or other major markets. It may be months or years later before it is ratified in Australia. The ADR process ex the WP29 process has the necessary view of the rest of the world in these matters and should be leveraged so as to avoid any such delays with international norms.

Department diminished resources and technical capability

With the benefit of some hindsight, industry has seen a change in the Department's role post the adoption of the first batch of 28 UN ECE regulations. Successive Governments had various cost saving measures across the public service. While the activities at WP29 remained and continue to remain, the application of new UN ECE regulations to ADRs has not been the same. The example of ADR 85/00 Pole Side Impact without the alternative of FMVSS 214 is an example. Whether it is a mindset that FMVSS is considered less worthy or was not a candidate is unknown. What is evident is the technical capability that is required by industry of the Department does not appear to present.

As stated previously the standard by which the regulatory environment may be measured is with that of the EU or the US. Open dialogue between industry stakeholders and the regulator is essential. It is how innovations in the vehicle safety arena are achieved. It is the norm.

While we have seen that there is a risk of "regulatory capture" in other industries, the discourse between the automotive industry and regulators is open, frank and necessary.

The advent of the RCVS post the latest Motor Vehicles Standards Act, now the Motor Vehicle Standards Act 2018 (2021), has resulted in a system that is antipodal to that of other certifications regimes. The ROVER system has allowed the removal for any discourse on vehicle regulatory issues as per the EU and US and many other regulatory regimes.

There is a clear need to have the right resources in place and the necessary development to align with industry needs. The required technical capability to allow a level of industry/Department interaction akin to



that of the EU is a minimum. To achieve this a level of technical capability needs to be addressed within the Department.

Government/Industry ADR fora

The current peak forum for Government and industry in the regulatory sphere is the Vehicle Standards Consultative Forum (VSCF). The Federal and State government to government forum is represented by the Vehicle's Regulators Forum (VFR).

While the MTAA is not part of the VSCF some MTAA members have access to the VSCF process but have expressed dismay with the process. This is unfortunate as such fora is critical for the level of two-way discussion opportunities to address issues of mutual concern. Fears have been raised regarding the infrequent meetings and the lack of transparency.

If the ADR process from gestation at WP29 to an agreed final formatted ADR when issued in Australia, this forum needs to be an essential functioning with mutual government/industry input.

RCVS/ROVER

It is acknowledged that the review does not cover the RCVS/ROVER system and as such MTAA members have expressed openly that in not doing so has not addressed a gaping shortcoming in the Australian vehicle Type Approval process.

The ADRs are a class leading instrument when compared with similar legislative schemes in other markets, but the application of the ADR within the RCVS/ROVER system is critically hampering the ease of doing business.

It would be unfortunate that this review be seen as the band-aid on mortal wound if the outcome does not call for the complete ADR process to be addressed in a timely manner.

Conclusion

While ADRs play a vital role in ensuring vehicle safety and compliance, certain unique or costly requirements create unnecessary barriers to vehicle availability and industry efficiency. The slow adoption of global standards, particularly in relation to EV regulations and the transition of EU Whole Vehicle Type Approved (WVTA) vehicles, places Australia at a disadvantage.

To remain competitive and aligned with international markets, it is essential to streamline the ADR process, improve engagement between industry and government, and ensure timely action on WP29 working group discussions. Addressing shortcomings in the RCVS/ROVER system and enhancing technical expertise within the Department will facilitate a more effective and responsive regulatory framework.

MTAA urges the government to undertake a comprehensive review of the ADR process, focusing on reducing regulatory bottlenecks and fostering a system that supports both industry growth and consumer choice. We look forward to working collaboratively to achieve these outcomes.



MTAA would be pleased to expand on this submission with the Department. Please contact MTAA Chief Executive, Matt Hobbs on 0419 608 845 or matt.hobbs@mtaa.com.au

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APPENDIX I Australian Design Rules - All

Alternative Standards Candidates Listing

	<u> </u>		<u> </u>				Comments
ADR No.	Heading	UN ECE	EEC Directive	USA FMVSS	China GB GB/T	Other	Comments This listing is a proposal only, the necessary discourse on applicability and suitability is required by all stakeholders
1/00	Reversing Lamps	R23.01		108	15235-2007		
2/01	Side Door Latches and Hinges	R11.04	70/387/EEC	206 207, 202, 201,	15086-2013		
	Seats and Seat Anchorages	R17.07		210	15083-2019		
4/06 5/06	Seatbelts Anchorages for Seatbelts	R16.08 R14.08	77/541/EEC \(\text{76/115/EEC} \)	209 210, 225	14166-2013 14167-20XX		
6/00	Direction Indicators	R6.02	70/113/EEC	108	17509-2008		Rear Directions Indicators must be amber
8/01	Safety Glazing Material	R43.01		US DoT	9656-2021		China CCC approval for Consideration
10/02	Steering Column	R12.04	91/662/EEC	208, 212, 219, Part 572	11557-2011		
11/00	Internal Sun Visors	R21.01	74/60/EEC	202	11552-2009		
13/00	Installation of Lighting and Light-Signalling Devices on other than L- Group Vehicles	R48.06		108	4785-2019		Rear Directions Indicators must be amber
14/02	Rear Vision Mirrors	R46.04		111	15084-2013		
14/02	Rear Vision Mirrors Installation	R46.04		111	15084-2013		
18/03	Instrumentation	R39.02	168/2013 75/443/EEC□	101	15082-2008		
19/02	Installation of Lighting & Light-signalling Devices on L-	R53.02	2016-1824-				
21/00	Group Vehicles Instrument Panel	R74.02 R21.01	Annex IX 74/60/EEC	202	11552-2009		
23/03	Passenger Car Tyres	R30.02		109	9743-2015		
	Anti-Theft Lock	R18.03		114, Part 541, 542, 543, 580	20816-2006		
29/00	Side Door Strength			214 Federal: 40 CFR			
30/01	Smoke Emission Control for Diesel Vehicles	R24.02		Part 86, California: CCR	3847-2018		
31/04	Brake Systems for Passenger Cars	R13.H		Title 13 135	21670-2008		
33/01	Brake Systems for Motorcycles and Mopeds	R78.03	2016-1824- Annex III				
34/03	Child Restraint Anchorages and Child Restraint Anchor Fittings	R145.00		225	GB 14166-2013 GB 14167-2013		
35/07	Commercial Vehicle Brake Systems	R13		105			
38/07	Trailer Brake Systems						
42/05	General Safety Requirements						
43/04 44/02	Vehicle Configuration & Dimensions Specific Purpose Vehicle Requirements						
45/01	Lighting & Light-signalling Devices not covered by ECE						
46/00	Regulations Headlamps	R112/113		108	21259-2007		
47/00	Retroreflectors	R3.05		108	11564-2008		
48/00	Devices for Illumination of Rear Registration Plates	R4.04		108	18408-2015		
49/00	Front and Rear Position (Side) Lamps, Stop Lamps and End-outline Marker Lamps	R7.07		108	5920-2019		
50/00	Front Fog Lamps (If fitted)	R19.05		108	4660-2016		
51/00	Filament Lamps	R37.03			15766.1-2008 15766.2-2016 15766.3-2007		
52/00	Rear Fog Lamps (If fitted)	R38.00			11554-2008		
54/00	Headlamps for Mopeds	R56.00					
	Headlamps for Motor Cycles	R57.00 R72.00					
57/00	Special Requirements for L-Group Vehicles	 P52.01					
58/00	Requirements for Omnibuses Designed for Hire and Reward	R52.01 R107.05					
59/00	Standards for Omnibus Rollover Strength	R66.02		400	E000 0040		
60/00 61/02	Centre High Mounted Stop Lamp CHMSL) Vehicle Markings	R7.07		108	5920-2019		
62/02	Mechanical Connections Between Vehicles						
63/00	Trailers Designed for Use in Road Trains						
64/00	Heavy Goods Vehicles Designed for Use in Road Trains & B-Doubles Maximum Road Speed Limiting for Heavy Goods						
65/00	Vehicles and Heavy Omnibuses		92/6/EEC				
67/00	Installation of Lighting and Light-Signalling Devices on Three-Wheeled Vehicles						
68/00	Occupant Protection in Buses			208, 212, 219,			
69/00	Full Frontal Impact Occupant Protection	R95.03		Part 572	20071-2006		
72/00 73/00	Dynamic Side Impact Occupant Protection Offset Frontal Impact Occupant Protection	R95.03		208, 212, 219,	11551-2014		
74/00	Side Marker Lamps (If Fitted)	R94.04		Part 572 108	18099-2013		
75/00	Headlamp Cleaners (If fitted or if Required)	R45.01		100	21260-2007		
76/00	Daytime Running Lamps (If fitted)	R87.00		108	23255-2019		
77/00 78/00	Gas Discharge Headlamps Gas Discharge Light Sources	R98.00 R99.00		108 108	21259-2007 25991-2010		
. 5, 50	2.5 Dissilatigo Light Coulous	7100.00	<u> </u>	100	20001 2010		

79/05	Emission Control for Light Vehicles	R83.06 (EURO 5b)	715/2007 and 2017/1151	(CFR) Title 40, Part 86 –	18352.6-2016 27999-2019		Certificates of conformity issued by the US EPA or test reports demonstrating compliance to the Tier 3 exhaust emission standards
80/04	Emission Control for Heavy Vehicles	R49.07 R83 R154	595/2009 582/2011	Part 86 40 CFR 86.007- 11		Japan Chapter 2, Section 1, Article 41	
81/02	Fuel Consumption Labelling for Light Vehicles	R101.00			GB/T 18386-2017 GB/T 18488.1-2015 GB/T 18488.2-2015		
82/00	Engine Immobilisers	R116.00		114, Part 541, 542, 543, 580	20816-2006		
83/00	External Noise	R51.02 (03)	EU/540/2014	40 CFR 205	1495-2002		
83/00	External Noise (Motor Cycles)	R41.05 R63.02	2018/295				
84/00	Front Underrun Impact Protection	R93.00	2000/40				
85/00	Pole Side Impact Performance	R135.01		214	GB/T 37337- 2019		
86/00	Parking Lamps	R77.01		108			
87/00	Cornering Lamps	R119.01		108			
88/00	Electronic Stability Control (ESC) Systems	R140.00		126	21670-2008 Annex D		
89/00	Brake Assist Systems (BAS)	R139.00					
90/00	Steering System	R79.03		126	GB 17675-1999 valid until 31.12.2021 GB 7258-2017 / XG1- 2019		
91/00	Rear Underrun Impact Protection	R58.02	70/221/EEC				
92/00	External Projections	R26.03	74/483/EEC		11566-2009		
93/00	Forward Field of View	R125.01	77/649/EEC□	205	11562-2014		
94/00	Audible Warning	R28.00		101	15742-2019		
94/00	Audible Warning Installation	R28.00	2016/1824	101	15742-2019 7258-2017		
95/00	Installation of Tyres	R142.00	2015/166/EU		GB9743—200× G/TBT/N/CHN/1703		
96/00	Commercial Vehicle Tyres	R54.00					
97/00	Advanced Emergency Braking for Omnibuses, and Medium and Heavy Goods Vehicles	R131.01					
98/00	Advanced Emergency Braking for Passenger Vehicles	R152.00		49 CFR 596	GB/T 38186- 2019		
98/01 01/08/24	Advanced Emergency Braking for Passenger Vehicles	R152.02		49 CFR 596	GB/T 38186- 2019		
99/00	Lane Departure Warning Systems	R130.00					
105/00	Blind Spot Information Systems	R151.00					
106/00	Side Underrun Protection	R73.01					
107/00	Lane Keep Systems						
108/00	Reversing Technologies	R158.00					
109/00	Electric Power Train Requirements	R100.03					
110/00	Hydrogen-Fuelled Vehicles Safety Related Performance	R134.01					
	Advanced Emission Control for Light Vehicles	R154.02					
112/00	Control of Real Driving Emissions for Light Vehicles	R168.00					
113/00	Acoustic Vehicle Alerting Systems for Quiet Road Transport Vehicles	R138.01					

UN ECE Legend	
ADR Utilises ECE reg. & allows as "Alternative standard"	R49.07
ADR Unique	
UN ECE Reg Base with Australian unique requirements	R13