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Dear National Transport Commission

RE: A national in-service safety law for automated vehicles discussion paper

The Australian Automobile Association (AAA) welcomes the opportunity to provide comment on the National Transport Commission's (NTC) discussion paper on *A national in-service safety law for automated vehicles*.

The AAA is the peak organisation for Australia's motoring clubs and their more than eight million members. The association's constituent clubs are the NRMA, RACV, RACQ, RAA, RAC, RACT and the AANT. The AAA regularly commissions research and develops in-depth analysis of issues affecting transport systems, including affordability, road safety and fairness.

The AAA supports the NTC's goal of developing a regulatory system to support the safe commercial deployment of automated vehicles. Automated vehicles are expected to provide significant safety and societal benefits. However, it is important that new, advanced technologies are deployed with a full understanding of their operation and that potential risks are managed appropriately.

The AAA is principally focussed on ensuring there is appropriate regulation in place to build consumer confidence in automated driving technology, without adding unnecessary regulatory costs – as these will ultimately be borne by the consumer.

To date, the AAA has preferred a staged approach to regulating automated vehicles, given the rapid development and uncertainty regarding the technology and international regulatory environments. A staged approach will ensure Australian regulations are sufficiently flexible to adapt to changing technologies and reflect the latest international standards and conventions. It also ensures regulatory decisions are made based on quantitative evidence.















In parallel to this discussion paper, the Department of Infrastructure, Transport, Regional Development and Communications is preparing a draft vehicle standard *Australian Design Rule 90/01 Steering System* (ADR 90/01) to provide a type approval pathway for vehicles at level 3 automation and above.¹

Regulatory requirements at the time of first supply will influence the in-service regulation of automated vehicles. It is therefore difficult to provide specific feedback to proposed in-service requirements and regulatory powers until the first supply requirements are clear.

In-service safety regulation of automated vehicles

The AAA considers that an integrated regulatory system, featuring a national regulator for automated driving system entities (ADSEs) is critical to the effectiveness of an in-service safety regulator.

The current relationship between state and territory governments and the federal government, associated with the regulation of vehicles at both first supply and in-service, presents additional complexities for automated vehicles due to the ongoing role for ADSEs.

Overlap and duplication of regulatory roles present risks for consistency, efficiency and cost-effectiveness. Importantly, the cost of regulation in Australia must not become a barrier to the introduction of new technology.

Automated driving systems will be subject to performance requirements at first supply and obligations will be placed on the ADSEs bringing those systems to market.² However, self-certification will be a major component of the first supply regulation, at least in the short term. As a result, standardisation of automated driving systems and ADSE processes should not be expected initially.

The AAA is of the view that the Department of Infrastructure, Transport, Regional Development and Communications, as the first supply regulator, has a core role in the ongoing regulation of automated vehicles in service and to ensure minimal overlap and duplication in regulation.

Similarly, the department's participation in the development of international standards for vehicles, through United Nations Working Party 29, will be integral to ensure that the regulation of automated vehicles, both in service and at first supply, is internationally consistent.

The AAA understands that current frameworks designed under *the Road Vehicle Standards Act 2019* may not have been designed for the approval of components that are not part of a whole vehicle approval. However, the AAA considers it ideal that the same regulator is responsible for ADS approvals regardless of whether the systems are offered as part of a new vehicle or supplied to the 'aftermarket'.

Similarly, updates to ADS made to in-service vehicles would ideally be regulated by the same agency that regulates systems at first supply.

Such an approach would minimise gaps for entities introducing systems to the aftermarket and ensure they are regulated consistently with systems offered as part of new vehicles.

The key objective to date regarding the in-service safety of ADS has been to ensure an ADSE continues to operate in compliance with its obligations and commitments made at first supply of the ADS.

¹ As defined by SAE International J3016.

² Draft vehicle standard Australian Design Rule 90/01 Steering System, Australian Government, November 2020.

The AAA considers there is an important distinction to be made from this, which is that the in-service regulator should be focussed on regulating the ADSE, not the performance of the ADS. Any prescriptive performance requirements set by the in-service regulator for the ADS would introduce duplication and potential for inconsistent requirements between the in-service and first supply regulators.

Consumer confidence

Consumer confidence in the regulatory system, for both safety and consumer protection, will impact confidence in adopting technology.

The discussion paper addresses the scenario where an ADSE withdraws from the market. Without an entity responsible for its operation, it is understood than an ADS must not be engaged.

Of particular concern to consumers will be the options and remedies available to those who have invested in an ADS which may no longer be operational. As a parallel, for conventional vehicles there are manufacturer guarantees that repair facilities and spare parts will be available for a reasonable period of time.³

Under the current regulatory framework, consumers must invest significant time and resources to seek redress for suspected breaches of laws. The AAA has previously argued that, when product issues arise, sellers of high value goods like motor vehicles should be held to a higher standard than those of other lower value goods.

Consumer protections may be complicated further by the introduction of automated driving systems, and while deployment models are not yet clear, clarity of the consumer protections will be needed for confidence in investment decisions.

In addition to these key issues raised, the AAA offers responses to the specific questions posed in the discussion paper. These responses are attached.

The AAA thanks the NTC for the opportunity to provide feedback to this complex issue and would welcome the opportunity to further discuss our feedback.

Yours sincerely,

Michael Bradley Managing Director

³ Competition and Consumer Act 2010, Australian Government.

Response to questions

The AAA considers it difficult to provide specific answers to many questions posed by the NTC when there is such uncertainty around the technology to be regulated.

Similarly, the uncertainty surrounding the regulatory framework creates challenges in considering the various situations in detail. For example, it is not clear from the discussion paper what the interaction will be between the in-service regulator and an ADSE which has just received type approval from the first supply regulator.

For these reasons, the following responses offered by the AAA consider the issues in principle.

Question 1: What prescriptive duties under the general safety duty should be included in the AVSL to manage in-service safety risks?

See response to Question 2 below.

Question 2: What matters relating to compliance with a general safety duty are better suited to guidance than being prescribed in the AVSL? Should this guidance have legislative force?

Care should be taken when considering prescriptive duties set by the in-service regulator, particularly as the first supply regulation will include elements of self-certification. It should be ensured that in-service requirements are not inconsistent with requirements at first supply.

The AAA notes that the discussion paper identifies several potential prescriptive duties which have a similar intention to requirements included in draft ADR 90/01 *Steering System 2020.* Examples include education and training, data recording and retention, and system updates. Indeed, the draft ADR 90/01 includes the requirement that *the ADSE must ensure that the requirements of this standard continue to be met while the vehicle is in service for at least the design life of the ADS.* ⁴

Consistency in interpretation between the first supply and in-service regulators is important to build confidence in both consumers and industry. Any prescriptive duties included in the AVSL should not translate to ADS design or performance requirements which are not required at first supply.

Prescriptive duties may be particularly beneficial in providing confidence to ADSEs bringing systems to market by clarifying requirements. However, regulation must be careful not to restrict innovation. Guidance may be suitable to assist entities bringing technology to market in meeting regulatory expectations without restricting innovation.

Question 3: Are existing and proposed regulatory frameworks (state and territory laws, first -supply requirements and general safety duty obligations) sufficient to address third party interference with an ADS? If not, should interference with the safe operation of an ADS be a specific offence, and how should this offence be enforced?

The concept of modifications to in-service vehicles is not new. However, the risk associated with the modification of ADS may be much higher than other modifications due to potential for mass application.

⁴ Section 3.2.23 of Draft vehicle standard *Australian Design Rule 90/01 – Steering System*, Australian Government, November 2020.

The current frameworks may not be sufficient to capture and deter third party interference and ensure consumer confidence.

Question 4: Should the law provide a specific defence for Australian ADSE executive officers who rely on information provided by others, like a parent company, when discharging their due diligence duty?

The right balance needs to be struck with the regulation of automated vehicles in Australia. Australia is a technology taker with respect to light vehicles and therefore local representatives may rely on technical expertise from parent companies based overseas.

Confidence for the ADSE is a critical issue to be addressed. A law which does not cater for the Australian market nor support entities supplying technology will damage industry confidence and present as a potential barrier to technology uptake. At the same time, consumer confidence in the safety of ADS must be ensured.

The AAA suggests the NTC build a comprehensive understanding of new vehicle supply arrangements in Australia to ensure a balanced regulatory system.

Question 5: Please provide your views on the transfer of responsibilities for an in-service ADS from an ADSE to a new entity.

- Should an ADSE be able to transfer responsibility for an in-service ADS to a new entity?
- If so, what powers should the in-service safety regulator have for approving the transfer?

Under the scenario where an ADSE withdraws from the market, the understanding is that the ADS must not be engaged as there is no entity responsible for its operation. Such a scenario is likely to be a serious concern to consumers who have invested in an ADS.

In principle, the AAA supports the ability for an ADSE to transfer responsibility to a new entity and therefore allow continued operation of the ADS. The alternative scenario appears to be that the ADS would no longer be functional and therefore be of little value.

Transferring responsibility to a new entity brings a range of challenges that would be addressed more simply by the first supply regulator. For example, the transfer of responsibility is likely to require a transfer of approval. The potential for re-assessment of the approval application by a different regulator may result in a differing judgement. Further, the requirements under the first supply framework are likely to become more stringent over time, meaning that the transfer of approval should consider the requirements in place when the first supply approval was issued.

The discussion paper reports that the *Road Vehicle Standards Act 2019* will allow for the transfer of a type approval to a new entity, however it is the AAA's understanding that this is generally done for models considered 'current' and still entering the market as new vehicles.

The AAA considers the ideal regulatory approach would be for the first supply regulator to maintain current approvals for ADS in operation and supported by an ADSE, regardless of whether systems are still entering the market. The ability to transfer type approval to a new entity would then be facilitated by the *Road Vehicle Standards Act 2019.*

A situation of further concern would be where an ADSE becomes insolvent. The AAA understands financial requirements for an ADSE may be included by the first supply regulator, however it is not clear what the

ongoing function will be to ensure these financial requirements are maintained and therefore that obligations can indeed be met.

Question 6: If there is no new entity to take responsibility for an ADS when an ADSE exits the market, are recall (including disengagement) under the RVSA and recourse under the Australian Consumer Law appropriate measures? Is there any role for the in-service regulator?

The AAA considers this a serious issue that requires a full analysis considering all relevant regulators. The AAA also suggests that recall provisions may be subject to the final wording and requirements of ADR 90/01.

Under the current regulatory framework, consumers must invest significant time and resources to seek redress for suspected breaches of laws. The AAA considers consumer protections must be subject to a detailed review to ensure consumers have confidence to purchase an ADS.

Related to ADSE conduct, section 4.4.3 of the discussion paper suggests that the in-service regulator may not be required to actively monitor the market itself. Given the regulatory framework for automated vehicles has a reliance on self-certification, the AAA considers that market surveillance activities by regulators are critical.

Question 7: What should the role of the in-service regulator be for modifications made by an ADSE to an in-service ADS that changes its ODD or the level of automation?

The discussion paper states that it is anticipated that ADSEs will seek to enhance their ADS's functionality when the ADS is in service. However, it should be noted that the draft ADR 90/01 prohibits the expansion of the operational design domain (ODD). It is not clear whether the discussion paper and the draft ADR offer alignment on this issue.

Based on draft ADR 90/01, the ODD declared by the ADSE would be a critical consideration of the first supply assessment and approval. If the ADSE wishes to expand the performance of its ADS, either for new vehicles or those already in the fleet, there should be a review conducted by the same regulator.

It may be appropriate to treat enhancements of an ADS where the ODD is expanded as a new system. Under this treatment, such enhancements would require new or updated approvals from the first supply regulator, provided that the ADSE continues to support its operation.

Question 8: How should in-service modifications made by parties other than an ADSE to vehicles to make them automated vehicles be managed? Consider:

- vehicle manufacturers modifying vehicles to become automated vehicles while in service
- businesses that supply and install aftermarket ADSs
- individuals installing aftermarket ADS kits.

See response to Question 9.

Question 9: Are there any gaps in the regulation and proposed regulation of in-service modifications that the NTC has not identified? Are there other options that should be considered?

The AAA considers it ideal that the same regulator has responsibility for regulating an ADS, regardless of whether the ADS is supplied with vehicles at first supply or supplied into the aftermarket.

The AAA understands that frameworks designed under the *Road Vehicle Standards Act 2019* may not have been designed for the approval of components that are not part of a whole vehicle approval.

The cost-effectiveness of introducing another regulator for in-service modifications should be considered and the AAA suggests there is value in exploring the facilitation of component approvals under the *Road Vehicle Standards Act 2019* for ADS offered to the aftermarket.

A single regulator for such roles would also support responsive and flexible regulation as new technology emerges and international standards become available.

Question 10: Do you agree that the additional functions the NTC has identified may need to be undertaken by the regulator to ensure in-service safety?

- Reporting
- Crash investigations (for enforcement, with a specialist agency like the ATSB to undertake no-blame investigations)
- Accreditation
- Regulatory approvals

See response to Question 11.

Question 11: Accreditation provides an alternate pathway for an entity to enter the market. Are there other purposes for which accreditation should be used in the in-service framework?

The AAA agrees reporting and crash investigations may contribute to consumer confidence in technology. Transparency is important in this sense and the AAA considers that information such as investigation of defects, speed of investigations and rectification plans must be transparent to the public.

Similarly, market surveillance and monitoring activities are important elements to a regulatory system that relies on self-certification. Both reporting and crash investigations complement market monitoring.

The AAA considers it logical that the Australian Transport Safety Bureau extend its scope to include automated light vehicles, rather than to resource a new specialist agency for this activity.

The AAA considers accreditation of ADSEs appropriate, in principle, for managing the transfer of responsibilities in situations where an ADSE withdraws from the market. However, the AAA believes approvals for ADS issued by the in-service regulator would add duplication to regulatory roles and increase the cost of regulation, which will ultimately be passed on to the consumer.

Question 12: Do you agree with the functions the regulator is likely to perform in the initial phase following commencement of the AVSL?

The AAA agrees that, due to low vehicle/system numbers initially, the capacity of the regulator will need to increase over time. However, the regulator should be appropriately resourced initially to enable effective reaction to any issues arising. Even in the initial stages, it is possible there will be scenarios that were not predicted and the regulator must be capable of responding.

The AAA considers the following functions will be necessary immediately following commencement of the AVSL:

- Monitoring international developments
- Engagement with other regulators
- Active market monitoring
- Enforcement
- Education
- Research

In considering initial functions, it is not clear from the discussion paper what the interaction will be between the in-service regulator and an ADSE which has just received type approval from the first supply regulator. As a parallel, human drivers obtain a driver licence from a regulator to allow them to operate a vehicle on public roads.

Question 13: Are the proposed compliance and enforcement powers proportionate to meet the objective of safely operating automated vehicles in Australia?

See response to Question 14.

Question 14: Do you consider that the in-service regulator should have any of the following powers?

- Recall powers
- Power to suspend the operation of an ADS until a safety issue is resolved by the ADSE
- Power to permanently suspend an ADSE from operating its ADS. In what circumstances would such a suspension be warranted?

Recall powers are held by the Commonwealth under its first supply framework. The AAA considers that the regulator issuing approvals for ADS should be the regulator holding recall powers.

Similarly, the power to suspend operation of an ADS until a safety issue is resolved by the ADSE would ideally be held by the regulator issuing the approval for the ADS. The circumstances where recall provisions are not sufficient, and permanent suspension for the operation of an ADS is warranted, are not clear.

Question 15: Do you consider that additional prescriptive requirements may be needed to support a risk-based approach to compliance and enforcement under the AVSL? Please provide examples.

See response to Question 16.

Question 16: Please share your views on the illustrative penalties set out in appendix B.

Over time, as more is understood about the technology and international standards are developed, it may become appropriate to add more requirements to the AVSL. Similarly, it could be expected that requirements at first supply will be updated with increasing clarity around the systems being offered.

It is important that the in-service regulatory requirements complement the requirements at first supply. While many of the obligations listed in Appendix B are aligned with those proposed in draft ADR90/01, the wording is different and duplicating these assessments introduces the risk of inconsistent interpretation and requirements.

Duplication of roles may also lead to duplication of expertise and resourcing which would add cost to both government and industry - a cost which will ultimately be passed on to the consumer.

Question 17: Has the NTC identified the additional powers that may be required by the inservice regulator in addition to the baseline powers provided in the *Regulatory Powers (Standard Provisions) Act 2014 (Cwlth)*?

No response

Question 18: Are there other roadside enforcement issues relating to automated vehicle in-service safety that the NTC should consider?

See response to Question 19.

Question 19: How should ADSEs advise on their ADS's interaction with roadside enforcement agencies? Should the AVSL require the ADSE to provide a law enforcement interaction protocol to the in-service regulator and/or roadside enforcement agencies?

The AAA considers that the in-service regulator should not set design and performance requirements for the ADS. Ideally, such requirements would be set by the first supply regulator.

Draft ADR 90/01 includes the requirement that *the ADSE must provide* a description of the functionality of the ADS relating to its interaction with enforcement agencies and emergency services as well as provision of information in real time at the roadside. ⁵

The AAA supports the suggestion of an enforcement interaction protocol, however prefers that such a requirement be captured by ADR 90/01. Such work may best be pursued by the Government through its participation in the development of international standards.

Question 20: Do you agree that when a breach of road traffic laws occurs and:

- the ADS is engaged, or
- a roadside enforcement agency forms a reasonable belief that the ADS was engaged at the time of the breach

that the incident should be treated as a potential breach of the general safety duty and not handled through the infringement system for human drivers?

The AAA agrees such instances should not be handled through the infringement system for human drivers, however suggest it would be more appropriate that such a scenario be treated as evidence of a potential breach, rather than a potential breach.

The discussion paper also suggests that infringements detected by traffic cameras be issued to the ADSE for an explanation. The AAA suggests that such a simplified approach, without the reasonable belief that the ADS was engaged, may add costs and create inefficiencies and frustration for both ADSEs and vehicle owners.

For instance, it may be the case initially that very few ADSs can operate in complex urban environments with mixing traffic and various road users. Issuing infringement notices to ADSEs based on traffic cameras in this environment would be inefficient.

The AAA suggests that consideration of the operational design domain of ADSs will improve the efficiency of issuing infringement notices.

⁵ Section 3.2.35 DRAFT Australian Design Rule 90/01 - Steering system

Question 21: Do you agree that when a breach of a road traffic law occurs and a roadside enforcement agency forms a reasonable belief that the remote driver was in control of the vehicle at the time of the breach, that the incident should be referred to the in-service regulator and not handled through the infringement system for human drivers?

The AAA agrees in principle, noting that the remote driver may be a human and there are issues around their behaviour and obligations that will need to be resolved.

Question 22: Do you agree that when a breach of road traffic laws occurs and:

- it is unclear to a roadside enforcement agency which entity is in control of the vehicle at the time of a road traffic law breach, or
- a road safety camera detects a road traffic law breach

that the infringement notice be issued in the first instance to the human driver or registered owner/operator with a process to nominate the ADS or remote driver as the driver if required? Are there other approaches that should be considered?

The AAA agrees in principle, however clarity will need to be established around the burden of proof requirements and the process for a consumer or vehicle owner to nominate an ADSE as being the party responsible for an infringement.

Question 23: Are the interactions between the in-service regulator and other regulators and agencies accurately described?

See response to Question 24.

Question 24: Are there other agencies that the in-service regulator will need to interact with?

In addition to the agencies identified, flexibility for integration with future bodies that are yet to be established should be considered. For instance, increasing penetration of connected vehicles may see the establishment of a body to manage the information flow between various recipients. Similarly, the forthcoming body to support access to service and repair information for vehicles may be of relevance.

Section 9.3.3. of the discussion paper states that the in-service regulator will have a role in influencing the adoption of best practices by ADSE in relation to data recording, access to information and safe interaction with emergency services through ongoing monitoring and enforcement of the general safety duty.

The AAA believes care must be taken when considering the interaction with other regulators to ensure complementary requirements are applied. For instance, the assessment of ADSE processes at first supply and the assessment of those same processes in service should be complementary and consistent between regulators.

Question 25: Are there other information types, purposes or parties relevant to the in-service regulator's access to information?

See response to Question 26.

Question 26: Have the key information flows that the in-service regulator needs to be a party to been identified? Are there others that you suggest?

Due to the reliance on self-certification for automated driving systems, a high level of standardisation between systems should not be expected and flexibility in information requirements will likely be necessary. As a result, care must be taken to ensure that any information requirements do not impose additional system design requirements on the ADS which are not specifically required by the first regulator.

The discussion paper suggests biological information may be required to assess the behaviour of the driver. Such information may require design features that are not mandatory under first supply regulations.

Similarly, the suggestion that the agency may need access to information that identifies the vehicle occupants is likely to impose design requirements not specified at first supply. The AAA questions the explicit need for access to information identifying occupants noting that this does not appear to be in alignment with the AVSL objectives (section 10.9.3) to:

- ensure ADS is safe
- ensure ADSE compliance with general safety duty
- ensure compliance by fallback ready user with state and territory driving laws
- ensure compliance by remote drivers to the rules that apply to remove drivers.

Question 27: Do the proposed information access powers meet the objectives of the in-service regulator? Are there other statutory powers for information access that the regulator will require to support its compliance and enforcement functions?

No response.

Question 28: Do you agree that a specific power authorising collection, use and disclosure of personal information is required in the national law and in state and territory legislation?

The AAA agrees that much of the information described in the discussion paper is likely to be considered 'personal' information, including the information specified in draft ADR 90/01 that must be made available to roadside enforcement.

As mentioned above in response to Questions 25 and 26, it is not clear how the specific power authorising the collection of personal information of vehicle owners and occupants aligns with the AVSL's broad objectives. The AAA seeks to understand how ongoing collection of such personal information supports the AVSL's objectives.

Question 29: What privacy protections may be needed around the collection, use and disclosure of ADS-derived personal information?

Consumer polling by the AAA suggests some consumer concern with the sharing and control of their data collected by vehicles. Similarly, the Royal Automobile Club of Western Australia conducted a survey of its members finding that 87% think it is very or extremely important for government to consult with industry and the community about how they intend to collect, use and share transport-related data.⁶

⁶ RAC Member Priorities Tracker: vehicle-generated data, Royal Automobile Club of Western Australia, June 2020.

The AAA strongly supports consumer engagement and education on access to vehicle-generated data. Such education may be most appropriate at point of purchase, allowing consumers to make informed decisions prior to the purchase of technology.

Principle 7 in Table 3 of the discussion paper acknowledges the importance of notifying consumers/users of government data collection. Section 10.9.2 in the discussion paper builds further on this with the suggestion that obligations could be placed on the ADSE to:

- \circ $\hfill\hfilt$
- \circ obtain consent to collection and disclosure of personal information
- \circ detail how a person can access their personal information held by the ADSE
- ensure the personal information it holds is accurate, up to date and complete.

Such obligations are important steps in building consumer understanding and confidence in automated vehicles and their regulation.

The discussion paper also states that the NTC intends to conduct a privacy impact assessment to systematically consider the information access and use proposals made in chapter 10, and identify the impact that these proposals might have on the privacy of individuals. The AAA looks forward to the findings of this assessment.

Question 30: Do you agree with the differences outlined between the legislative implementation approaches? Which approach will best achieve the reform outcomes?

The AAA prefers the Commonwealth complementary law approach and considers that consistency, efficiency, reduced duplication between the states/territories, and integration with the first supply regulator are key benefits to this approach