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Submitted via email to Automated Vehicles automatedvehicles@ntc.gov.au

National Transport Commission: The Regulatory Framework for Automated Vehicles in Australia

Dear Automated Vehicle Team,

Thank you for the opportunity to provide feedback on the regulatory framework for automated vehicles in Australia.

IAG strongly supports a system of regulation for autonomous vehicles (**AV**) that has safety at its core. For automated vehicles to be a successful part of our transport system people need to be able to trust the technology will operate safely and that protection exists for when things go wrong.

We believe insurance is a key part of the safety continuum. Regulation needs to be in place to ensure consumer safety and that those responsible for the technology while it is in operation are held accountable for safety breaches. Insurance complements this regulation by offering products to protect against residual risk including the health and financial burden of something going wrong, it is also a mechanism for recovery when systems fail. In order for insurers to offer this additional protection there needs to be solid regulation of the risks on the road and a sharing of data and information so insurers can calculate and price products to offer the community.

The end to end regulation around automated vehicles needs to be set at a particularly high level for several reasons. We know people hold machines and technology to a higher level of safety than humans[1]. Human error is an acceptable risk in many facets of society including driving on the road, however, machines and AI technology are not given that same tolerance. One of the main arguments for adopting AV technology in Australia is that it would remove human error and so reduce road crashes by up to 90%[2]. We expect AV technology to operate flawlessly, especially when the consequences of an error could cause harm or even cause the death of a human being. Similarly, public trust is key to AV technology succeeding. One error early in the roll out of this technology could have long term implications for its uptake in our society.

[1]https://www.aph.gov.au/Parliamentary_Business/Committees/House/Industry_Innovation_Science_and_Resources/Driverless_vehicles/Report/section?id=committees%2Freportrep%2F024056%2F25011 e
[2]https://www.aph.gov.au/Parliamentary_Business/Committees/House/Industry_Innovation_Science_and_Resources/Driverless_vehicles/Report/section?id=committees%2Freportrep%2F024056%2F24918

As documented in IAG's previous submissions to the NTC found here[3] we do not believe that the self-certification process chosen for the importation/first supply stage of regulation is strict enough, to prevent serious safety breaches occurring. However, we know self-certification is the endorsed approach, as such, we recommend that the next level of regulation (in-service regulation) will need to be at the highest safety standard possible to compensate.

We continue to suggest that the in-service regulator not only monitors the general safety duty imposed on an automated driving system entity (**ADSE**), but also regulates the ADSE for ongoing compliance against the self-certification criteria completed at first supply. Including the operational design domain and safety protocols stipulated. This would ensure every ADSE operating in Australia continually complies with the conditions of their certification.

We recognise the detailed and well considered work the NTC has done and presented in this discussion paper. We ask the NTC to consider the following key points when implementing the regulatory framework for automated vehicles.

Repairing ADS

IAG and the Insurance Council of Australia have a long-standing position that to ensure safe vehicle repairs technical and diagnostic repair information must be available to all repairers and not restricted to those repairers operating within authorised manufacturer and dealer networks[4]. The issue recently came to a resolution with an amendment to the *Competition and Consumer Act 2010* (Cth) (**CCA**) to establish a scheme for motor vehicle service and repair information to be shared with all Australian repairers and Registered Training Organisation's (**RTO**)[5]. We strongly support this amendment.

Our concern with *Section 8.5 - Individuals modifying, repairing or installing an automated driving system* of the NTC's regulatory framework for automated vehicles in Australia is that

a) **Insurer repairs would fall into this category and be considered an aftermarket modification.** Insurers use a variety of repair models and networks to repair vehicles in a way that is safe and cost effective for our customers. We need to be able to repair vehicles in order to offer insurance products.
b) **Customers with an ADS vehicle would be forced to seek repairs from the manufacturer**. This would have negative effect on competition, repair price for the consumer and prevent many independent repairers from competing for car servicing and repair work.

We suggest that the amendment to the CCA forms part of the regulatory framework for automated vehicles in Australia, and that a mandatory scheme is created requiring ADSE's and car manufacturers to share the information needed to repair and service ADS and AVs with independent repairers.

Sharing technical information about ADS with insurers

In addition to the above, insurers will need detailed information from ADSE's on how their ADS performs. We need to rate the "risk" of a driver when underwriting a policy. To do this for ADSE's we need to understand how their ADS (driver) works and how likely it is to be a risk on the road. This piece of information is vital for insurers to be able to offer competitive pricing for AVs, otherwise insurers would be forced to estimate the risk and this may have impacts on the price of our products.

In our opinion if this is not mandated, ADSE's will not share this information. To do this, ideally a standardised interface would be created that all ADSE's must use; the ADSE's would then need to share a copy of their

[3] https://www.iag.com.au/submission-national-transport-commission-investigation-service-safetyautomated-vehicles
https://www.iag.com.au/iag-submission-service-safety-law-automated-vehicles
[4] https://www.pc.gov.au/__data/assets/pdf_file/0008/272906/sub120-repair.pdf
[5] https://parlinfo.aph.gov.au/parlInfo/download/legislation/ems/r6695_ems_295e259b-1f16-4077-9b4d-1bdce7935f8b/upload_pdf/JC001692.pdf;fileType=application%2Fpdf

proprietary information in this format so insurers can compare ADSs and be able to assess the risk of each ADS. We understand there would likely be hesitancy from ADSEs to readily share this information, however, we believe it could be done as long as we work collaboratively across industries and the regulator has put in place appropriate information security standards and procedures.

Liability

Human error is a legally and socially accepted term for humans but is not acceptable for machines and technology. Therefore, we caution the use of "reasonably practicable" in the in-service regulation of AV technology and ADS.

We understand the NTC is seeking to create regulation that allows flexibility; however, we believe the "reasonably practicable" threshold is too low when it relates to a fleet of AVs. Instead of one human worker at an ADSE causing one accident, one error could lead to a fault in 100 or 1000 AVs (including a fleet of large trucks). The consequences for error are too high, even if the likelihood is low.

To ensure safety we suggest that where there is any incident or compromised safety, the default should be that the ADS/AV has gone wrong and the ADSE is at fault, unless proven otherwise. We suggest the NTC consider a strict liability regime where this is known and agreed to by ADSEs in order for them to operate on our roads. If this ADSE default liability is not implemented, individuals will bear the burden of proving that it was not them but the AV/ADS was at fault. This will impact people who should be able to seek swift compensation if an ADS or ADSE vehicle is involved in an accident. Further, it will be far easier for ADSEs to disprove an AV / ADS was at fault than for an individual to prove this.

There is a particular need to ensure issues related to cyber risk are adequately catered for in the new framework. This is particularly relevant for any vehicle which is connected (to other vehicles, to a system or the transport network), as well as automated, as the update of software, modification of software or other components that can introduce cyber risk is a critical component of the safety of the vehicle.

In service regulation

The main concern we have with the proposed in service regulation is that breaches in the AVSL will need to go through the court system. The implications of this sort of approach in the past has led to the creation of schemes such as the Compulsory Third Party (CTP) schemes to reduce the burden of consumers needing to be prove breaches in courts.

As stated in our previous submission found here[6] our preference is to prevent years of lengthy court battles by creating a quality framework and accreditation process for ADSE's. This process can be designed and administered by state road authorities. The ADSE's ability to continue operating in Australia should be linked to passing this accreditation, and for accreditation scores (or data) to be made public for consumers to make informed choice about which ADSE they trust. IAG would welcome the opportunity to provide input into the development of this framework, particularly advising on the needs of insurers providing cost-effective insurance products.

Independent testing of technology

As stated in our previous submission[7], it is important that independent testing and regular testing of AV technology is completed to ensure safety. In our experience insuring vehicles and their occupants, and repairing vehicles, we have seen gaps in the regulation of vehicles which can have cost and/or safety

[6] https://www.iag.com.au/sites/default/files/Documents/Government%20submissions/In-service-regulation-IAG-submission.pdf
[7] https://www.iag.com.au/sites/default/files/Documents/Government%20submissions/NTC-Consultation-RIS-In-service-safety-for-automated-vehicles.pdf

consequences.

We believe a new independent mechanism will be needed to test the functionality of AV technology and ADSs, and report on their findings (similar to ANCAP). In addition to how this operates today, future AV technology and may require re-testing or regular testing to ensure the AV technology and AVs continue to function as promised throughout the lifecycle of the AV and especially after repair and recalibration. Ideally this would be a formal part of the regulatory framework for automated vehicles, but at a minimum should be included when presenting this framework to transport ministers and decision makers as an important funding consideration.

Data storage and availability

Standardised, readable and accessible data is critical for all parties to succeed in the connected and AV network. The type of data produced, the length of time for which it is stored and who can access it and how, should all form parts of a robust data governance framework. This framework, once created, needs to be managed by a neutral, independent entity to ensure security and appropriate use of that data and be subject to Australian laws on data use.

IAG would welcome the opportunity to provide input into the development of this framework, particularly advising on the needs of insurers.

Another concern is there should be a requirement for ADSEs to share crash data on every collision. Figure 11 on p59 of the NTC's regulatory framework outlines that each state in service regulator would have authority for crash investigations. This is important, however figure 11 implies crash data retrieval is only when police are called to a crash. In practice police do not attend all collisions in many states and insurers could be left without a mandate to request this vital information. We propose that part of the ADSE self-certification process and/or any in-service accreditation requires the ADSE to share collision information with insurers at any time upon request. If this is not mandated, we are not confident it will be reliably shared. This is a key component for insurers to offer products to ADSE's and individuals that own AVs and to determine liability following a crash – which may be minor in visual effect but significant in the cost of repair.

Driver capabilities

We are concerned that the regulatory framework does not provide enough detail on what capabilities are required of the fallback ready user. We understand it's the NTC's intent that this is established by each state/territory regulator. However, we feel there needs to be some national benchmarking around this, i.e, that the fall-back ready user cannot be held responsible for ADS errors, even if "in-charge" of the vehicle at the time of the error, and a competency benchmark for who can be a backup driver and under what circumstances.

In addition, there needs to be national rules/guidelines/benchmarking created for each state on how much education and understanding of the ADS and AV features a driver requires to purchase or use an AV. Alignment across the states is easier for ADSE's when entering the Australian market, and safer for all participants as the rules apply uniformly across all states and territories in Australia.

IAG is available to discuss the above recommendations, provide further information or answer any questions in more detail. Please contact Naomi Graham Principal Public Policy & Industry Affairs on 0411 238 602

Sincerely,

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IAG