



26 August 2019

National Transport Commission  
Level 3/600 Bourke Street  
Melbourne VIC 3000  
[www.ntc.gov.au](http://www.ntc.gov.au)

## In-Service Safety for Automated Vehicles

We are grateful for the opportunity to make a submission to above Regulation Impact Statement. We understand that NTC is seeking feedback to assess options to potential manage the in-service safety of automated vehicles.

The Australian Automotive Aftermarket Association (AAAA) is the national industry association representing manufacturers, distributors, wholesalers, importers and retailers of automotive parts and accessories, tools and equipment in Australia. The Association has over 2,300 member companies in all categories of the Australian automotive aftermarket and includes major national and multi-national corporations, as well as a large number of independent small and medium-sized businesses. We are involved in the global network of industry associations, sharing information on European and American models for in-vehicle data generation and transmission.

There are a range of issues that are identified and analysed in the RIS of which we do not have any particular expertise or representative mandate to comment upon. Our interest is in the treatment of issues related to the maintenance and repair of automated vehicles.

There are three issues that are of concern to AAAA members and these are listed below.

### 1. Scenario Accuracy/Relevance.

#### Scenario 2: Vehicle repair affecting the ADS

Ben notices a scratch on the front bumper of his automated vehicle and takes the vehicle to a repairer. While repairing the scratch, the repairer damages the sensors on the front of the car.

Following the repair, Ben sets the vehicle to operate at high automation. The damaged sensors no longer accurately detect the distance between Ben's vehicle and the vehicle in front. The ADS does not diagnose a problem. As a result, Ben's vehicle runs into the back of another vehicle.

The above scenario is provided in this RIS, to illustrate the threat level of in-service repair and maintenance. Unfortunately, this scenario is lacking in credibility. It is difficult to imagine this scenario ever playing out in a mechanical workshop. In fact there are at least three reasons why this would not occur:

- The scratch on the front bumper is not of concern to a mechanical repairer: A vehicle that is presented to a mechanical service and repair workshop is unlikely to have the scratch attended to unless this 'scratch' affected the safe mechanical operation of the vehicle. There appears to be a misunderstanding of the role of each of the sub-sectors of the aftermarket. A small scratch could be attended to by a specialist vehicle detailer who is unlikely to be a professional mechanical technician.
- After any repair, automated vehicles require re-calibration. The subsequent re-calibration process which occurs as the last step in a repair, will clearly identify that a sensor is not working or is not correctly aligned. Re-calibration currently occurs on all vehicles with automated driver assistance including adaptive cruise control. Recalibration services are also required for windscreen and tyre replacement for vehicles with enhanced ADAS.
- Finally, vehicles with ADAS that are already in operation on Australia's roads will display a sensor malfunction. For any work that that is conducted on a vehicle, or any event (shopping trolley collision might be a good example here) the owner will see and hear an alert when the engine is engaged. Risk mitigation here is quite simple – sensors that are not in alignment or are damaged, should be brought to the attention of the occupants immediately. Effectively the vehicle should not proceed without a recalibration/repair of these sensors.

So in short – the example is not a real world case and it is difficult to imagine any mechanical repairer attempting to repair a scratch and then not noticing that a sensor is out of alignment. We do not wish to be disrespectful or disdainful of this example – but understandably, the formulation of recommendations that assign a high threat level to our industry should be based on real examples reflective of the profession of mechanical service and repair.

## 2. Servicing Automated Vehicles – Estimated Number of Enterprises

The Consultation RIS identifies potentially 23,000 in-service vehicle repair business that are, or will be, providing after sales services for automated vehicles. We agree that this is

a close approximation of the number of **mechanical repair** businesses in Australia. However, there are a range of related businesses that are also likely to have a significant role in the safety of in-service automated vehicles. In addition to Automotive Repairs and Maintenance, this public discussion should also include other service providers such as - windscreen replacement, specialist tyre replacement, vehicle modification, and collision repair and road-side assistance. A small sample of the businesses that currently involved in providing services to automated vehicles that are currently on Australian roads. In our view the number of businesses that are potentially affected is likely to be as high as 68,000. The number of businesses that would be covered is clearly well in excess of 23,000 and this would need to factor in to the NTC cost analysis.

### 3. Absence of Market Failure

Vehicles with enhanced ADAS are currently serviced by the independent aftermarket. Specialist repairers with significant investment in non-intrusive diagnostic equipment (e.g. oscilloscope) and training are already engaged in repair and service of this high level technology. Vehicles are maintained and returned to manufacturer specifications using sophisticated pass through technology and re-calibration equipment. There does not appear to be any evidence of market failure in the current repair and service of level 1 and 2 Automated Vehicles. We are of the view that there is not enough information in this document that would justify a change in previous NTC assessment of safety risks:

Specifically, I refer to this November 2016 document

[https://www.ntc.gov.au/Media/Reports/\(32685218-7895-0E7C-ECF6-551177684E27\).pdf](https://www.ntc.gov.au/Media/Reports/(32685218-7895-0E7C-ECF6-551177684E27).pdf)

Page 15 states:

“Modification, maintenance and repair of increasingly automated vehicles could become a higher safety risk compared with conventional road vehicles due to the lack of a human driver as a fall back in the event that a modification causes a vehicle failure.

Regulatory oversight of modification (including over-the-air software updates) and vehicle repairs (including non-commercial private repairs) could be warranted in the longer term for highly automated vehicles that do not have human drivers. However, **unless evidence emerges of a market failure or unacceptable safety risk, no changes are recommended at this time to current laws and enforcement practices relating to vehicle modification, maintenance and repair.**

### Summary

The intent of this NTC discussion paper is to examine and seek feedback on problems/risks that will be introduced “that the market will not eliminate or mitigate”. Our view is that this document has not provided a sound argument for assigning ‘major threat’ status to the automotive aftermarket. The market can and should eliminate and mitigate risk by:

- Ensuring that **the vehicle owner** is charged with the responsibility to engage the services of appropriately qualified aftermarket service providers.
- Requiring the vehicle manufacturers to integrate warning systems that provided immediate feedback to the vehicle owner/ vehicle occupants that sensors are not in alignment or are not working as required.

The owner of the vehicle has a major role in in-service vehicle safety through regular service and maintenance – as is the case today. The vehicle manufacturer has the responsibility to ensure that the vehicle operator receives immediate feedback via dashboard warning that the systems are not malfunctioning – just as is the case today.

We value the opportunity to be involved in this important public policy conversation and we are very grateful for the opportunity to attend consultation events and to provide formal feedbacks on the NTC's assessment of risk and analysis of potential solutions

We look forward to further engagement with the NTC.

*Kind regards,*

A handwritten signature in black ink that reads "Lesley Yates". The signature is written in a cursive, flowing style.

**LESLEY YATES**

Director - Advocacy, Marketing & Research  
Australian Automotive Aftermarket Association (AAAA)