
FCAI Submission in response to NTC Discussion Paper – Review of “Guidelines for trials of automated vehicles in Australia”



Federal Chamber of Automotive Industries
Level 1, 59 Wentworth Avenue
KINGSTON ACT 2604
Phone: +61 2 6229 8220
Facsimile: +61 2 6248 7673

Contacts:
Mr. Rob Langridge, Director – Emerging Technologies
Mr. Tony Weber, Chief Executive

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INTRODUCTION

The Federal Chamber of Automotive Industries (FCAI) is the peak industry organisation representing the importers of passenger vehicles, light commercial vehicles, and motorcycles in Australia. The FCAI welcomes the opportunity to make this submission to the National Transport Commission on the subject of “Review of Guidelines for trials of Automated Vehicles in Australia”.

FCAI strongly supports a collaborative approach for the development of rules and regulations surrounding the future introduction of advanced technologies where consumer, public and industry can all benefit from mutual cooperation.

FCAI member organisations are at the cutting edge of innovation, according to Boston Consulting Group 2019 Most Innovative Companies Report¹, six vehicle manufacturers are in the Top 50 most innovative companies. Vehicle manufacturers are expending extraordinary amounts of money on research and development to commercialise and introduce the latest technologies with advances that will bring quantum changes to the way in which new vehicles will interact with the environment providing innovative mobility solutions whilst enhancing safety for all.

FCAI and the international community agree that automated vehicles have the greatest potential to provide a range of significant safety benefits to the Australian community by reducing and removing human error from the driving task. It is estimated that somewhere between 80 – 90% of accidents can be attributed to human error. These benefits should be maximized by ensuring that the manufacturers (overseas) of automated vehicles do not face local impediments that are out of step with international developments.

One of the potential impediments is implementing a regulatory regime that imposes additional obligations on manufacturers of automated vehicles and exposes them to additional liability. It goes without saying that automated vehicles need to be safe, however FCAI believes the NTC has not fully considered the implications of Executive Officer (EO) liability, given that as acknowledged by NTC in the recent meetings, Australia will be the first country in the world to propose EO liability for Automated Vehicles SAE Level 3 +. This proposed regulatory regime that was reportedly endorsed by the Transport Infrastructure Council (TIC) based solely on NTC advice, is expected to limit mainstream light vehicle Automated Vehicle (AV) deployment in the Australian market and therefore any associated safety and cost benefits to Australian society.

FCAI member organisations have only been involved in limited trialling in the Australian market as the majority of light vehicle trials are undertaken predominately in areas of close proximity of vehicle technology development centres associated with manufacturers and of course where governments are supportive and facilitate arrangements to undertake trials.

Local trials will usually be considered necessary where unique challenges are identified that need to be considered at early stages of development or as the product is approaching commercialisation and testing of assumptions or tuning of conditions in Australia is necessary to be undertaken.

¹ <https://www.bcg.com/en-au/publications/2019/most-innovative-companies-innovation.aspx>

FCAI is generally supportive of the NTC guidelines for undertaking AV trials in Australia as long as States and Territories align and do not add significant additional burdens. In general, it should be remembered that trials will only occur where governments are supportive and facilitate the ability of trials to be undertaken. It must be remembered that the primary light vehicle development bases are in the following continents:

Asia / Europe / North America

All the vehicle manufacturing countries in these continents are in the northern hemisphere, undertaking trials in the southern hemisphere is usually an extremely expensive undertaking when similar trials undertaken close to development bases will allow greater engineering resource utilisation without the associated transport, travel and accommodation costs. If approval requirements are generally delayed by arduous and or iterative approval processes, this increases the barriers and reduces the likelihood that AV trials will select Australia as the test environment.

SHOULD THE GUIDELINES BE UPDATED TO IMPROVE THE MANAGEMENT OF TRIALS (SECTION 3 OF THE GUIDELINES) AND, IF SO, WHY? CONSIDER IN PARTICULAR:

N/A

SHOULD THE GUIDELINES BE UPDATED TO IMPROVE THE SAFETY MANAGEMENT OF TRIALS (SECTION 4 OF THE GUIDELINES) AND, IF SO, WHY?:

Standards of evidence required

FCAI is a strong supporter of high level principles based objectives to meet the needs of a safety management plan and that the plan needs to consider a risk based approach that is consistent with the type of trial being undertaken inclusive of the environment or Operational Design Domain (ODD) involved. More prescriptive requirements can be overly burdensome and are often unnecessary in trial applications.

Monitoring human drivers or operators

We do agree that operator or driver inattention is an issue that needs to be monitored and addressed within AV trials where appropriate, this is an emerging issue in AV trials across the globe and one that deserves attention within the safety management plan.

Risks to other road users

Similarly, trialling organisations should consider unpredictable human behaviour and the strategies for how these scenarios are catered for in any trial being undertaken and therefore we support this clarification.

Interaction with enforcement and emergency services

FCAI members are only supportive of identifying the requirements to interact with enforcement and emergency services at a high level. In addition to enhancing the safety management plan, we consider that the road management authority could take a leading role in alerting the relevant associated authorities of the details of all trials occurring within the specific areas of responsibility. Providing a central point of information for enforcement and emergency services would greatly enhance the communication necessary to ensure full agency awareness, understanding and management.

Recognition of pre-trial tests

The current guidelines that leave open the matter of pre-trial tests used for trials in other jurisdictions should continue. Requiring trialling organisations to replicate tests locally even where other similar tests have been undertaken and evidence provided is, in our view, overly bureaucratic. It should make no difference where tests have been undertaken even if they have been conducted overseas especially when the safety management plan clearly identifies the risks with the mitigation strategy clearly expressed. There are many other examples of where overseas tests are undertaken and evidence submitted to authorities such as:

- Type approval submissions for vehicle certification.
- NCAP organisations for safety star ratings.

WHAT ISSUES HAVE BEEN ENCOUNTERED WHEN OBTAINING OR PROVIDING INSURANCE?

N/A

ARE THE CURRENT INSURANCE REQUIREMENTS SUFFICIENT (SECTION 5 OF THE GUIDELINES)? IF NOT, HOW SHOULD THEY CHANGE?

FCAI recommends that the NTC should be discussing this issue with the Insurance Council of Australia (ICA) who may be able to facilitate member support for suitable products to be made available according to the jurisdiction of the trial.

As the automotive industry moves closer to more expansive trials globally prior to commercialisation, it is interesting to note that the United Kingdom (UK) Insurance Industry has taken a very different approach to liabilities for Automated Vehicles recognising the benefits to road safety and the consequent reductions in risk associated with removing human error. The UK approach has resulted in considerable numbers of AV trials in line with their Governments proactive and supportive approach to become a leader in the AV field embracing this advanced technology from both trials and in-service perspectives.

The NTC's "In-service" general safety duty proposals might appear as a well-intended regulatory approach in theory, while actually resulting in "heavy handed" regulation in practice, effectively stifling innovation adoption and therefore reducing the net benefit to Australians – in contravention of the 10 principles of regulation of which the following three are very relevant:

1. Regulation should not be the default policy option for makers: the policy option offering the greatest net benefit should always be the recommended option.
2. Regulation should only be imposed when it can be shown to offer an overall net benefit
3. The cost burden of new regulation must be fully offset by reductions in existing regulatory burden.

International liability and insurance approaches in UK, Europe, Asia and the US are quite different to those proposed by NTC as their preferred option for adoption in Australia. The evolution of the NTC position seems to be on the basis that all of the objectors of "in service EO liability" are only those that will have these extraordinary obligations placed on them despite the technology expected to have a marked reduction in motor vehicle accidents and associated costs.

FCAI contends that NTC would be wise to review international developments as developed and assess them on the merits of the ideology and best practice approach, which does not appear to have been done. In our view it is preferable to develop the right policy positions rather than taking a world's first approach especially considering that Australia no longer domestically manufactures light vehicles and our market size will have negligible influence on international automotive policy developments.

SHOULD THE GUIDELINES BE UPDATED TO IMPROVE THE PROVISION OF RELEVANT DATA AND INFORMATION (SECTION 6 OF THE GUIDELINES)? CONSIDER IN PARTICULAR:

Yes, it would be extremely useful for trialling organisations to be able to use the guide as a one-stop shop for all the guidelines required by each of the State and Territory governments. This is especially so whilst there are such varied requirements across jurisdictions. Trialling organisations can be overwhelmed in attempting to comply with all the requirements. As AV trials increasingly consider cross border trials, variations between jurisdictions make the compliance requirements and understanding increasingly difficult.

Given the recent announcement communique by the Transport Infrastructure Council (TIC) of the development of a single National Regulator for Automated Vehicles when on the road, the responsibilities for trial approvals would be assisted by ensuring that this regulator assumes responsibility for AV trial approvals. This would allow for an informed expert group to consider the trial, streamlining processes and facilitating a pro-active approach to AV trials.

Again, FCAI would reiterate that any action made to simplify and streamline processes will make trials easier to conduct and therefore make it more likely that AV trials are contemplated for the Australian environment.

Finally, enhancing the document in this way will ensure that trial participants are more likely to meet all the requirements necessary to ensure full compliance.

IS THERE ANY ADDITIONAL INFORMATION THE GUIDELINES SHOULD INCLUDE FOR TRIALLING ORGANISATIONS?

N/A

SHOULD THE GUIDELINES APPLY TO ANY OTHER EMERGING TECHNOLOGIES (DISCUSSED IN CHAPTER 4 OR OTHER TECHNOLOGIES) AND OPERATING DOMAINS?

FCAI does not agree that the guidelines should be updated to include trials that do not currently require an exemption or a permit especially for those trials that do not involve operation on public roads. Whilst the guidelines can be informative for these trials, making them mandatory would be expected to have many unintended consequences for academia and businesses who already undertake a risk management approach to operations. In addition, most trials have to consider Work Health Safety implications without having to add substantially to regulatory compliance.

ARE THERE ANY ADDITIONAL CRITERIA OR ADDITIONAL MATTERS RELEVANT TO THE TRIALS OF AUTOMATED HEAVY VEHICLES THAT SHOULD BE INCLUDED IN THE GUIDELINES?

N/A

ARE THERE CURRENTLY ANY REGULATORY OR OTHER BARRIERS TO RUNNING LARGER TRIALS? IF SO, HOW SHOULD THESE BARRIERS BE ADDRESSED? (CONSIDER THE GUIDELINES, STATE AND TERRITORY EXEMPTION AND PERMIT SCHEMES, AND COMMONWEALTH IMPORTATION PROCESSES.)

N/A

SHOULD THE GUIDELINES CONTINUE TO ALLOW COMMERCIAL PASSENGER SERVICES IN AUTOMATED VEHICLE TRIALS? IF SO, SHOULD THE GUIDELINES REFERENCE ADDITIONAL CRITERIA THAT TRIALLING ORGANISATIONS SHOULD BE SUBJECT TO, AND WHAT SHOULD THESE CRITERIA BE?

N/A

WHAT CHALLENGES HAVE YOU FACED WITH ADMINISTRATIVE PROCESSES WHEN APPLYING FOR APPROVING TRIALS OF AUTOMATED VEHICLES, AND HOW COULD THESE BE ADDRESSED?

N/A

ARE THERE ANY OTHER BARRIERS TO CROSS-BORDER TRIALS? IS THERE A NEED TO CHANGE CURRENT ARRANGEMENTS FOR CROSS BORDER TRIALS?

Given the recent communique announcement by the Transport Infrastructure Council (TIC) of the development of a single National Regulator for Automated Vehicles, the responsibilities for trial approvals would be assisted by ensuring that this regulator assumes responsibility for AV trial approvals. This would allow for an informed expert group to consider the trial, streamlining processes and facilitating a pro-active approach to AV trials particularly where trials are expected to become larger and encompass considerably greater Operational Design Domains (ODDs) involving trials that cross State and Territory borders.

SHOULD THERE BE A MORE STANDARDISED GOVERNMENT EVALUATION FRAMEWORK FOR AUTOMATED VEHICLE TRIALS? IF SO, WHAT ARE THE TRIAL ISSUES THAT SHOULD BE EVALUATED?

N/A

SHOULD THE RESULTS OF EVALUATIONS BE SHARED BETWEEN STATES AND TERRITORIES? IF SO, HOW SHOULD COMMERCIALLY SENSITIVE INFORMATION BE TREATED?

FCAI does not agree that the results should be shared at this early stage, many trials involve considerable commercially sensitive information as well as providing indications to the market as to AV development progression prior to formal company market announcements. The automotive industry is highly competitive and there are numerous consumer perceptions in relation to AVs that need to be carefully managed as the technology progresses.

WHAT WORKS WELL IN THE AUTOMATED VEHICLE IMPORTATION PROCESS, AND WHAT ARE THE CHALLENGES?

N/A

IS THERE ANYTHING FURTHER THAT SHOULD BE DONE TO FACILITATE A TRANSITION FROM TRIAL TO COMMERCIAL DEPLOYMENT?

FCAI and the international community agree that automated vehicles have the greatest potential to provide a range of significant safety benefits to the Australian community by reducing and removing human error from the driving task. It is estimated that somewhere between 80 – 90% of accidents can be attributed to human error.

Whilst improvements in road safety of 80-90% are significant, there is no suggestion that AVs will be accident free. It is expected that AVs will be involved in some accidents, most of these accidents will be considered unavoidable and due to circumstances beyond the capabilities of the AVs control system or the capabilities of the hand over operation to prevent the incident. In addition, any accident involving an AV will need to be investigated.

Given this scenario it will be important to ensure that the narrative from regulators and enforcement is considered and appropriate, managing consumer expectations for the outcomes of AV trials and ultimately deployment.

ARE THERE ANY MATTERS THAT THE NTC SHOULD CONSIDER IN ITS REVIEW OF THE GUIDELINES?

Vehicles involved in limited trials should not attract taxes and charges typically designed for mainstream business and consumer consumption. Luxury Car Tax (LCT) is a particularly anachronistic tax that has the effect of stifling the introduction of emerging and safety related technologies. In terms of AV trials, these vehicles typically use an array of emerging expensive technologies - given that the technology has not yet been commercialised, gaining the benefit of mass production cost reductions.

CONCLUSION

The design of vehicles on the road is one of the important factors in road safety. Modern vehicles are much safer than the ones they have replaced over time. Under similar accident conditions, occupants or other road users are much more effectively protected with modern vehicles compared to older models.

FCAI and the international community agree that automated vehicles have the greatest potential to provide a range of significant safety benefits to the Australian community by reducing and removing human error from the driving task. It is estimated that somewhere between 80 – 90% of accidents can be attributed to human error. These benefits should be maximized by ensuring that the manufacturers (overseas) of automated vehicles do not face local impediments that are out of step with international developments.

Given the recent announcement communique by the Transport Infrastructure Council (TIC) of the development of a single National Regulator for Automated Vehicles, the responsibilities for trial approvals would be assisted by ensuring that this regulator assumes responsibility for AV trial approvals. This would allow for an informed expert group to consider the trial, streamlining processes and facilitating a pro-active approach to AV trials.

Again, we would reiterate that any action made to simplify and streamline processes will make trials easier to conduct and therefore make it more likely that AV trials are contemplated for the Australian environment.

Finally, if the current NTC proposal concerning Executive Officer Liability is implemented then it is expected to effectively hinder the introduction of AVs to the Australian market and this will have a consequential effect on light vehicle trials being conducted.

Kind Regards

Rob Langridge