



Submission Regarding

Clarifying control of automated vehicles
Discussion paper

Conducted by the
NTC

June 2017

Introduction

The improvement in safety for Australian motorists as automated technology improves will be a game changer for the industry.

Through our previous submissions to the NTC with Australian Automobile Association (AAA), RACV recognises and welcome these benefits, not just in safety, but also in the areas of congestion, emissions, accessibility for the elderly and disabled and cost of car ownership. These benefits are of keen interest to our members and all road users.

RACV considers that there are two categories of technology that apply to this situation. Either a vehicle is partially or highly autonomous and must have a human driver monitoring the driving task, who is ready to take manual controls back from the vehicle at any time, or a vehicle is fully automated or autonomous and can operate without a human driver and all vehicle occupants are considered passengers.

The revised legal and enforcement framework must be in place by the time fully automated vehicles are a reality.

In the near term, the RACV supports clarifying the meaning of control and proper control in partial and highly automated vehicles; however international best practice should be drawn on, wherever possible.

Consultation

RACV has reviewed the questions proposed in the consultation paper and takes the following view on each.

Consultation questions:

- 1. Do you agree with the assumptions and objectives underpinning the NTC's work to develop national enforcement guidelines? If not, what other assumptions or objectives should be considered?***

RACV supports the introduction of flexible national enforcement guidelines which are performance based. A consistent approach is essential across Australia to ensure that jurisdictions undertaking trials do so using the same regulatory pathway. We must avoid the "rail gauge" problem.

- 2. Do you agree that national enforcement guidelines should clarify issues of control and proper control based on SAE International Standard J3016 Levels of Driving Automation? If not, what other approach should be considered?***

Australia should follow developments in international best practice for determining control and proper control in a highly automated vehicle. RACV believes using SAE International Standard J3016 Levels of Driving Automation would be an acceptable approach and the preferred option given its acceptance in other jurisdictions.

3. For the purposes of enforcing proper control, is there value in grouping levels of driving automation according to whether vehicles are capable of automated operation?

Yes, as long as they are in line with international standards and best practice.

4. Do you agree that the human driver should remain in control of a vehicle with partial or conditional automation, and that the automated driving system should be in control of a vehicle operating at high or full automation? If not, why?

RACV agrees with this proposition and that the demarcation of automation levels should be considered in accordance SAE International Standard J3016 Levels of Driving Automation.

5. In the event that the automated driving system is determined to be in control of a vehicle operating with conditional automation, should road traffic laws introduce obligations on the human driver as supervisor of the automated driving system?

RACV believes that the road rules should require the operator to be responsible for monitoring the safe operation of the vehicle at all times and be capable of taking over immediate control in the event of an autonomous technology failure or other emergency.

6. Do you agree with the suggested indicators of proper control for each level of driving automation (outlined in Table 2 on page 34 of this paper)? Are there any other indicators that should be included in the guidelines?

RACV acknowledges that as vehicles mature in the level of automation proper control will more appropriately need to be measured by awareness and alertness. We believe the indicators of proper control included in the discussion paper are acceptable. However it should be noted that there is little practical difference between level 5 and level 4, automation in this respect.

7. Should special consideration be given to automated parking functions that are partially automated and can only operate without the driver holding the steering wheel?

RACV believes that a clarification of the road rule interpretation of proper control should give consideration of self-parking drive modes. This should also include hands free operation on other modes where the system is designed to operate. However, RACV also notes that this must be outcome or performance based to take account of changing technology.

8. Should the national enforcement guidelines also clarify the application of due care and attention offences to automated vehicles? If so, what behaviours usually penalised under these offences require clarification when applied to automated vehicles?

Yes clarifications should also be given for due care and attention offences such as speed and lane keeping.

9. Do you agree that the guidelines should not apply the proper control test to the automated driving system until the automated driving system and automated driving system entity are recognised in legislation? If not, what alternative approach should be considered?

RACV agrees that the proper control test should not apply until the automated driving system and entity are recognised in the appropriate legislation.

10. Do you agree that the guidelines should only specify enforcement agency interaction with automated vehicles once the technology capability of automated vehicles is more developed and enforcement practices implemented in overseas jurisdictions? If not, what alternative approach should be considered?

RACV agrees that an approach taking into account overseas experience and best practice should inform the guidelines adopted in Australia. However careful consideration should also be given to Australian circumstances as appropriate.

