



Committee Secretary
Standing Committee on Industry, Innovation, Science and Resources
P.O Box 6021
Parliament House
Canberra ACT 2600

Dear Sir / Madam,

The Australasian New Car Assessment Program (ANCAP) welcomes the opportunity to provide a submission to this inquiry into the social issues relating to driverless vehicles in Australia by the Standing Committee on Industry, Innovation, Science and Resources.

Please find ANCAP's submission below relating to the terms of reference presented by the Committee.

Kind regards,



Mr James Goodwin
CHIEF EXECUTIVE OFFICER

6 FEBRUARY 2017

ANCAP Submission to the House of Representatives Standing Committee on Industry Innovation, Science and Resources: Inquiry into the social issues relating to land-based driverless vehicles

The Australasian New Car Assessment Program (ANCAP) is the leading, independent vehicle safety advocate in Australasia. ANCAP provides consumers with transparent advice and information on the level of occupant and pedestrian protection provided by different vehicle models in the most common types of crashes, as well as their ability – through technology – to avoid a crash.

ANCAP is supported by all Australian and New Zealand motoring clubs, the Australian Government, the New Zealand Government, Australian state and territory governments, the Victorian Transport Accident Commission, NRMA Insurance and the FIA Foundation.

ANCAP has a key role in educating consumers about new vehicle technology, promoting the benefits of new technologies and building community confidence in those technologies.

Key points on the introduction of autonomous vehicle technology:

- ANCAP supports and will actively encourage the introduction of autonomous vehicle technology to assist the driver and improve road safety
- ANCAP has a key role in educating consumers and building community confidence in autonomous technology
- ANCAP supports Federal, state and territory governments working with the vehicle industry and other stakeholders to overcome any regulatory concerns limiting the introduction or use of autonomous technology
- ANCAP supports comprehensive on and off road trials of autonomous technology
- ANCAP recommends that safety should remain a top priority in all discussions on autonomous technology or driverless vehicles.

The future of improving vehicle safety lies with autonomous technologies with human error believed to be a factor in over 90 per cent of road crashes¹. In less than one years time ANCAP will update its rating program and begin local testing and assessments of autonomous technologies. The technologies being tested include Autonomous Emergency Braking (AEB) in various scenarios, including vulnerable road users; speed assist systems, including traffic sign recognition and digital map data management; and lane support systems.

As technology develops, new tests and assessments will be developed in collaboration with international partners to continue to reward and promote those systems considered to offer the highest levels of safety. The testing and assessment of these technologies may influence the driverless cars of the future and ANCAP considers this to be a key step on the road to driverless vehicles in Australia.

While additional testing and assessments of technology will be introduced, ANCAP will retain and update the crash-testing component of its ratings. With the Australian vehicle fleet having an average age of 10.1 years², vehicles featuring levels of autonomous technology will continue to mix with older vehicles for many years to come, and high levels of occupant protection must continue to be required for new vehicles.

ANCAP acknowledges the difficulty in speculating on the future operation and usage of vehicles featuring high levels of automation. ANCAP's focus is currently on encouraging autonomous technologies that do not replace the driver, but rather support the driver. These technologies would generally be considered partially or conditionally automated and ANCAP would like to emphasise that

¹ FleetAlert (April 2011), 'Human error accounts for 90% of road accidents' accessed at <http://www.alertdriving.com/home/fleet-alert-magazine/international/human-error-accounts-90-road-accidents>

² Australian Bureau of Statistics (July 2015), '9309.0 - Motor Vehicle Census, Australia, 31 Jan 2015' accessed at <http://www.abs.gov.au/ausstats/abs@.nsf/mf/9309.0>

these levels of automation are available today, however at lower levels in Australasia than in other regions such as Europe³.

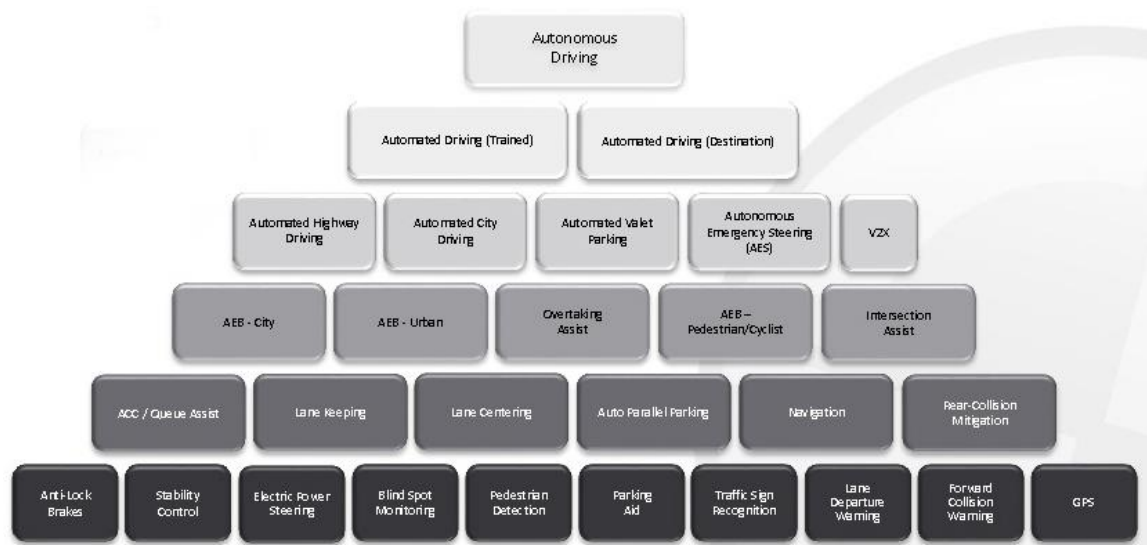


Figure 1 - Building blocks of vehicle automation

The development of the commercially available autonomous vehicle will be evolutionary. Figure 1 shows an illustration of the building blocks of vehicle automation. These building blocks will be laid as technology matures and becomes more reliable.

ANCAP suggests that the Committee consider the immediate role of encouraging the rollout of vehicles featuring levels of automation considered partially or conditionally automated. Some considerations required may include:

- Consumer acceptance
- Safety
- Defining 'control of the vehicle'
- Providing infrastructure to support autonomous vehicle technologies
- National consistency on traffic laws and infrastructure such as speed signs and lane markings to support autonomous vehicle technologies

ANCAP also has a role in assisting governments with ANCAP Safety Ratings having a significant influence over market demand for vehicle safety. With the inclusion of autonomous systems as part of the rating it is expected that this will again influence the market demand for these safety systems.

Automation is present in sectors other than road transport, and autonomous vehicle technology is an international topic of discussion. ANCAP recommends, where possible, the adoption of internationally consistent practice.

³ Royal Automobile Club of Victoria (December 2014), 'Emerging Vehicle Safety Technology' accessed at https://www.racv.com.au/wps/wcm/connect/racv/internet/auxiliary/news+_+events/research+and+reports/research-and-reports