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National Transport Commission  
Level 3, 600 Bourke Street  
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Dear Rahila,

**Guidelines for trials of automated vehicles in Australia**

Thank you for the opportunity to provide our feedback as part of the *Review of guidelines for trials of automated vehicles in Australia*.

Please find EasyMile's submission enclosed hereunder; should you have any queries do not hesitate to contact me via email to [greg.giraud@easymile.com](mailto:greg.giraud@easymile.com) or on my mobile 0403 195 746.

Best regards,

A handwritten signature in blue ink, appearing to read "Greg Giraud".

Greg Giraud  
Managing Director Australia & New Zealand

## Background

EasyMile is an industry leader in driverless technology.

Its award-winning solutions for mobility and intralogistics are driven by cutting-edge software that automates transportation platforms without the need for dedicated infrastructure. Since 2014, the innovative company has become known for quality delivery and real-world deployments. EasyMile's expert technology already drives autonomous vehicles in 300+ locations across more than 30 countries.

Its flagship solution, the EZ10 passenger shuttle, improves public transport by connecting hubs and in many areas, provides a service where there otherwise wasn't one. The TractEasy is a tow-tractor solution optimising supply chains with cross/indoor-outdoor, 24/7 ground transportation at factories and industrial sites. It also offers a powerful fleet management and supervision system, one of the very first to be deployed with real world autonomous vehicles. EasyMile's adaptable software can also be integrated in numerous other vehicle platforms making it a partner of choice for global original equipment manufacturers.

Founded in 2014, EasyMile has a global presence with headquarters in Toulouse (France) and regional offices in Adelaide (Australia) Denver (USA), Berlin (Germany) and Singapore. The Company employs over 230 highly-skilled and passionate employees specialising in robotics, computer vision and vehicle dynamics.

In Australia, EasyMile is headquartered in Adelaide and has deployed projects in the City of Playford (Adelaide Metropolitan Area), Renmark (SA), Coffs Harbour and Armidale (NSW), the City of Redlands (QLD), and Darwin (NT). All projects cater for specific uses case and operate on public roads and mixed traffic environments.



## Review of the Guidelines for trials of automated vehicles in Australia

**Question 1: Should the guidelines be updated to improve the management of trials (section 3 of the guidelines) and, if so, why? Consider in particular:**

- **the standard of evidence required in a traffic management plan**

The traffic management plan can be onerous and duplicate with other documentation supplied at times.

The traffic management treatment and standard of evidence required could be reviewed and reassessed now that domestic AV stakeholders are more familiar with automated vehicles deployment and processes; for instance the development of standard templates for the traffic management plan, and standardized checklists based on the project and vehicle considered would be helpful.

- **the definition of ‘trial location’**

We support the suggested clarification put forward i.e. that a trial location could either be specific roads, routes or regions and/or the vehicle’s ODD.

As a trialling organisation we have a very clear ODD matrix to assess the feasibility of a project and we are supportive of the ODD approach which provides greater flexibility than a location-based one.

- **the stakeholders trialling organisations should engage with**

EasyMile engage with enforcement agencies and emergency services as standard practice during trials and support this as a recommendation. It is important for this to happen early in the process and for these stakeholders to be educated on the technology; we generally organise a meeting with emergency services as part of the service setup process, where stakeholders have the opportunity to do a guided tour of the vehicle and gain an understanding of key in-service and operational aspects.

- **requirements to state the purpose of a trial**

While the trialling organisation can help develop the purpose, this has to primarily come from the jurisdiction or entity commissioning the trial in line with their own transport innovation or new mobility strategic objectives. This should be the starting point of any trial: the project consortium and client should be aligned on the purpose, from which the project’s objectives will be derived.

**Question 2: Should the guidelines be updated to improve the safety management of trials (section 4 of the guidelines) and, if so, why? Consider in particular:**

- **the standard of evidence required**

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- **human driver or operator inattention**

This is managed at operational level and some flexibility needs to be maintained should this become a guidelines requirement: safety concepts and procedures vary from a trialling organisation to another and from vehicle to vehicle. Making detailed prescriptive requirements in this regard will further burden pre-trial processes and may not be adapted to all vehicles and organisations.

This is already part of our standard practices: safety operators face a comprehensive recruitment, training and testing regime in line with our safety concept. To maximise alertness, mandatory regular breaks are put in place throughout the safety operator's shift and the total number of hours in a shift is capped.

In addition, the project's operation manager (typically a public transport operator) does multiple spot checks daily via the in-vehicle camera to ensure the onboard operator is following safety and operational procedures.

- **road user behaviour that does not comply with road rules**

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- **interaction with enforcement and emergency services**

As part of standard practices, EasyMile already conducts a vehicle presentation with local emergency services before the start of operations. This is an important part of the process and could be added as a high-level requirement with the current level of details in the guideline. Imposing detailed requirements may remove the current flexibility and further burden the pre-trial process.

- **pre-trial testing**

A pre-trial test is a burdensome process as it often involves additional logistics to transport the vehicle to a different testing site, setting up a testing route, deploying and running the vehicle on a chosen test track hence mobilising engineering and government's resources to set up and appraise the test.

If the vehicle has been trialled in a similar ODD or gone through a series of tests in a given jurisdiction, running similar tests in a different jurisdiction will bring similar results: jurisdictions should be amenable to accepting test results from other jurisdictions or from international tests or self-assessment and self-certification as is the case the US, where self-certification is the process adopted by the National Highway Traffic Safety Administration.

We support a greater level of sharing between domestic and international jurisdictions where possible to make future projects' setup phase more efficient.

A national testing framework should also be considered and developed as soon as possible.

- **any additional key safety criteria. Consider the safety criteria for the first supply of automated vehicles for commercial deployment (Appendix A).**

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### **Question 3: What issues have been encountered when obtaining or providing insurance?**

There has been some confusion as to which parties need which insurance, especially when the autonomous vehicle operations are managed by a company that is not the ADSE.

This topic has since been addressed at the operational level and should not require any prescription at a legislative/guidelines level.

**Question 4: Are the current insurance requirements sufficient (section 5 of the guidelines)? If not, how should they change?**

They are sufficient. Further prescriptive requirements are not necessary and as an emerging industry the current high-level approach should be maintained.

**Question 5: Should the guidelines be updated to improve the provision of relevant data and information (section 6 of the guidelines)? Consider in particular: Review of ‘Guidelines for trials of automated vehicles in Australia’: Discussion paper May 2020 9**

The guidelines and the first supply safety criteria agreed by ministers regarding provision of relevant data and information are sufficient and we do not support additional detailed prescriptive requirements in this regard.

Specifically regarding disengagements, disengagements may happen several times a day for a number of reasons which are often not linked to safety: for instance, circumventing an obstacle on the vehicle route, such as a private vehicle incorrectly parked, temporary construction or roadworks. Disengagements do not provide an indication of the automated vehicle’s safety and reporting on such events will impose additional burden.

**Question 6 Is there any additional information the guidelines should include for trialling organisations?**

As a trialling organisation we strongly support any additions that encourage further harmonisation and standardisation of the process nationally.

In this respect, inter-jurisdiction sharing and collaboration through the guidelines should be encouraged and details of the trials to date with points of contact from Austroads or from state governments is a good idea.

**Question 7 Should the guidelines apply to any other emerging technologies (discussed in chapter 4 or other technologies) and operating domains?**

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**Question 8 Are there any additional criteria or additional matters relevant to the trials of automated heavy vehicles that should be included in the guidelines?**

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**Question 9 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.)**

Aside from the importation and the cap on the number of trialling vehicles under the Motor Vehicle Standards Act 1989, we see no major regulatory barriers to larger trials.

The main barrier is that the country and state's aspirations to create a favourable development environment and to facilitate autonomous vehicle innovation have faltered after the first wave of single vehicle trials. This is in stark contrast to other western countries and more mature AV markets which continue to push the boundaries of AV development by facilitating more ambitious, larger scale, multi-vehicle commercial AV projects.

Supporting larger projects is essential as deployment and regulations are intimately linked at this stage of the technology's development and they will continue to evolve side by side as the industry and market mature.

**Question 10 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?**

Yes, they should continue to allow commercial passenger services. No changes are necessary as the commercial and operational criteria can be discussed and developed at operational level.

**Question 11 What challenges have you faced with administrative processes when applying for approving trials of automated vehicles, and how could these be addressed?**

The application and approval processes are iterative, burdensome and vary from state to state. We support the creation of an easy to follow checklist of requirements and consistent templates for the document pack.

We also support the creation of a committee as a one-stop-shop for trial applications on the South Australian model to streamline communications.

**Question 12 Are there any other barriers to cross-border trials? Is there a need to change current arrangements for cross border trials?**

Undertaking a trial application process across two states and territories is unrealistic and unappealing under the current arrangements, as it would require the duplication of two similar but different approval processes across two states.

The single national scheme must be the long-term goal but the mutual recognition framework between state and territory would be a good interim mechanism.

**Question 13 Should there be a more standardised government evaluation framework for automated vehicle trials? If so, what are the trial issues that should be evaluated?**

This is not necessary as there are no two similar trials. The trial evaluation relies heavily on the scope of the project and the purpose and objectives stated by the commissioning party which are all different: learnings and format change from trial to trial based on location, use cases, technology tested (e.g. on-demand, infrastructure etc.)

**Question 14 Should the results of evaluations be shared between states and territories? If so, how should commercially sensitive information be treated?**

In the spirit of increasing collaboration between states and territories, end of trial reports, learning and research findings could be shared in confidence, provided the project consortium including the state or territory partner agrees to it.

Two approaches could be considered:

1. Early trial discussions could take place to differentiate on reporting and evaluation targets: what is for internal stakeholders, what can be shared between states and territories and what is for the wider public.
2. A single evaluation report is produced with commercial in confidence sections and data redacted as relevant.

**Question 15 What works well in the automated vehicle importation process, and what are the challenges?**

The automated vehicle importation adds another complex, costly and at times unpredictable challenge to an already burdensome pre-trial process.

Although the Department of Infrastructure, Transport, Regional Development and Communications' concessional approval provides an initial entry point for automated vehicles, it is a tedious and non-linear process.

It is not scalable or adapted for the long term or larger fleet of vehicles. One overarching issue is that the Australian Design Rules are not adapted to autonomous vehicles.

Further, the evaluation vehicle category is no longer appropriate - the clause specifying that vehicles need to be returned or destroyed after four years is unrealistic and unadapted.

**Question 16 Is there anything further that should be done to facilitate a transition from trial to commercial deployment?**

See response to Question 9

**Question 17 Are there any matters that the NTC should consider in its review of the guidelines?**

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