On-road enforcement for automated vehicles

The operation of automated vehicles on Australian roads will create unique challenges for enforcement. This discussion paper details these challenges and proposes options to address them. It focuses on how law enforcement will interact with automated vehicles on the road. It does not cover broader enforcement issues such as criminal investigations.

The National Transport Commission (NTC) consulted with industry and government stakeholders to develop the information in this paper. We conducted topic-based workshops as well as targeted sessions.

We will use the findings from this work to develop policy positions that are nationally consistent and outcomes based. This will help states and territories when they put in place regulatory and policy changes. It will also help them with changes to procedures, training needs and system requirements.

Context

This paper is part of the on-road enforcement for automated vehicles project. The goal of the project is to develop a nationally consistent approach that allows state and territory law enforcement officers to:

- interact with automated vehicles
- respond to the road safety risks of automated vehicles.

The on-road enforcement work is part of a broader reform program. Its aim is to create end-to-end regulation to support the safe commercial deployment and operation of automated vehicles at all levels of automation. The NTC is collaborating with Austroads and the Commonwealth, state and territory governments on the reform program. We are seeking consensus on policy positions and final outputs so we can achieve national consistency.

States and territories want to be prepared for enforcing automated vehicles when they begin operating on our roads. At the same time, there is uncertainty over the future capability of automated vehicle technology. The ongoing tension between these two themes states is a common theme running through this paper. In response, most of the proposed options in the paper do not seek to define prescriptive solutions. Instead, they focus on making sure enabling powers and provisions are available.

This approach aims to balance the following considerations:

- reform principles of legal certainty
- flexibility to accommodate future developments in technology
- advice from law enforcement about their operational requirements.

This discussion paper examines the powers of state and territory law enforcement officers. It aims to encourage discussion about whether current powers are sufficient for officers to interact with and respond to the road safety risks of automated vehicles. The paper explores practical aspects of interacting with automated vehicles. Where there are gaps, the paper considers options to address them. The focus is on how industry is considering these issues, and how existing or proposed mechanisms may be used to address them.

The key areas covered are:

- Powers and practices of state and territory law enforcement officers. These include powers to interact with, intercept or disable, and to ensure the safe on-road operation of automated vehicles.
- Access to data (powers and privacy protections) by state and territory law enforcement agencies. This includes data to identify automated vehicles and respond to their road safety risks (for example, data on factors causing or contributing to a breach of a road traffic law or crash).
- Enforcement agencies sharing data with relevant parties, particularly the in-service safety regulator.

The NTC is a national land transport reform body with a mandate focused on transport laws. For this reason, any matters relating to the powers and practices of police officers beyond road safety, such as criminal investigations, are not covered in this paper.

We acknowledge the potential operational impacts of automated vehicles on law enforcement. This paper does not attempt to comprehensively assess these impacts. It is only intended to support states and territories in considering potential operational impacts within their jurisdiction.

Providing on-road directions to automated vehicles

Consideration is given to how enforcement officers can provide directions to automated vehicles at the roadside. We propose to include the automated driving system (ADS) as a system to which enforcement officers can provide an on-road direction.

Two options to assist automated driving system entities (ADSEs) to develop the capacity of their ADS to interact with enforcement officers and act on directions are proposed.

Disabling an automated driving system

Considers how enforcement officers could disable an ADS at the roadside and remotely, and relevant processes once an ADS is disabled. Proposes that there may be multiple scenarios where police may need additional powers to disable a vehicle as well as remove an automated vehicle from the road once its ADS has been disabled.

Data needs and overview of enforcement access to automated vehicle data

Recognises that enforcement officers will need to access data to respond to automated vehicle road safety risks. This includes timely access to data for crash investigation and reporting, and in relation to road rule infringements.

Considers relevant data needs and provides and overview of some of the issues around enforcement access to automated vehicle data.

Access to data at the roadside and more broadly

Considers issues relating to the availability and accessibility of ADS operational data at the roadside and more broadly. The paper outlines the range of existing mechanisms, such as the first supply requirements, for ongoing data recording and sharing capability that are relevant for law enforcement access to vehicle data.

Proposes that states and territories include new data collection/access powers that would allow enforcement officers to collect or access ADS data at the roadside.

Additional data availability and access considerations

Outlines additional issues around enforcement access to automated vehicle data, such as visual indicators, in-vehicle cameras and information from vehicle occupants, as well as retention and admissibility of automated vehicle data.

Interactions with the in-service regulator, ADSEs and registered owners

Sets out the interactions between law enforcement and the in-service regulator, automated driving system entities (ADSEs) and automated vehicles registered owners. Considers whether states and territories need new powers to allow enforcement officers to disclose relevant data and information to the in-service regulators and ADSEs.

Operational impacts on enforcement roles, responsibilities and resources

In the final chapters we consider the operational impacts of automated vehicles on enforcement roles, responsibilities and resources.

We conclude that it is difficult to quantify the scope of the impact until more is known about automated vehicles and how they will operate in the Australian environment. States and territories need to consider the potential operational impacts within their jurisdictions to allow for adequate training and investment in infrastructure.

A case study of a camera-detected rule breach is used to illustrate the modified role of enforcement officers in dealing with automated vehicles.

Next steps

We are seeking views on the options discussed in this paper. We want our work to support states and territories as they implement regulatory, policy, procedure and system changes. Ideally, the advice we receive will be framed around practical considerations to help us achieve this.

We welcome written submissions, as well as feedback through to 5 September, 2022. During the consultation period we will also consult with stakeholders through meetings. We will use the findings from our work to develop a policy paper and updated guidelines. We will then submit these to Commonwealth, state and territory infrastructure and transport ministers for approval.