



Australian Government

Department of Infrastructure,
Transport, Regional Development,
Communications and the Arts



Earlier work on the automated vehicle regulatory framework

This paper **explains** background information

April 2024

Overview

To access the benefits and minimise the safety risks of automated vehicles, Australia needs a new, nationally consistent regulatory framework. Over several years, the National Transport Commission (NTC) has been working with state and territory governments and the Australian Government on an end-to-end regulatory framework for automated vehicles. This paper explains the process followed and decisions made so far.

Key points

In 2018 infrastructure and transport ministers agreed to take a uniform approach to driving laws for automated vehicles by developing a national law, and agreed to a safety assurance approach for the first provision of automated vehicles to the Australian market through the existing regulatory framework under the *Road Vehicle Standards Act 2018*.

In 2020 ministers agreed to a regulatory approach for the in-service safety of automated vehicles, including a national in-service Automated Vehicle Safety Law (AVSL) and a new national regulator, safety duties on Automated Driving System Entities (ADSEs) and executive officer due diligence obligations. Ministers also agreed that requirements for human users of automated vehicles would be established in state and territory law.

In 2022 ministers agreed that the AVSL would be implemented through Commonwealth law, and that the NTC would work with state and territory governments on the development of a national approach to complementary state and territory legislation to support the national regulatory framework. Other details of in-service regulatory framework for automated vehicles were agreed at this time.

In 2023 ministers agreed to a range of nationally consistent policy positions for state and territory complementary laws relating to fallback-ready users, third-party interference, registration and roadworthiness, passenger transport regulation, and on-road enforcement.

The need for a new regulatory framework

Depending on how they are introduced and used, automated vehicles have the potential to reduce carbon emissions and improve road safety, mobility, accessibility, productivity, traffic flow and fuel efficiency. However, automated vehicles could introduce new on-road safety risks that may not be addressed by the market without regulatory intervention.¹ Nationally inconsistent approaches to on-road safety by multiple regulators could also create regulatory barriers to market entry.

Therefore, Australia needs a regulatory framework that will:

- address risks and make sure automated vehicles will operate safely on the roads
- minimise unnecessary regulatory barriers so that the Australian market is open to automated vehicle technology.

Previous decisions

The NTC, state and territory governments and the Australian Government have worked together since 2016 to develop a flexible and safety-focused regulatory framework for automated vehicles. Through the Infrastructure and Transport Ministers Meeting and its predecessors, governments have made key decisions that have shaped the development of the regulatory framework so far.

This agreed framework is now guiding the development of the Automated Vehicle Safety Law (AVSL), and amendments to state and territory laws. The process of developing and passing the legislation will help to confirm these policy settings, or update them as necessary.

Early consideration of a national law and first provision

In May 2018 infrastructure and transport ministers agreed to take a uniform approach to driving laws for automated vehicles by developing a national law. At the same time, they agreed that when the ADS is engaged, there must be an entity that is responsible for complying with driving obligations, rather than any human user. We refer to this entity as the Automated Driving System Entity (ADSE).

In November 2018 ministers considered how automated vehicles would enter the Australian market, which we call 'first provision'.² They agreed to a safety assurance approach for the first provision of automated vehicles to the Australian market. This would mean incorporating new safety criteria into the existing regulatory framework under the *Road Vehicle Standards Act 2018* (RVSA).

Agreement to a national law and regulator

In June 2020 ministers considered how to ensure automated vehicles operate safely once they are on the roads, or 'in-service'. They agreed to a regulatory approach that would include the following elements:³

- a national in-service AVSL would complement existing road safety legislation by regulating parties not explicitly covered in current legislation

¹ National Transport Commission (NTC), [In-service safety for automated vehicles: consultation regulation impact statement](#), NTC, Melbourne, 2019, accessed March 2024.

² The NTC prepared a [consultation regulation impact statement \(RIS\)](#) on safety assurance for automated driving systems which was released in May 2018, and the resulting [decision RIS](#) was provided to Ministers in November 2018 to support their decision (files accessed March 2024).

³ This decision was supported by the NTC's [Decision regulation impact statement – In-service safety for automated vehicles](#) (June 2020, accessed March 2024).

- the AVSL would establish a new regulator with the necessary functions, powers and duties
- the AVSL would place a general safety duty on ADSEs to ensure the safety of an ADS
- the AVSL would place due diligence obligations on the executive officers (top-level managers) of ADSEs to ensure compliance with the general safety duty
- the AVSL would authorise the new regulator to regulate the ADSE, ADSE executive officers and remote drivers (teleoperators)
- the AVSL would enable regulation of matters including:
 - the performance of the dynamic driving task by ADSs, which should achieve consistent outcomes with existing road rules for human drivers
 - remote driving in which an ADSE uses individuals located outside of the vehicle to monitor and/or operate the ADS
- requirements for human users of automated vehicles would be established in state and territory laws.

In May 2021 ministers agreed on principles to guide the development of the regulatory framework. The framework should:

- be nationally consistent – support a single, national market for vehicles in Australia
- be internationally aligned – maintain alignment with evolving international standards to keep Australia part of the global vehicle market
- be effective – ensure safety as the key outcome
- be adaptable – allow technology and solutions to evolve over time
- be efficient – the end state should be scalable to the size of the deployment and use existing systems, processes and legislation where possible. Regulators should be efficient, scalable and risk-based in their approach
- provide flexibility – focusing on outcomes and principles-based approaches rather than the technology, application and business model
- support and enable deployment through removing barriers to ensure Australians can gain the benefits of this technology
- provide consistent rules regardless of how automated vehicles come to market
- provide clarity for industry and consumers on their responsibilities and liabilities, including ensuring there is clear responsibility for the driving of a vehicle at all times.

End-to-end regulatory framework

After consulting on the details of the AVSL, the NTC proposed a comprehensive regulatory framework for automated vehicles to ministers.⁴

In February 2022 ministers agreed that the AVSL would be implemented through Commonwealth law, and that the NTC would work with state and territory governments on the development of a national approach to complementary state and territory legislation to support the national regulatory framework.

The 2022 policy paper acknowledged the key parties that would be regulated under the national regulatory framework, including that:

- ADSEs and ADSE executive officers will be regulated under the AVSL

⁴ National Transport Commission (NTC), [The regulatory framework for automated vehicles in Australia](#), NTC, Melbourne, 2022, accessed March 2024.

- an automated vehicle's access to the road network, vehicle registration, road management, regulation of human drivers and other road users as well as human driver licensing will continue to be regulated under existing state and territory laws
- state and territory road transport regulators will continue to have responsibility for roadworthiness inspections and the regulation of non-ADS repairs and modifications
- human users of automated vehicles, including fallback-ready users and third parties interfering with an automated vehicle, will also be regulated by states and territories.

Other elements of the in-service framework agreed at this time are described below.

Prescriptive duties to support compliance with the general safety duty

The AVSL will impose a number of prescriptive duties on the ADSE to support the general safety duty. An ADSE must use a systematic approach to manage safety risks, prevent unsafe operation of its ADS, provide education about using its ADS, and ensure system upgrades are installed safely.

Prescriptive requirements to support the in-service regulator's enforcement role

The AVSL will also impose prescriptive requirements to support the regulator's enforcement role. An ADSE must disengage its ADS when there is no ADSE to support it, ensure its automated vehicles record certain data, keep records of safety incidents, and log all modifications to its ADS.

For more information, see the [Automated Driving System Entity in-service obligations](#) paper.

Penalties

Breaches of the general safety duty will be categorised dependent on the seriousness of the breach and be subject to either criminal or civil penalties. Breaches of the prescriptive duties and requirements will be subject to criminal penalties.

Executive officers will be expected to exercise due diligence, making reasonable efforts to ensure the ADSE complies with its safety duties.

Third-party interference

State and territory governments will establish an offence of third-party interference with an ADS in their laws. This will include modifications to, repairs of, or installations of an ADS that have not been authorised by the responsible ADSE or the regulator; and deliberate engagement of an ADS that has been disengaged by an ADSE.

For more information, see the [Third-party interference with an ADS](#) paper.

In-service regulator

The AVSL will establish a new Commonwealth regulator with a range of functions including certifying ADSEs, monitoring, investigation, enforcement, providing education and guidance, rule-making and reporting.

The new regulator's compliance and enforcement powers will include audit, inspection, entry and seizure, improvement notices, directions to act, infringement notices, formal warnings, enforceable undertakings, and suspension of an ADS or ADSE.

For more information, see the [Regulator powers and functions](#) paper.

Non-type-approved commercially deployed automated vehicles

Any automated vehicles approved for commercial deployment under an RVSA approval pathway other than type approval will still need an ADSE and be regulated under the AVSL by the new regulator.

State and territory complementary law policy positions

In June 2023 infrastructure and transport ministers agreed to a series of policy positions relating to state and territory law enforcement and road transport laws. These include:

- **Conditionally automated ADS features** – Obligations for users of conditionally automated (level 3) ADS features were agreed, including an obligation for a fallback-ready user to be seated in the driver's seat to take control of the vehicle when required. A range of non-dynamic driving task obligations would also be assigned to the fallback-ready user, and some to automated vehicle passengers. These are detailed in the [Human user or occupant obligations when using a vehicle with an ADS](#) paper.
- **Third-party interference** – Offences are to be introduced in both the AVSL and state and territory laws; covering any interference with an ADS or ADS component, unauthorised modification to an ADS or ADS component, and unauthorised repairs to an ADS or ADS component. Separate offences will restrict unauthorised installation or activation of an ADS in an in-service vehicle.
- **Registrations and roadworthiness** – State and territory vehicle registration and roadworthiness laws will be amended so that vehicle owners and fallback-ready users must not allow an automated vehicle to operate on the road if it is unregistered or does not comply with vehicle standards. These rules will not apply to passengers. A person will commit an offence if they allow an ADS to be engaged, used or permitted to be used to drive on the road if they are aware, or must have realised that the ADS is unsafe. An ADSE will not have any obligations for vehicle registration unless it is the owner of the vehicle. The standards for roadworthiness assessment will be updated to account for basic evaluation of the ADS where applicable, identify allowable modifications to non-ADS components, and allowable ADS repairs in a written-off vehicle.
- **Light and heavy vehicle standards** – The standards will be updated to refer to the applicable national road vehicle standards for ADS compliance, and will not introduce additional standards for an ADS.
- **Passenger transport services** – Considering how automated vehicles may be used in passenger transport services, ministers agreed to a number of positions, including that ADSEs that supply vehicles to a third-party transport operator without acting as a transport provider will not have additional obligations under passenger transport legislation. They also agreed state and territory regulators that investigate passenger transport crashes will liaise with the automated vehicle in-service safety regulator when automated vehicles are involved, passenger transport legislation will only allow the ADSE or an ADSE-authorized party to modify or repair an ADS in a passenger transport service vehicle, and certain obligations related to human drivers will not apply to an ADS performing a passenger transport service.
- **Law enforcement interactions with automated vehicles** – Ministers agreed that state and territory enforcement powers would be amended to enable law enforcement interactions with automated vehicles and access to automated vehicle data, and establish expectations about information sharing between law enforcement agencies and the automated vehicle in-service regulator. The NTC's paper *On-road enforcement for automated vehicles* provides more information on potential future on-road enforcement requirements.⁵

⁵ National Transport Commission (NTC), [On-road enforcement for automated vehicles](#), NTC, Melbourne, 2023, accessed March 2024.