



Automated vehicle development in Australia

SIP-adus 2017

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Australia

About the National Transport Commission

Independent statutory body

Develop national surface transport policy reform proposals

Funded by the Commonwealth and 8 state and territory governments

Remove 'regulatory barriers' to new, innovative transport services and products

The Australian Context



Regulatory reforms for

automated road vehicles

Roadmap of reform

- To develop end-to-end legal framework for commercial deployment of automated vehicles
- Near, medium, long-term reforms 2016–2020
- Builds on extensive consultation

Daimler's Mercedes, Bosch to deliver self-driving car by 2021

Nathan Bomey, USA TODAY Published 5:02 a.m. ET April 4, 2017 | Updated 5:32 p.m. ET April 6, 2017

CAR BUYING

Audi Promises Fully Self-Driving Cars With Artificial Intelligence by 2020

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AUG 16, 2016 | PALO ALTO, CALIF.

FORD TARGETS FULLY AUTONOMOUS VEHICLE FOR RIDE SHARING IN 2021; INVESTS IN NEW TECH COMPANIES, DOUBLES SILICON VALLEY TEAM

- Ford announces intention to deliver high-volume, fully autonomous vehicle for ride sharing in 2021
- Ford investing in or collaborating with four startups on autonomous vehicle development
- Company also doubling Silicon Valley team and more than doubling Palo Alto

BMW says it will deliver self-driving car by 2021

Nathan Bomey, USA TODAY Published 9:27 a.m. ET July 1, 2016 | Updated 3:51 p.m. ET July 1, 2016

Toyota promises self-driving car with 'autopilot switch' by 2020



By Alistair Charlton

October 6, 2015 11:35 BST



GOAL

**End-to-end regulation
by 2020 to support the
safe, commercial
deployment and
operation of automated
vehicles at all levels of
automation**

Key challenges

1. Safety
2. Liability
3. Enforcement
4. Data

The logo for the National Transport Commission (NTC) in 2017, featuring the letters 'NTC' in a bold, sans-serif font above the year '2017' in a smaller font, all contained within a white rectangular box with rounded corners and a thin border. The background of the entire image is a grayscale photograph of a city street with a blurred train in the foreground and several multi-story buildings in the background.

NTC
2017

AV ROADMAP

Trial guidelines	2017
Safety assurance	2017
Clarifying control	2017
Driver reform	2018
Insurance	2018
Exemption powers	2018
Data access	2018

Key areas:

- Scope of operations
- Safety management plan
- Appropriate insurance
- Agree to provide key data

Approved by transport ministers
in **May 2017**

GUIDELINES FOR TRIALS OF

AUTOMATED VEHICLES

IN AUSTRALIA

C-ITS and Automated Vehicle trials in Australia



Safety assurance options

1. Continue current approach
2. Self-certification
3. Pre-market approval
4. Accreditation



Clarifying control

Guidelines will clarify:

- who is responsible for the vehicle at each level
- how the 'proper control' rule applies to AVs
- ways police can interact with AVs on the road.



Upcoming NTC projects



Changing driver
laws to support
AVs

Exemption powers
and CTP insurance
review

Regulatory access
to C-ITS and AV
data

Creating an end-to-end regulatory system

Imported and manufactured

Registration

Licensing

Modification/roadworthiness

On the road

Infrastructure

**S
A
S**

Commonwealth

NTC

Austrroads

States and
territories



Parting
thoughts...

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NTC AUSTRALIA
National Transport Commission

Roads Heavy vehicles Bus & coach Rail International Topics

Guidelines for trials of automated vehicles in Australia

The guidelines support state and territory road agencies in providing exemptions or permits for trials, and give greater certainty to industry on conditions for trials.

[Learn more](#)

News

Aug 15 2017
PBS marketplace review seeks to build on safety and productivity gains as Australia's freight task grows
Interested parties are invited to provide feedback on ways to improve Performance Based Standards (PBS) scheme for heavy vehicles.
[Read More](#)

Aug 30 2017
New type of heavy vehicle defect notice to improve enforcement compliance burden
From 1 July heavy vehicle operators may see a new type of defect used by enforcement officers to manage vehicle roadworthiness.
[Read More](#)

Submissions

We welcome submissions from any individual or organisation.

Roadmap of reform – Current projects

We are implementing our roadmap of reform in phases to ensure we can prioritise the solutions based on when different levels of automation are likely to be commercially deployed.

Project	Purpose	Delivery date	Current status	Outcome
Automated vehicle trial guidelines	Develop national guidelines governing conditions for trials of automated vehicles.	May 2017	Completed	Support trials at all levels of automation. Ensure consistent trial conditions nationally. Support cross-border trials.
Clarifying control of automated vehicles	Develop national enforcement guidelines that clarify regulatory concepts of control and proper control for different levels of driving automation.	November 2017	Analysing options	Consistent application of law across jurisdictions.
Safety assurance system for automated vehicles	Design and develop a safety assurance regime for automated road vehicles.	November 2017	Analysing options	Support safe commercial deployment of vehicles at all levels of automation.
Changing driving laws to support automated vehicles	Develop legislative reform options to clarify the application of current driver and driving laws to automated vehicles, and to establish legal obligations for automated driving system (ADS) entities.	May 2018	Scoping	Legal obligations of drivers support all levels of automation.
Automated vehicle exemption powers and compulsory third party insurance review	Support jurisdictions in reviewing current exemption powers to ensure legislation can support on road trials. Support jurisdictions in reviewing injury insurance schemes to identify any eligibility barriers for occupants of an automated vehicle, or those involved in a crash with an automated vehicle.	2018	Planning	All Australian jurisdictions are able to support AV trials. Injury insurance schemes support all levels of automation.

The National Transport Commission leads regulatory and operational reform nationally to meet the needs of transport users and the broader community for safe, efficient and sustainable land transport.

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