Automated vehicle regulatory reform in Australia

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Regulatory context for vehicles

Australia

- Federal system
- Eight states and territories and Commonwealth
- **First supply** (type approval): Commonwealth
- **In-service** (including regulation of (human) drivers, vehicle registration, licensing, civil liability, criminal liability: states and territories
About the NTC

Independent body

National transport policy reform proposals

Funded by the Commonwealth, state and territory governments

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

End-to-end regulation in place by 2020 to support the safe, commercial deployment and operation of automated vehicles at all levels of automation.
Changing driving laws to support automated vehicles

Safety assurance system

Review of government access to connected and automated vehicle data

Motor accident injury insurance review

Who is responsible for driving and what are the responsibilities of various parties?

How do we ensure automated vehicles are safe at first supply and once on roads?

How do we protect users’ data?

How do we ensure people in an accident with an automated vehicle are not in a worse position than people in an accident with a conventional vehicle?
Key concept for our work:
The ADSE is the entity that is certifying that the ADS can safely perform the driving task.
Key themes

Changing driving laws consultation

- **National approach** to laws regulating an ADS ‘driver’.

- **Legal certainty** and clarity about:
  - whether an ADS is legally permitted to perform the dynamic driving task.
  - which entity is legally responsible for an ADS when it is performing the dynamic driving task, including responsibility for complying with road traffic laws.

- **No safety gaps** if an ADS performs the dynamic driving task.
Purpose-built national law

Uniform approach to driving laws

1. Allows an ADS to perform the dynamic driving task when it is engaged.
2. Ensures that there is always a legal entity responsible for the dynamic driving task when the ADS is engaged.
3. Clarifies responsibility at various levels of automation when the ADS is engaged.
4. Sets out any obligations on relevant entities.
5. Provides a regulatory framework with flexible compliance and enforcement options.
Dynamic driving task obligations

The purpose built law:

• to define the dynamic driving task in a way that aligns with SAE J3106

• provide the dynamic driving task obligations
When engaged, the ADS is in control at conditional, high and full automation and the ADSE is responsible for compliance with dynamic driving task obligations.
Fallback-ready user

Recommended duties for fallback-ready users:

a) remain sufficiently vigilant to respond without undue delay when required

b) hold the appropriate licence

c) comply with drug, alcohol and fatigue driver obligations
Safety assurance system

- Mandatory self-certification against safety criteria by an ADSE.
- Transition to pre-market approval as international standards are developed.
Proposed safety assessment criteria

1. Safe system design and validation processes
2. Operational design domain
3. Human-machine interface
4. Compliance with relevant road traffic laws
5. Interaction with enforcement and other emergency services
6. Minimal risk condition
7. On-road behavioural competency
8. Installation of system upgrades
9. Testing for Australian road environment
10. Cybersecurity
11. Education and training
Proposed additional obligations

1. Data recording and sharing
2. Corporate presence in Australia
3. Minimum financial requirements
In service-risks

Considering a ‘primary safety duty’

- Non-prescriptive, overarching and positive general safety duty on the ADSE to ensure the safety of the ADS ‘as far as reasonably practicable’.
- Covers unsafe behaviours not captured by prescribed offences.
- Safety duties on others such as modifiers, repairers, registered owners?
Next steps

Safety assurance
• Recommendations to Transport and Infrastructure Council in November 2018

Discussion papers
• Motor accident injury insurance and automated vehicles
• Government access to C-ITS and automated vehicle data
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