

TRANSPORT CANADA RELEASES UPDATED GUIDELINES FOR TESTING AUTOMATED DRIVING SYSTEMS

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In August 2021, Transport Canada released the *Guidelines for Testing Automated Driving Systems in Canada Version 2.0* [1] ("the Guidelines") which replaced the previous 2018 guidelines for testing highly automated vehicles in Canada. The Guidelines apply to any organization conducting research and development trials of vehicles equipped with automated driving systems ("ADS").

The Guidelines establish a baseline of best-practices to ensure that on-road testing and trials involving ADS vehicles are done safely. Further, the Guidelines seek to clarify the roles and responsibilities of federal, provincial or territorial, and municipal governments as it relates to trial organizations. The Guidelines emphasize safety, accessibility, efficiency and collaboration with government, stakeholders and international partners.

This bulletin describes the four chapters of the Guidelines and their key features.

Chapter 1: Engagement with Government Agencies

The Guidelines set forth the government approvals that trial organizations are required to seek prior to conducting testing. Specifically, the Guidelines describe the "pathway to approval" which is a checklist that enumerates the key steps that a trial organization must take to get approval for ADS testing in Canada. [2]

Further, the Guidelines refer to the Accessible Transportation for Persons with Disabilities Regulations (ATPDR), which set forth accessibility requirements for various transportation service providers. The Guidelines encourage trial organizations to determine if their services would fall within the scope of the ATPDR prior to testing. [3]

Chapter 2: Pre-Trial Considerations

The Guidelines contemplate pre-trial safety elements including: assessing the safety of the test vehicle, route selection/operating environment, the establishment of safety management strategies, the use of safety drivers, public communication and awareness and engagement with first responders and law enforcement. [4]

The Guidelines list the 13 safety outcomes which are relevant to assessing the safety of ADS vehicles. Among other things, these include reviewing and assessing the cyber security of the test vehicle using *Canada's Vehicle Cyber Security Guidance*, *Canada's Vehicle Cyber Security Assessment Tool*, and other international best practices.^[5]

Chapter 3: Test Considerations

Next, the Guidelines cover safety considerations that should be managed throughout the duration of a trial. The Guidelines mandate applying a graduated approach to testing. This refers to progressively introducing new and increasingly complex elements into testing which allows trial organizers to assess the safety of each new iteration of the ADS vehicle.^[6]

The Guidelines also emphasize various other safety considerations including: adapting safety management strategies, incident and emergency response, safety driver responsibilities during testing, the safe management of remote operations, conducting trials without a safety driver present, safe interactions with other road users, trials with passengers and regular reporting and information sharing.^[7]

Chapter 4: Post-test Considerations

Finally, the Guidelines include brief recommendations on final reporting as well as information on exporting, destroying, or donating test vehicles following the completion of trials.^[8]

Conclusion

As ADS vehicle testing activities continue to develop rapidly in Canada, the Guidelines provide a useful roadmap for industry participants regarding how to plan for and execute testing in a safe manner. For more information about these Guidelines or other developments in the industry, please do not hesitate to contact us.

[1] Canada, "[Guidelines for Testing Automated Driving Systems in Canada](#)" (August 2021).

[2] *Ibid* at Chapter 1.

[3] *Ibid*.

[4] *Ibid* at Chapter 2.

[5] *Ibid*.

[6] *Ibid* at Chapter 3.

[7] *Ibid*.

[8] *Ibid* at Chapter 4.

by [Mitch Koczerginski](#) and [Sezen Izer](#) (Articling Student)

A Cautionary Note

The foregoing provides only an overview and does not constitute legal advice. Readers are cautioned against making any decisions based on this material alone. Rather, specific legal advice should be obtained.

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