Proposed Pilot Framework – Automated Commercial Motor Vehicles

Ministry of Transportation (MTO)

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The proposed pilot framework for Automated Commercial Motor Vehicles (ACMVs) includes both regulatory requirements and rules overseen by the Registrar of Motor Vehicles. All requirements would be published as Program Conditions on Ontario.ca.

Contents

Progra	m Conditions	2
1.	Overview	2
2.	General conditions	3
3.	Safe operation	4
4.	Vehicle configuration types	5
5.	ACMV testing restrictions	5
6.	Carrier qualifications	
7.	Driver qualifications	9
8.	Assistant qualifications and capabilities	9
9.	Areas of Operation	10
10.	Truck Inspection Stations	11
11.	Data reporting and evaluation	11
12.	Notification of collisions/incidents/infractions	12
13.	Cargo restrictions	13
14.	Special equipment requirements	13
15.	Signage requirements	13
16.	Inclement weather, visibility and/or road conditions	14
17.	Speed restrictions	14
18.	Speed recording device	14
19.	Revocation of approval	15
20.	Cybersecurity declaration	15

Program Conditions

1. Overview

- a. Ontario is committed to supporting the safe adoption of new and emerging transportation technologies to improve road safety, enhance the transportation system, and bolster the economy. To continue the province's leadership in the testing of Automated Vehicle (AV) technologies, this pilot program aims to evaluate the performance of Automated Commercial Motor Vehicles (ACMVs), understand their compatibility with existing road users and infrastructure, and assess opportunities for improving road safety and supporting the trucking sector.
- b. For the purposes of the pilot, Automated Commercial Motor Vehicles (ACMVs) are defined as trucks with a Registered Gross Vehicle Weight (RGVW) over 4,500 kg that meet SAE International's (formerly the Society of Automotive Engineers) SAE Standard J3016, Taxonomy and Definitions for Terms Related to Driving Automation Systems for On-Road Motor Vehicles of Level 3, 4, and 5 autonomy.
- c. The Ontario Ministry of Transportation (MTO) is proposing a 10-year pilot framework that would allow eligible and approved participants to test ACMVs in Ontario.
- d. For the purpose of the pilot, SAE J3016 Level 3 Driving Automation is considered automated driving systems whereby the vehicle can drive itself under limited conditions, will not operate unless all required conditions are met, but a driver must intervene or takeover the driving task if requested by the vehicle.
- e. For the purposes of the pilot, SAE J3016 Level 4 Driving Automation is considered automated driving systems whereby the vehicle can drive itself under limited conditions, will not operate unless all required conditions are met, and will not require a driver to take over the driving task.
- f. For the purposes of the pilot, SAE J3016 Level 5 Driving Automation is considered automated driving systems whereby the vehicle can operate using automated driving features, driving the vehicle under all conditions and will not require a driver to take over the driving task.
- g. For the purposes of the pilot, an ACMV driver is as defined as a 'driver' under the *Highway Traffic Act* (HTA), in addition to being considered as someone located in the driver's seat of the vehicle who is responsible for overseeing the automated driving systems and intervening as needed, in addition to any other tasks required of a commercial motor vehicle driver under the HTA or subsequent regulations.
- h. For the purposes of the pilot, driverless testing is considered when an ACMV is operating under SAE J3016 Level 4 or Level 5 automation, whereby automated driving features will not require a driver to take over the driving task.

- i. For driverless testing, the carrier must demonstrate how they will satisfy all applicable commercial motor vehicle rules and regulations under the HTA, including those that typically apply to drivers. An assistant, located within the ACMV or at a different location in Ontario, must also provide oversight of the ACMV when driverless testing occurs.
- j. To participate in the pilot, applicants must submit an application package to MTO. MTO will review the application form and contact the applicant to discuss next steps for developing a custom graduated testing framework with performance milestones that are relevant to the applicant's technology and operational use case. Once a testing approach has been established and approved by the Registrar of Motor Vehicles, a signed copy of the approval package will be sent back to the applicant. A copy of the signed approval package must be kept in all vehicles participating in the pilot program, at all times.
- k. The ACMV Pilot Program will be separate from Ontario's Automated Vehicle (AV) Pilot Program. The pilot will take place over a 10-year period to ensure sufficient time to effectively evaluate.
- I. MTO's Registrar of Motor Vehicles may restrict the number of participants and vehicles permitted to operate.
- m. On an ongoing basis throughout the 10-year pilot, MTO will assess data and information from on-road testing of ACMVs, engage stakeholders, and make amendments to the pilot framework, if required.
- n. The following conditions apply to the ACMV Pilot Program operations.

2. General conditions

- a. Participants must enter into an agreement with MTO, acknowledging and accepting the responsibilities specified in the application form.
- b. A copy of the signed approval package(s) must accompany all ACMVs and must be produced on demand to a police officer or enforcement officer appointed to carry out the provisions of the HTA.
- c. The signed approval package may be transferred between qualifying vehicles operated by the same package holder, providing that the vehicles are registered to the same Commercial Vehicle Operator's Registration (CVOR) / National Safety Code (NSC) registration number specified on the approval package.
- d. Participants must designate one or more personnel as primary contacts and notify MTO of any changes. If partnering with another organization, they must also designate one or more personnel from the partner organization and inform MTO of any changes. Contact information must include name, title, address, telephone, cellphone, and e-mail address.

- e. Before granting approval to participate in the pilot, MTO may request proof from involved carriers and their partners of equipment to be used. This may include verification of compliance with the federal *Motor Vehicle Safety Act* (MVSA), consisting of the manufacturer's vehicle specifications. Additionally, the request could also involve proof of compliance labels (National Safety Mark (NSM)) and the vehicle alterer's intermediate and final stage labels. If deemed necessary, the request may also seek confirmation from Transport Canada that the vehicle meets MVSA standards. Such requests would be at the discretion of MTO's Registrar of Motor Vehicles.
- f. Unless otherwise authorized by MTO, a driver must remain in the driver's seat of the ACMV to oversee the automated driving systems and intervene as required, including taking full manual control of the vehicle. The driver must also perform other tasks required by legislation or regulation for a commercial motor vehicle driver. If a driver is present, they are responsible for the care and control of the vehicle at all times.
- o. If approved for driverless testing, the carrier is responsible for ensuring an assistant provides oversight of the vehicle. This oversight may include initiating a safe stop, manoeuvring to clear the way for other road users, advising the vehicle on decision-making (e.g., changing lanes to avoid construction, drive over a plastic bag on the road), or other oversight capabilities required for safe operation as deemed necessary by the carrier and/or the Registrar of Motor Vehicles. The assistant's oversight must not include remote control of the vehicle for regular driving tasks.
- g. For ACMV testing with and without a driver, all HTA rules and regulations for commercial motor vehicles still apply, including but not limited to O. Reg. 555/06: HOURS OF SERVICE, O. Reg. 363/04: SECURITY OF LOADS, O. Reg. 199/07: COMMERCIAL MOTOR VEHICLE INSPECTIONS, O. Reg. 611: SAFETY INSPECTIONS), except where specific exemptions are provided by the regulation.
- If approved for driverless testing, the applicant must demonstrate to MTO how the carrier will satisfy all HTA rules and regulations that typically apply to drivers of commercial motor vehicles.
- i. ACMVs may engage in commercial activities during testing.

3. Safe operation

- a. The carrier is liable for any damage to highway infrastructure.
- b. The ACMV must operate exclusively on MTO-approved routes in a manner that does not cause damage to highway infrastructure, including avoiding interference with curbs, lights or other highway fixtures.

4. Vehicle configuration types

- a. Eligible vehicle configurations, vehicle weights and dimensions include those set out in Schedule 1 and 19 through25 of O. Reg 413/05, Vehicle Weights and Dimensions (VWD) for Safe, Productive, and Infrastructure-Friendly (SPIF) Vehicles: SPIF #1 (Designated Tractor-Trailer Combination 1), Tractor Fixed Axle Semitrailer; SPIF #19 (Designated Truck 1), 2-axle Truck; SPIF #20, (Designated Truck 2), Tandem-Axle Truck; SPIF #21 (Designated Truck 3), 3-axle Truck plus Auxiliary Axle; SPIF #22 (Designated Truck 4), Twin-Steer Tandem Drive Truck; SPIF #23 (Designated Truck 5), Self-Steer Triaxle Truck; SPIF #24 (Designated Truck 6), Tri-Drive 4-axle Truck; SPIF #25 (Designated Truck 7), Twin-Steer Tri-Drive 5-axle Truck.
- b. Long Combination Vehicles (LCVs), tractor double-trailers (A-, B-, or C-trains), lift axle equipped tractor semitrailer configurations, truck-trailer configurations, and busses are not permitted.
- c. To test an ACMV that does not meet all requirements of the federal MVSA, carriers must obtain an exemption from Transport Canada, the federal authority responsible for vehicle safety standards.

5. ACMV testing restrictions

- a. Prior to obtaining approval to test ACMVs, applicants must develop a graduated approach to demonstrate safe operation in lower-risk environments before advancing to testing in higher-risk environments. Applicants must work collaboratively with MTO to establish a custom graduated testing framework with performance milestones tailored to their technology and operational use case.
- b. The testing approval process is divided into two streams:

Stream #1: Driver-supervised testing of vehicles under SAE Level 3 autonomy as defined under SAE J3016. A driver must be present in the driver's seat and prepared to engage the vehicle as necessary.

<u>Note:</u> Stream #1 may include testing of vehicles equipped with technologies to operate as SAE Level 4 or 5 autonomy. Due to the pilot program's requirement to have a driver prepared to engage the vehicle, operation under the pilot would be considered SAE Level 3 autonomy.

Stream #2: Driverless testing of vehicles under SAE Level 4 or 5 autonomy as defined under SAE J3016. An assistant, located either within the vehicle or at a different location in Ontario, must be ready to provide oversight of the ACMV. The carrier must demonstrate compliance with all relevant commercial motor vehicle rules and regulations under the HTA, including those typically applicable to drivers.

- c. As part of the application process and before approval for Stream #1, applicants must provide data to demonstrate to MTO that the ACMV can safely operate in simulations, test tracks, and/or private property.
- d. Pilot participants must demonstrate safe operation through the stages of their graduated approach in the driver-supervised stream before requesting to start the driverless testing stream, if desired.
- e. MTO may impose restrictions (times, locations, or others) based on municipal input or as deemed necessary by the Registrar of Motor Vehicles to ensure the safety of other road users.
 - If a municipality recommends evidence-based restrictions that are necessary to protect the safety of other road users (details in Section 9), MTO will consider these restrictions. Municipalities may recommend restrictions for MTO's consideration only if they are considered the local road authority.
- f. If MTO implements testing restrictions:
 - Stream #1: MTO would require the driver of the ACMV to take manual control along sections of a route where testing restrictions have been implemented.
 - Stream #2: MTO would not approve participants for driverless testing on roads where MTO has imposed restrictions.
 - For example, if a participant applies to Stream #2 for a route passing through Municipality A (where MTO has not imposed testing restrictions) and Municipality B (where MTO has imposed testing restrictions), MTO would approve driverless testing only in Municipality A. Once the vehicle enters Municipality B, MTO would require a driver to be onboard to provide supervision.
- g. Determining when a pilot participant is ready to safely transition to the next phase of their graduated approach or into the driverless testing stream would be a collaborative effort between MTO and the pilot participant.
- h. MTO may consider a participant's previous ACMV testing experience with similar vehicles within the same weight class when assessing progress within their graduated testing approach.
- i. Applicants may refer to the following table as guidance when developing their graduated testing approach. Examples of higher risk environments are for reference only and participants must tailor their approach based on their unique technology. The final decision on whether, when, and where participants are permitted to test rests with the Registrar of Motor Vehicles, based on the quality and quantity of evidence demonstrating safe operation provided by the applicant.

Table 1. Example of a graduated approach where participants must demonstrate safe operation in a restricted testing environment before progressing to higher risk testing environments.

Stream	Stage	Testing environment	Requirements to move to the next stage*
1. Driver- supervised	A) Restricted Operational Design Domain (ODD)	 Public roads and/or highways deemed lower risk by MTO. Restrictions may apply to higher-risk environments, including: School zones Transit routes High volumes of vulnerable road users (e.g., cyclists, pedestrians) Adverse weather conditions Dawn/ dusk/ darkness 	Demonstrate to MTO that the ACMV can safely operate in lower risk testing environments.
	B) Desired ODD	Desired testing environment (applicant-dependent, may still include restrictions above based on performance history, municipal feedback, or other factors determined by MTO).	Demonstrate to MTO that the ACMV can safely operate in the desired ODD.
2. Driverless	A) Restricted ODD	Potentially same restrictions as in 1.A. above	Demonstrate to MTO that the ACMV can safely operate without a driver in lower risk testing environments.
	B) Desired ODD	Potentially same restrictions as in 1.B. above	

* MTO will work with applicant to identify performance milestones that are technology-specific and relevant to the applicant's ODD.

General testing restrictions (applies to testing with a driver and driverless testing):

j. The ACMV is expected to travel in the right-most lane of the highway, where feasible.

Testing restrictions for Stream #1: Driver-supervised testing:

For testing of SAE Level 3 autonomy equipped vehicles with a driver present, the pilot participant must:

- k. Inform MTO of the environment and limits the ACMV is designed to work in (also known as its ODD)
 - The ODD must specify weather conditions, specific names of streets/highways, times of day, and days of the week proposed for testing.
 - Testing programs must include the weight of the vehicle during testing, including freight.
- I. Confirm that a driver will be responsible for overseeing the automated driving system and intervening as needed, in addition to fulfilling any other tasks required of a commercial motor vehicle driver under legislation and regulation.

Testing restrictions for Stream #2: Driverless testing:

Pilot participants may be permitted to begin driverless testing of SAE Level 4 or 5 autonomy equipped vehicles (where there is no driver present), once they demonstrate the ACMV's capability for safe operation under driver-supervision. For driverless testing, pilot participants must:

- m. Inform MTO of the environment and limits the ACMV is designed to work in (also known as its ODD.)
 - The ODD must specify weather conditions, specific names of streets /highways, times of day, and days of the week proposed for testing.
- n. Affirm the technology is safe and effective in performing all required driving tasks based on prior real-world testing. Participants may be asked to provide evidence.
- o. Demonstrate how the carrier will comply with all applicable commercial motor vehicle rules and regulations under the HTA, including those that typically apply to drivers.
- p. Outline how an assistant will provide oversight of the vehicle to ensure safety (see Section 8 for details on the assistant's required qualifications and capabilities).
- q. Place a copy of the signed approval package in a visible place in the ACMV and retain another copy with the assistant providing oversight.

6. Carrier qualifications

An interested pilot participant can meet the carrier qualifications requirement if they meet one set of criteria (a, b, or c). MTO will consider relevant experience from other North American jurisdictions towards meeting the pilot requirements.

- a. Participant has been operating as a carrier for at least 2 years, has a carrier safety rating of at least "Satisfactory-unaudited", and partners with a carrier with at least 5 years of experience and a carrier safety rating of at least "Satisfactory-unaudited".
- b. Participant has been operating as a carrier for at least 3 years and has a carrier safety rating of "Excellent-audited".

c. Participant has been operating as a carrier for at least 5 years and has a carrier safety rating of at least "Satisfactory-unaudited"

Other carrier qualifications:

- d. If the above safety ratings in (a) through (c) do not meet the specified requirements, the pilot participant must cease operations immediately.
- e. The pilot participant must maintain a minimum of \$10 million in public liability insurance coverage.
 - Insurance must be held by the carrier to which the ACMV is registered.
 - The ACMV pilot program operates under Ontario's current auto insurance framework, allowing access to accident benefits regardless of fault and allowing claimants to pursue further compensation under tort law.
- f. Participant may be required to provide documentation with their application to substantiate their qualifications.

7. Driver qualifications

When a driver is required for testing:

- a. The pilot participant must attest that they have provided drivers with valid and appropriate training to safely operate and oversee the ACMV.
- b. The driver must have a valid Class A, B, C or D driver's Licence, with Z (air brake) endorsement, as applicable.
- c. The driver must have a minimum of 5 years provable and relevant experience.
- d. The driver's Personal Drivers Abstract must show:
 - No driving-related Criminal Code (Canada) convictions in previous 36 months;
 - No more than one moving violation conviction of any kind in the previous 12 months; and
 - No more than two moving violation convictions of any kind in previous 36 months.

8. Assistant qualifications and capabilities

For driverless testing:

- a. The carrier is responsible for ensuring an assistant provides oversight of the vehicle.
- b. The assistant must meet all the driver requirements outlined in Section 7 of the pilot, including associated commercial driver qualifications.

- c. The assistant may be situated in the ACMV passenger seat or at a different location within Ontario.
- d. The assistant's location must enable the carrier to comply with all HTA rules and regulations for commercial motor vehicles that typically apply to drivers.
- e. The assistant's oversight capabilities may include initiating a safe stop, manoeuvring to clear the way for other road users, advising the vehicle on decision-making (e.g., changing lanes to avoid construction, drive over a plastic bag on the road), or other oversight capabilities required for safe operation as deemed necessary by the carrier and/or the Registrar of Motor Vehicles. The assistant's oversight must not include remote control of the vehicle for regular driving tasks.
- f. The pilot participant is responsible for ensuring that the assistant is trained and qualified to provide oversight of the ACMV.
- g. The carrier maintains responsibility for the ACMV at all times.

9. Areas of Operation

- a. Applicants must inform MTO in advance and obtain approval for their intended testing, including the date of travel, time of day, origin/destination locations, the section of highway for intended travel (interchange to interchange) and the duration of automated mode operation.
- b. For testing on provincially controlled infrastructure (e.g., highways), applicants must obtain prior approval from MTO. In the application form, applicants must identify all municipal infrastructure where ACMVs are proposed to be tested.
- c. For testing on municipally controlled infrastructure, applicants must contact the local road authority in advance. In the application form, applicants must specify all municipal infrastructure where ACMVs are proposed to be tested and identify the responsible road authority.
- d. If the ACMV is being tested on municipally controlled infrastructure, applicants must submit a "work zone and first responders' interaction plan" to affected authorities, such as law enforcement and municipalities, outlining how the automated vehicle will interact with law enforcement, emergency responders, and construction zones.
- e. Applicants must notify each relevant municipality and demonstrate that they have:
 - Engaged all local municipalities where they intend to test ACMVs, specifying the proposed locations and times for testing.
 - Considered feedback from municipalities regarding their testing proposal and provided MTO with a copy of any feedback received from the municipality.

- o If crossing municipal boundaries, participants must engage each relevant municipality.
- MTO may require the applicant to obtain additional information from the municipality, where the Registrar deems that additional information is required to adequately evaluate the safety risk.
- f. As participants progress through their graduated approach and modify their approved testing environments, they must notify relevant road authorities and provide any updates to their approved testing status and ODD.

10. Truck Inspection Stations

a. ACMVs must report to any Truck Inspection Station / Commercial Vehicle Inspection Facility on the same basis as other commercial motor vehicles.

11. Data reporting and evaluation

- a. MTO will evaluate the performance of ACMVs by comparing their operation to the current naturalistic truck driving environment and evaluating their potential impact on the trucking industry and road users.
- b. Based on the pilot's evaluation results, MTO will determine whether and how to proceed with a further, measured roll-out of ACMV operations. The reliability of results will depend on the quantity and quality of available data at the conclusion of the pilot.
- c. The following data must be recorded daily during all ACMV testing and retained for two years:
 - Names and driver license numbers of the drivers and assistants (as applicable)
 - o 360-degree video footage
 - Weather conditions
 - Shared road space
 - GPS-event time stamp and location at regular intervals not exceeding one minute in length whereby the tracking system must display output in a legible table, including rows and columns.
 - Automated status on or off
 - Automated mode parking or driving
 - Automated transition time stamp
 - \circ Record of driver intervention of steering or braking, throttle or indicator
 - Time since last driver interaction
 - Driver seat occupancy
 - o Driver belt latch
 - o Speed
 - Vehicle warnings or notifications to the vehicle's operator

- d. All data recorded must be made accessible to MTO upon request. Participants must fully cooperate with any MTO representative making inquiries about the carrier's participation in the program.
- e. Participants must complete and submit annual reports including, but not limited to, testing routes, weather conditions, unusual events (e.g., unexplained stops), collisions, disengagements, hard braking events, kilometres driven, hours tested, speeds (km/h), and details on safety-critical events such as emergencies resulting from system failures.
- f. Participants must provide the vehicle identification number (VIN) of the truck or truck-tractor in the application.

12. Notification of collisions/incidents/infractions

- a. Carrier must notify MTO via email within 24 hours following any reportable collision using a designated ACMV pilot email address.
- b. An ACMV involved in a collision while in automated mode must be taken out of operation until the cause of the collision can be determined. If any flaw is identified with the vehicle, it must not be used until repaired and retested to the satisfaction of MTO.
- c. Within 5 business days of any reportable collision (as specified in s.199 of the HTA), the carrier must provide a copy of the collision report, the carrier's written explanation of the collision circumstances, 30 seconds of 360-degree video footage leading up to the incident, and a detailed report related to the trip and the truck involved in the incident. Information must be submitted via email and include:
 - Weather conditions
 - Shared road space
 - GPS-event time stamp and location at regular intervals not exceeding one minute in length whereby the tracking system must display output in a legible table, including rows and columns.
 - Automated status on or off
 - Automated mode parking or driving
 - Automated transition time stamp
 - Record of driver intervention (steering, braking, throttle or indicators)
 - Time since last driver interaction
 - Driver seat occupancy
 - Driver belt latch status
 - Speed
 - Vehicle warnings or notifications to the vehicle's operator

- d. Within 10 business days, a carrier must provide notification and description of any nonreportable incident that disrupts traffic (e.g., ACMV stops in the middle of the road and blocks traffic, mounts curb or sidewalk, damages a sign, etc.) or damages property. Information must be submitted via email.
- e. Pilot participants agree that any information provided may be shared with police.
- f. Police and law enforcement personnel are requested to notify MTO of any participants' infractions via email.

13. Cargo restrictions

- a. ACMVs must not carry any regulated dangerous goods requiring placards on the vehicle exterior.
- b. ACMVs must not carry livestock or special provision loads.

14. Special equipment requirements

- ACMVs must be equipped with a functioning antilock braking system (ABS)compliant with Canadian Motor Vehicle Safety Standard 121, and a functioning Electronic Stability Control (ESC) System compliant with Canadian Motor Vehicle Safety Standards 136.
- b. ACMVs must be certified as compliant to federal Motor Vehicle Safety Regulations (MVSR) and must not be modified in such a manner that would bring the vehicle out of compliance with the federal MVSR.
- c. ACMVs must be equipped with Electronic Logging Devices (ELDs) compliant with Transport Canada's Certified ELD regime.
- d. ACMVs must provide both audible and visual alerts to the driver when automated driving features are disengaged or experience any sort of system communication failures.
- e. Carrier is responsible for ensuring that vehicles meet these requirements and for ensuring that the technology is in good working order.

15. Signage requirements

a. A yellow-orange sign with black lettering stating "TEST VEHICLE. STAY BACK." must be displayed on the front and rear of all ACMVs.

- Background of the sign: Type III or superior yellow-orange retroreflective sheeting complying with the Standard Specification for Retroreflective Sheeting for Traffic Control (D 4956) of the American Society for Testing and Materials.
- Pictogram: Black.
- Lettering: Black, Highway Gothic, E-series modified, 50 mm high.
- Sign size: At least 30 cm by 230 cm.
- The sign must be positioned to be clearly visible to following and oncoming traffic without obstructing licence plates, lights or other safety devices, and must be removed or covered when not in use.
- b. ACMVs must only operate equipped with effective lighting and conspicuity, at minimum, in compliance with Canada Motor Vehicle Safety Standard 108, Lamps, Reflective Devices, and Associated Equipment.

16. Inclement weather, visibility and/or road conditions

- a. The ACMV must operate only in approved weather conditions. Prior to testing, the carrier must identify the weather conditions that intend to test in and provide evidence of their capability to navigate in these conditions to MTO.
- b. If the roadway is: Partly Snow Covered, Fully Snow Covered, Snow Packed, Icy, or there is a Road Closure or Reduced Visibility (i.e. visibility is 500m or less), and the carrier is not approved for test operation in these conditions, a driver must take manual control of the vehicle. These conditions align with the Winter Driving conditions posted and defined on the MTO's 511. Use the "Winter Driving -Road Conditions" selection in <u>511on.ca</u>. Alternatively, a text version of the "Road Conditions" can be found under the "Text" tab of this website.

17.Speed restrictions

a. ACMVs must adhere to existing provincial speed limits for commercial motor vehicles and/or as determined by the Registrar. Operators will be subject to strict speed enforcement by police. Travel within the pilot must be at safe operating speeds, ensuring all other posted speed limits are adhered to at all times.

18. Speed recording device

- a. ACMV must be equipped with a functioning and accurate electronic on-board device that records speed, time and date at regular intervals not exceeding five minutes in length.
- b. The speed recording device must be a GPS or similar tracking system and must display in a legible table format with rows and columns.

- c. Tachograph and tachograph charts are not acceptable speed recording devices within the Program.
- d. Data from this device must be retained for at least two years and capable of producing a report indicating the vehicle's speed at specified dates and times.
- e. Upon request, such reports must be provided to MTO who, in turn may share them with police. Reports are not expected to be produced at roadside.

19. Revocation of approval

- a. MTO reserves the right to suspend a carrier, revoke pilot operation privileges, modify ACMV regulations, or modify the Ontario ACMV Pilot Program Conditions at any time without advance notice.
- b. Signed Approval package(s) may be revoked or suspended for breach of any regulation, including non-compliance with the HTA.
- c. Approval packages automatically become invalid if a holder's Carrier Safety Rating falls below the specified requirements in Section 6 (a) through (c).
- d. MTO reserves the right to withdraw approval or modify conditions related to the application or approval package without advance notice.

20. Cybersecurity declaration

- a. Carrier is responsible for ensuring the cybersecurity and data privacy of the ACMV.
- b. Applicant must declare to MTO the actions, design choices and measures they have taken to ensure the vehicles planned for testing in Ontario account for cybersecurity impacts on road safety.
- c. To be eligible for driverless testing, the applicant must demonstrate procedures to disengage the automated technology and stop the vehicle in the event of a cybersecurity incident.