

Regulations and other Acts

M.O., 2018

Order number 2018-16 of the Minister of Transport, Sustainable Mobility and Transport Electrification dated 9 August 2018

Highway Safety Code
(chapter C-24.2)

ESTABLISHING the Autonomous Bus and Minibus Pilot Project

THE MINISTER OF TRANSPORT, SUSTAINABLE MOBILITY AND TRANSPORT ELECTRIFICATION,

CONSIDERING the second paragraph of section 633.1 of the Highway Safety Code (chapter C-24.2) which provides that the Minister may, by order, after consultation with the Société de l'assurance automobile du Québec, authorize the implementation of pilot projects to study, test or innovate in respect of any matter relevant to the Code, that the Minister may in particular, with a view to highway safety, develop new rules on traffic or vehicle use, set the rules and conditions for the implementation of a pilot project and authorize any person or body to use a vehicle in compliance with the standards and rules prescribed by the Minister, and that the provisions of a pilot project prevail over any inconsistent provision of the Code and its regulations;

CONSIDERING the third paragraph of that section which provides that as regards pilot projects relating to autonomous vehicles, the Minister may also provide for an exemption from the insurance contribution associated with the authorization to operate a vehicle, set the minimum required amount of liability insurance guaranteeing compensation for property damage caused by an automobile and require the manufacturer or distributor to reimburse the Société for compensation that it will be required to pay in the event of an automobile accident, and that those special rules prevail over the rules prescribed by the Automobile Insurance Act (chapter A-25) and its regulations;

CONSIDERING the fourth paragraph of that section which provides in particular that pilot projects are conducted for a period of up to five years when they relate to autonomous vehicles, and that the Minister may modify or terminate a pilot project at any time;

CONSIDERING the fifth paragraph of that section which provides that the publication requirement set out in section 8 of the Regulations Act (chapter R-18.1) does not apply to an order made under section 633.1 of the Highway Safety Code and that an order under the second or third paragraph of that section is published in the *Gazette officielle du Québec*;

CONSIDERING that the Société has been consulted on the implementation of the Autonomous Bus and Minibus Pilot Project;

ORDERS AS FOLLOWS:

The Autonomous Bus and Minibus Pilot Project, attached to this Order, is hereby established.

ANDRÉ FORTIN,
Minister of Transport, Sustainable Mobility and Transport Electrification

Autonomous Bus and Minibus Pilot Project

Highway Safety Code
(chapter C-24.2, s. 633.1)

CHAPTER I GENERAL

DIVISION I PRELIMINARY

1. The implementation of the Autonomous Bus and Minibus Pilot Project is hereby authorized on the following basis:

(1) to test autonomous buses and minibuses on certain public highways; and

(2) subject to the second paragraph, to collect anonymized data regarding the testing for the purpose of evaluating autonomous bus and minibus traffic on the road network and co-habitation with the various road users with a view to developing rules adapted to those types of vehicles.

In the event of an accident, offence or incident involving the vehicle, the collection of data on the automated driving system and information on the driver is permitted to determine the causes of the event.

2. A committee composed of representatives of the Minister of Transport and the Société de l'assurance automobile du Québec (the Société), according to their respective area of jurisdiction, are to ensure the monitoring and evaluation of the testing projects.

3. For the purposes of this Order,

“autonomous bus” means a bus equipped with an automated driving system that can operate the vehicle at driving automation Level 4 or 5 based on SAE International Standard J3016, or at driving automation Level 3 based on that Standard if the sale of the bus is not allowed in Canada;

“autonomous minibus” means a minibus equipped with an automated driving system that can operate the vehicle at driving automation Level 4 or 5 based on SAE International Standard J3016, or at driving automation Level 3 based on that Standard if the sale of the minibus is not allowed in Canada;

“driver” means a natural person, present in the vehicle, who totally or partially controls the operation of vehicle or, if the automated driving system is performing all the driving tasks, oversees the operation of the system, and is capable of taking over control of the vehicle's automated system;

“promoter” means a manufacturer, distributor or operator authorized by the Minister.

DIVISION II **ELIGIBILITY REQUIREMENTS**

4. To be authorized under the pilot project, a manufacturer, distributor or operator of an autonomous bus or minibus must

(1) submit to the Minister of Transport and to the Société

- (a) an application specifying
 - i. the testing project;
 - ii. the objectives pursued;
 - iii. the autonomous buses or minibuses intended to be put into service and the number of such vehicles;
 - iv. the area in which the testing project is to be implemented and a description of the route to be taken by the vehicle;

v. the means taken to ensure compatibility of the testing with the road layout where the testing is to take place;

vi. the safety measures proposed, including the safety standards concerning the vehicle and the mitigation measures being considered, with a view to ensuring harmonious coexistence of the test vehicle with the other vehicles and road users; and

vii. the duration of the project;

(b) the training given to the vehicle driver, including documents in support of the training, and the other instructional tools;

(c) the program referred to in the second paragraph of section 24;

(d) any information necessary to determine whether the vehicle is safe; and

(e) in the case of an operator of an autonomous bus or minibus, written authorization from the manufacturer permitting the testing to be conducted by the operator and proof that the manufacturer is aware of the requirement to reimburse the Société for any compensation the Société will be required to pay in the event of an automobile accident; and

(2) be the vehicle owner.

5. Every project submitted by a manufacturer, distributor or operator of an autonomous bus or minibus in accordance with section 4 must be authorized by the Minister.

CHAPTER II **PROVISIONS THAT APPLY TO THE PILOT PROJECT**

DIVISION I **OBLIGATIONS OF THE PROMOTER AND THE DRIVER**

6. A promoter must obtain registration of the vehicle and authorization to put the vehicle into operation in compliance with section 7.

7. The registration of an autonomous bus or minibus and the authorization to put the vehicle into operation must be effected as provided in section 10.2 of the Highway Safety Code (chapter C-24.2) and in paragraph 2 of section 143 and sections 144, 147, 148, 159 and 160 of the Regulation respecting road vehicle registration (chapter C-24.2, r. 29), with the necessary modifications. However, the insurance

contribution associated with an authorization to operate a road vehicle, required by the Regulation respecting insurance contributions (A-25, r. 3.2), need not be paid.

A promoter must establish vehicle ownership and provide

- (1) proof of the security required by section 21;
- (2) proof that the liability insurance contract required under Title III of the Automobile Insurance Act (chapter A-25) is held and complies with section 20 of this pilot project; and
- (3) all information enabling the Société to identify the vehicle.

8. The Société is to issue a document at the time of registration containing the following information:

- (1) the owner's file number;
- (2) the owner's name and capacity;
- (3) the vehicle identification number;
- (4) the make and model of the vehicle, as applicable;
- (5) the vehicle's registration plate number;
- (6) an indication to the effect that the vehicle is an autonomous vehicle and that it is authorized to be operated under this pilot project; and
- (7) the conditions of the authorization to operate the vehicle.

9. A promoter must, as applicable, hold the authorizations, permits or licences required for the activities to be carried on within the framework of the pilot project.

10. A promoter must give training adapted to the driving of an autonomous bus or minibus to every driver of the vehicle and provide the driver with a certificate of training.

11. Before a project to test an autonomous bus or minibus begins, a promoter must provide the police, civil protection, fire protection and first responder authorities serving the area in which the vehicle is to operate with all information relevant to their services to ensure public safety.

The promoter must also provide the information to the Minister, to the Société and to the municipal authority concerned.

12. An autonomous bus or minibus may be put into operation only in the areas specified in the testing project.

13. A driver must carry in the vehicle

- (1) the document referred to in section 8 enabling the vehicle to be identified; and
- (2) the certificate of training provided by the promoter.

On demand by a peace officer, the driver must produce the documents for examination.

The peace officer must return the documents to the driver as soon as the officer has examined them.

DIVISION II

SAFETY MEASURES AND SPECIAL EVENTS

14. Unless safe bypass measures are applied, the malfunction or loss of use of the command or control equipment must cause the immediate stoppage of the autonomous bus or minibus.

15. A driver must be able to immediately take over the driving of the vehicle should the need arise.

16. In the event that a malfunction or an anomaly is detected or is brought to the attention of the promoter or driver, they cannot put the autonomous bus or minibus back into operation without making the necessary corrections.

17. A promoter must inform the Minister and the Société without delay if any of the following events occurs during the testing:

- (1) an accident causing damage or injury;
- (2) any event involving the safety of road users; or
- (3) a problem detected that poses a risk to the safety of road users.

Before putting the autonomous bus or minibus back into operation, the promoter must provide the Minister and the Société with all information enabling the causes of the problem or event to be determined, as well as the measures taken by the promoter to ensure the problem or event will not reoccur and that the safety of road users will no longer be compromised.

The promoter and the driver may put the vehicle back into operation only if the safety of road users has been ensured.

18. In the event of an accident involving an autonomous bus or minibus, the promoter must provide, on demand by a peace officer, all information concerning the vehicle's automated driving system enabling the causes of the accident to be determined.

The first paragraph applies to the vehicle manufacturer even if the manufacturer is not the person authorized by the Minister.

19. A promoter must also inform the Minister and the Société without delay of

(1) any statement of offence issued under the Highway Safety Code (chapter C-24.2) or a regulation under the Code in respect of the owner, driver or operator of the autonomous bus or minibus;

(2) any problem other than the problem described in subparagraph 3 of the first paragraph of section 17 detected during the testing of the autonomous bus or minibus; and

(3) any other element considered essential to the monitoring and evaluation of this pilot project.

DIVISION III INSURANCE AND SECURITY

20. Despite section 87 of the Automobile Insurance Act (chapter A-25), the minimum required amount of liability insurance guaranteeing compensation for property damage caused by an autonomous bus or minibus is \$1,000,000.

21. In the event of an accident involving an autonomous bus or minibus, the Société may recover the compensation it will be required to pay under the Automobile Insurance Act (chapter A-25) from

(1) the manufacturer, if the testing is under the manufacturer's responsibility or that of the operator of the vehicle; or

(2) the distributor, if the testing is under the distributor's responsibility.

To guarantee that obligation, the manufacturer, operator for and on behalf of the manufacturer, or distributor must provide and maintain security in favour of the Société in an amount corresponding to the risks that are specific to each testing project. The amount will be determined by the Minister after consultation with the Société and according to an actuarial analysis of the Société.

22. For the purposes of section 21, the manufacturer or the distributor, as the case may be, must reimburse the Société for compensation it will be required to pay under the Automobile Insurance Act (chapter A-25).

The manufacturer or distributor may refuse to reimburse the amount or may request a reduction in it only if proof is supplied establishing that the injury was caused

(1) by the fault of the victim or of a third person, unless the third person modified the automated driving system or took control of it; or

(2) by superior force other than one resulting from the condition or running order of the vehicle, including of its automated driving system.

23. A promoter must, at the request of the Minister or the Société, furnish proof of the security required by section 21 within 30 days after the request. Failure to do so prohibits the vehicle from being put into operation.

DIVISION IV EQUIPMENT AND MECHANICAL INSPECTION

24. Subject to the special requirements set out in the testing project to which this Order applies, the provisions of Titles VI and IX of the Highway Safety Code (chapter C-24.2) and those of the Regulation respecting safety standards for road vehicles (chapter C-24.2, r. 32) do not apply in respect of an autonomous bus or minibus.

Despite the foregoing, a promoter is required to set up a program designed to maintain the autonomous bus or minibus in good working order and that provides for maintenance standards as well as the vehicle inspection frequency and procedures. The program must be applied out by a person who has the knowledge and training necessary to diagnose and repair defects. In addition, the promoter is required to oversee the follow-up.

DIVISION V COLLECTION AND DISCLOSURE OF INFORMATION

25. Not later than 30 days after the testing has ended and after the end of each testing year if testing takes place over a period of more than one year, a promoter must submit to the Minister and to the Société a report dealing in particular with

(1) the testing results obtained;

(2) the duration of the testing for each route;

(3) the total number of kilometres travelled per automated and manual driving mode;

(4) the dates of onboard software updates and a summary of the attendant effects on the testing;

(5) the total number of automated driving mode disengagements and the main reasons for them;

(6) a summary of traffic accidents;

(7) the number of mechanical or technological incidents with a description of each and the corrective action taken;

(8) the number of times the emergency stop was applied;

(9) the number of complaints received, the subject of the complaints and the measures taken to remedy the situation; and

(10) any other element considered essential to the monitoring and evaluation of the testing project.

The promoter must also submit the information referred to in the first paragraph on receiving a request to do so from the Minister or the Société.

For the purposes of this section, a testing year begins on the date the testing project is authorized.

CHAPTER III PROVISIONS SPECIFIC TO CERTAIN TESTING PROJECTS

DIVISION I TESTING PROJECT WITH KEOLIS CANADA INNOVATION, L.P.

26. The Minister authorizes Keolis Canada Innovation, L.P., as the operator of a Navya Autonom Shuttle DL4 2018 autonomous minibus, to test the operation of the vehicle in Ville de Candiac

(1) along boulevard Montcalm Nord, from its intersection with boulevard Marie-Victorin to its intersection with rue de Verre;

(2) on rue de Verre; and

(3) on city hall property situated at 100, boulevard Montcalm Nord.

27. No passenger may be transported during the first two weeks of operation of the vehicle.

CHAPTER IV MISCELLANEOUS AND FINAL

28. Unless otherwise indicated in a provision of this Order, the Automobile Insurance Act (chapter A-25), the Highway Safety Code (chapter C-24.2) and their regulations apply to an autonomous bus or minibus as if it were a bus or minibus.

In any case of conflict in application, the provisions of this Order prevail over those of the Code and its regulations. The provisions of sections 20 to 22 of this pilot project prevail over those of the Automobile Insurance Act.

29. Sections 211.1 and 492.8 of the Highway Safety Code (chapter C-24.2) are suspended for the purposes of this pilot project.

30. Registration and authorization to put the vehicle into operation obtained under this pilot project are revoked as of the date on which the pilot project or the testing project ends, without any notice from the Société to that effect being necessary.

31. This Order comes into force on the fifteenth day following its publication in the *Gazette officielle du Québec*. It is revoked on the fifth anniversary of the day it comes into force.

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