

chapter C-24.2, r. 37.01

Autonomous Bus and Minibus Pilot Project

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

TABLE OF CONTENTS

CHAPTER I
GENERAL

DIVISION I
PRELIMINARY..... 1

DIVISION II
ELIGIBILITY REQUIREMENTS..... 4

CHAPTER II
PROVISIONS THAT APPLY TO THE PILOT PROJECT

DIVISION I
OBLIGATIONS OF THE PROMOTER AND THE DRIVER..... 6

DIVISION II
SAFETY MEASURES AND SPECIAL EVENTS..... 14

DIVISION III
INSURANCE..... 20

DIVISION IV
EQUIPMENT AND MECHANICAL INSPECTION..... 24

DIVISION V
COLLECTION AND DISCLOSURE OF INFORMATION..... 25

CHAPTER III
PROVISIONS SPECIFIC TO CERTAIN TESTING PROJECTS

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

§ 1. — *Testing project in Ville de Candiac*..... 26

§ 2. — *Testing project in Ville de Montréal*..... 27.0.1

DIVISION II (Revoked)

CHAPTER IV
MISCELLANEOUS AND FINAL..... 28

CHAPTER I

GENERAL

M.O. 2018-16, c. I.

DIVISION I

PRELIMINARY

M.O. 2018-16, Div. I.

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.

M.O. 2018-16, s. 1.

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.

M.O. 2018-16, s. 2.

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.

M.O. 2018-16, s. 3.

DIVISION II

ELIGIBILITY REQUIREMENTS

M.O. 2018-16, Div. II.

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
- (2) be the vehicle owner.

M.O. 2018-16, s. 4; M.O. 2019-08, s. 1.

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.

M.O. 2018-16, s. 5.

CHAPTER II

PROVISIONS THAT APPLY TO THE PILOT PROJECT

M.O. 2018-16, c. II.

DIVISION I

OBLIGATIONS OF THE PROMOTER AND THE DRIVER

M.O. 2018-16, Div. I.

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

M.O. 2018-16, s. 6.

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) *(paragraph revoked)*;

(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.

M.O. 2018-16, s. 7; M.O. 2019-08, s. 2.

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.

M.O. 2018-16, s. 8.

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.

M.O. 2018-16, s. 9.

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.

M.O. 2018-16, s. 10.

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.

M.O. 2018-16, s. 11.

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

M.O. 2018-16, s. 12.

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.

M.O. 2018-16, s. 13.

13.1. Where an autonomous bus or minibus is in motion, the driver must remain continuously attentive to events likely to affect road safety in order to be ready to intervene rapidly at any time in taking over control of the vehicle's automated system, immediately taking over the driving of the vehicle or adapting driving to the circumstances.

M.O. 2021-18, s. 1.

DIVISION II

SAFETY MEASURES AND SPECIAL EVENTS

M.O. 2018-16, Div. II.

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.

M.O. 2018-16, s. 14.

15. *(Revoked).*

M.O. 2018-16, s. 15; M.O. 2021-18, s. 2.

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.

M.O. 2018-16, s. 16.

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.

M.O. 2018-16, s. 17.

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.

M.O. 2018-16, s. 18.

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.

M.O. 2018-16, s. 19.

DIVISION III

INSURANCE

M.O. 2018-16, Div. III; M.O. 2019-08, s. 3.

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.

M.O. 2018-16, s. 20; M.O. 2019-08, s. 3.

21. *(Replaced).*

M.O. 2018-16, s. 21; M.O. 2019-08, s. 3.

22. *(Replaced).*

M.O. 2018-16, s. 22; M.O. 2019-08, s. 3.

23. *(Replaced).*

M.O. 2018-16, s. 23; M.O. 2019-08, s. 3.

DIVISION IV

EQUIPMENT AND MECHANICAL INSPECTION

M.O. 2018-16, Div. IV.

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.

M.O. 2018-16, s. 24.

DIVISION V

COLLECTION AND DISCLOSURE OF INFORMATION

M.O. 2018-16, Div. V.

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.

M.O. 2018-16, s. 25.

CHAPTER III

PROVISIONS SPECIFIC TO CERTAIN TESTING PROJECTS

M.O. 2018-16, c. III.

DIVISION I

TESTING PROJECTS WITH KEOLIS CANADA INNOVATION, L.P.

M.O. 2018-16, Div. I; M.O. 2021-18, s. 3.

§ 1. — *Testing project in Ville de Candiac*

M.O. 2021-18, s. 4.

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.

M.O. 2018-16, s. 26.

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

M.O. 2018-16, s. 27.

§ 2. — *Testing project in Ville de Montréal*

M.O. 2021-18, s. 5.

27.0.1. The Minister authorizes Keolis Canada Innovation, L.P., as the operator of autonomous minibuses to test the operation of the vehicles in Ville de Montréal on any of the following routes:

(1) route A, that is,

(a) the municipal parking lot the entrance of which is situated on rue Saint-André, between rue Jean-Talon Est and rue Bélanger, and identified by number 191 by the Agence de mobilité durable responsible for its management;

(b) rue Saint-André, from its intersection with rue Jean-Talon Est to its intersection with rue Beaubien Est;

(c) rue Beaubien Est, from its intersection with rue Saint-André to its intersection with rue Saint-Hubert;

(d) rue Saint-Hubert, from its intersection with rue Beaubien Est to its intersection with rue Jean-Talon Est;

(e) rue Jean-Talon Est, from its intersection with rue Saint-Hubert to its intersection with rue Saint-André;

(2) route B, that is,

(a) the municipal parking lot the entrance of which is situated on rue Saint-André, between rue Jean-Talon Est and rue Bélanger, and identified by number 191 by the Agence de mobilité durable responsible for its management;

(b) rue Saint-André, from its intersection with rue Jean-Talon to its intersection with the lane described in subparagraph *c*;

(c) the lane situated about 44 m northwest of rue Beaubien Est, from its intersection with rue Saint-André to its intersection with the public space described in subparagraph *d*;

(d) the public space of Ville de Montréal situated on the corner of rue Boyer and rue Beaubien Est and known as Espace Boyer;

(e) rue Beaubien Est, from its intersection with the public space described in subparagraph *d* to its intersection with rue Saint-Hubert;

(f) rue Saint-Hubert, from its intersection with rue Beaubien Est to its intersection with rue Jean-Talon Est;

(g) rue Jean-Talon Est, from its intersection with rue Saint-Hubert to its intersection with rue Saint-André;

(3) route C, that is,

(a) the municipal parking lot the entrance of which is situated on rue Saint-André, between rue Jean-Talon Est and rue Bélanger, and identified by number 191 by the Agence de mobilité durable responsible for its management;

(b) rue Saint-André, from its intersection with rue Jean-Talon Est to its intersection with the lane described in subparagraph *c*;

(c) the lane situated about 44 m northwest of rue Beaubien Est, from its intersection with rue Saint-André to its intersection with the public space described in subparagraph *d*;

(d) the public space of Ville de Montréal situated on the corner of rue Boyer and rue Beaubien Est and known as Espace Boyer;

(e) rue Beaubien Est, from its intersection with the public space described in subparagraph *d* to its intersection with rue Saint-André;

(f) rue Saint-André, from its intersection with rue Beaubien Est to its intersection with rue de Bellechasse;

(g) rue de Bellechasse, from its intersection with rue Saint-André to its intersection with rue Saint-Hubert;

(h) rue Saint-Hubert, from its intersection with rue de Bellechasse to its intersection with rue Jean-Talon Est;

(i) rue Jean-Talon Est, from its intersection with rue Saint-Hubert to its intersection with rue Saint-André.

M.O. 2021-18, s. 5.

27.0.2. Only an autonomous minibus whose vehicle identification number is 1N9A1SAC8JS384002 or VG9A2CB2CHB019031 may be used.

M.O. 2021-18, s. 5.

27.0.3. In the first 2 weeks of operation of an autonomous minibus, only passengers whose presence is required for the following may be transported:

- (1) evaluate or ensure the safe driving of the vehicle;
- (2) ensure the conduct, follow-up or evaluation of the test project.

M.O. 2021-18, s. 5.

DIVISION II

(Revoked)

M.O. 2019-08, s. 4; M.O. 2021-18, s. 6.

27.1. *(Revoked)*.

M.O. 2019-08, s. 4; M.O. 2021-18, s. 6.

27.2. *(Revoked)*.

M.O. 2019-08, s. 4; M.O. 2021-18, s. 6.

27.3. *(Revoked)*.

M.O. 2019-08, s. 4; M.O. 2021-18, s. 6.

CHAPTER IV

MISCELLANEOUS AND FINAL

M.O. 2018-16, c. IV.

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 section 20 of this pilot project prevail over those of the Automobile Insurance Act.

M.O. 2018-16, s. 28; M.O. 2019-08, s. 5.

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.

M.O. 2018-16, s. 29.

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.

M.O. 2018-16, s. 30.

31. *(Omitted in part).*

This Order is revoked on 31 August 2023.

M.O. 2018-16, s. 31.

UPDATES

M.O. 2018-16, 2018 G.O. 2, 3691A

M.O. 2019-08, 2019 G.O. 2, 721A

M.O. 2021-18, 2021 G.O. 2, 3423B

