

SECOND REGULAR SESSION

SENATE BILL NO. 1050

103RD GENERAL ASSEMBLY

INTRODUCED BY SENATOR FITZWATER.

5578S.01I

KRISTINA MARTIN, Secretary

AN ACT

To amend chapter 301, RSMo, by adding thereto one new section relating to automated vehicles.

Be it enacted by the General Assembly of the State of Missouri, as follows:

Section A. Chapter 301, RSMo, is amended by adding thereto
2 one new section, to be known as section 301.4100, to read as
3 follows:

301.4100. 1. For purposes of this section, the
2 following terms mean:

3 (1) "Automated driving system", the hardware and
4 software that are collectively capable of performing the
5 entire dynamic driving task on a sustained basis, regardless
6 of whether it is limited to a specific operational design
7 domain;

8 (2) "DDT fallback", the response by the person or
9 human driver to either perform the dynamic driving task or
10 achieve a minimal risk condition after occurrence of a
11 dynamic driving task performance-relevant system failure or
12 upon operational design domain exit, or the response by an
13 automated driving system to achieve minimal risk condition,
14 given the same circumstances;

15 (3) "Dynamic driving task", all of the real-time
16 operational and tactical functions required to operate a
17 vehicle in on-road traffic, excluding the strategic

18 functions such as trip scheduling and selection of
19 destinations and waypoints, and including without limitation:

20 (a) Lateral vehicle motion control via steering;

21 (b) Longitudinal motion control via acceleration and
22 deceleration;

23 (c) Monitoring the driving environment via object and
24 event detection, recognition, classification, and response
25 preparation;

26 (d) Object and event response execution;

27 (e) Maneuver planning; and

28 (f) Enhancing conspicuity via lighting, signaling, and
29 gesturing;

30 (4) "Fully autonomous vehicle", a motor vehicle
31 equipped with an automated driving system designed to
32 function without a human driver as a level 4 or 5 system
33 under SAE J3016B;

34 (5) "Human driver", a natural person in the vehicle
35 with a valid license to operate a motor vehicle who controls
36 all or part of the dynamic driving task;

37 (6) "Minimal risk condition", a condition to which a
38 person, human driver, or an autonomous driving system may
39 bring a vehicle after performing the DDT fallback in order
40 to reduce the risk of a crash when a given trip cannot or
41 should not be completed;

42 (7) "On-demand autonomous vehicle network", a
43 transportation service network that uses a software
44 application or other digital means to dispatch or otherwise
45 enable the prearrangement of transportation with fully
46 autonomous vehicles for purposes of transporting passengers
47 or goods, including for-hire transportation and
48 transportation of passengers or goods for compensation;

49 (8) "Operational design domain", operating conditions
50 under which a given automated driving system is specifically
51 designed to function, including, but not limited to,
52 environmental, geographical, and time-of-day restrictions,
53 and the requisite presence or absence of certain traffic or
54 roadway characteristics;

59 (10) "Request to intervene", notification by an
60 automated driving system to a human driver, that the human
61 driver should promptly begin or resume performance of part
62 or all of the dynamic driving task;

63 (11) "SAE J3016B", The Taxonomy and Definitions for
64 Terms Related to Driving Automation Systems for On-Road
65 Motor Vehicles published by SAE International in June 2018.

66 2. (1) A person may operate a fully autonomous
67 vehicle on the public roads of this state without a human
68 driver provided that the automated driving system is engaged
69 and the vehicle meets the following conditions:

70 (a) If a failure of the automated driving system
71 occurs that renders that system unable to perform the entire
72 dynamic driving task relevant to its intended operational
73 design domain, the fully autonomous vehicle will achieve a
74 minimal risk condition;

80 (c) When required by federal law, the vehicle bears
81 the required manufacturer's certification label indicating
82 that at the time of its manufacture it has been certified to
83 be in compliance with all applicable Federal Motor Vehicle
84 Safety Standards, including reference to any exemption
85 granted by the National Highway Traffic Safety
86 Administration.

91 (a) How to communicate with a fleet support specialist
92 who is available during the times the vehicle is in
93 operation;

94 (b) How to safely remove the fully autonomous vehicle
95 from the roadway and steps to safely tow the vehicle;

96 (c) How to recognize whether the fully autonomous
97 vehicle is in autonomous mode; and

98 (d) Any additional information the manufacturer or
99 owner deems necessary regarding hazardous conditions or
100 public safety risks associated with the operation of the
101 fully autonomous vehicle.

102 3. When an automated driving system installed on a
103 motor vehicle is engaged:

104 (1) The automated driving system is considered the
105 driver or operator, for the purpose of assessing compliance
106 with applicable traffic or motor vehicle laws and shall be
107 deemed to satisfy electronically all physical acts required
108 by a driver or operator of the vehicle; and

109 (2) The automated driving system is considered to be
110 licensed to operate the vehicle.

111 4. Before operating a fully autonomous vehicle on
112 public roads in this state without a human driver, a person
113 shall submit proof of financial responsibility satisfactory
114 to the department of commerce and insurance that the fully
115 autonomous vehicle is covered by insurance or proof of self-
116 insurance that satisfies the requirements of chapter 303.

117 5. In the event of a crash:

118 (1) The fully autonomous vehicle shall remain on the
119 scene of the crash when required by law, consistent with its
120 capability under subsection 2 of this section;

121 (2) The owner of the fully autonomous vehicle, or a
122 person on behalf of the vehicle owner, shall report any
123 crashes or collisions required by law.

124 6. An on-demand autonomous vehicle network shall be
125 permitted to operate pursuant to sections 387.400 to 387.440
126 with the exception that any law that reasonably applies only
127 to a human driver would not apply to the operation of fully
128 autonomous vehicles with the automated driving system
129 engaged on an on-demand autonomous vehicle network.

130 (1) A fully autonomous vehicle shall be properly
131 registered in accordance with this chapter. If a fully
132 autonomous vehicle is registered in this state, the vehicle
133 shall be identified on the registration as a fully
134 autonomous vehicle.

135 (2) A fully autonomous vehicle shall be properly
136 titled in accordance with this chapter. If a fully
137 autonomous vehicle is titled in this state, the vehicle
138 shall be identified on the title as a fully autonomous
139 vehicle.

140 8. A person may operate a motor vehicle equipped with
141 an automated driving system capable of performing the entire
142 dynamic driving task if:

143 (1) Such automated driving system will issue a request
144 to intervene whenever the automated driving system is not
145 capable of performing the entire dynamic driving task with
146 the expectation that the person will respond appropriately
147 to such a request; and

148 (2) The automated driving system is capable of being
149 operated in compliance with law when reasonable to do so
150 unless an exemption has been granted by the department of
151 transportation.

152 (3) Nothing in this section prohibits or restricts a
153 human driver from operating a fully autonomous vehicle
154 equipped with controls that allow for the human driver to
155 control all or part of the dynamic driving task.

156 9. A fully autonomous vehicle that is also a
157 commercial motor vehicle may operate pursuant to state laws
158 governing the operation of commercial motor vehicles, except
159 that any provision that by its nature reasonably applies
160 only to a human driver does not apply to such a vehicle
161 operating with the automated driving system engaged.

162 10. A fully autonomous vehicle that is designed to be
163 operated exclusively by the automated driving system for all
164 trips is not subject to motor vehicle equipment laws or
165 regulations of this state that:

166 (1) Relate to or support motor vehicle operation by a
167 human driver seated in the vehicle; and

168 (2) Are not relevant for an automated driving system.

169 11. (1) Unless otherwise provided in this chapter and
170 notwithstanding any other provision of law to the contrary,
171 fully autonomous vehicles and automated driving systems are
172 governed exclusively by this section. The department of
173 transportation is the sole and exclusive state agency that

174 may implement the provisions of this section, except as
175 provided in subsection 4 of this section.

176 (2) No state agency, political subdivision,
177 municipality, or local entity may prohibit the operation of
178 fully autonomous vehicles, automated driving systems, or on-
179 demand autonomous vehicle networks, or otherwise enact or
180 keep in force rules or ordinances that would impose taxes,
181 fees, or other requirements, including performance
182 standards, specific to the operation of fully autonomous
183 vehicles, automated driving systems, or on-demand autonomous
184 vehicle networks in addition to the requirements of this
185 section.

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