STATE OF NEW YORK

8468

IN SENATE

March 4, 2022

Introduced by Sen. COONEY -- read twice and ordered printed, and when printed to be committed to the Committee on Transportation

AN ACT to amend the vehicle and traffic law, in relation to autonomous vehicle driving

The People of the State of New York, represented in Senate and Assembly, do enact as follows:

Section 1. The vehicle and traffic law is amended by adding a new article 34-E to read as follows:

ARTICLE 34-E

AUTONOMOUS VEHICLE DRIVING

Section 1290. Definitions.

1291. Operation of fully autonomous vehicles without a human driver.

1292. Licensing.

1293. Insurance.

1294. Duties following crashes involving fully autonomous vehicles.

1295. On-demand autonomous vehicle network.

1296. Registration and title.

1297. Controlling authority.

1298. Operation of a motor vehicle with an automated driving system by a human driver.

§ 1290. Definitions. For purposes of this article the following terms shall have the following meanings:

1. "Automated driving system" shall mean the hardware and software that are collectively capable of performing the entire dynamic driving task on a sustained basis, regardless of whether it is limited to a specific operational design domain;

2. "Dynamic driving task or DDT" shall mean all of the real-time operational and tactical functions required to operate a vehicle in on-road traffic, excluding the strategic functions such as trip scheduling and selection of destinations and waypoints, and including without limitation: lateral vehicle motion control via steering, longitudinal motion control via acceleration and deceleration, monitoring the driving envi-

EXPLANATION--Matter in *italics* (underscored) is new; matter in brackets [-] is old law to be omitted.

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ronment via object and event detection, recognition, classification, and response preparation, object and event response execution, maneuver planning; and enhancing conspicuity via lighting, signaling, and gesturing;

3. "DDT Fallback" shall mean the response by the person or human driver to either perform the DDT or achieve a minimal risk condition after occurrence of a DDT performance-relevant system failure or failures or upon operational design domain exit, or the response by an automated driving system to achieve minimal risk condition, given the same circumstances;

4. "Fully autonomous vehicle" shall mean a motor vehicle equipped with an automated driving system designed to function without a human driver as a level 4 or 5 system under SAE J3016;

5. "Human driver" shall mean a natural person in the vehicle with a valid license to operate a motor vehicle who controls all or part of the dynamic driving task;

6. "Minimal risk condition" shall mean a condition to which a person, human driver, or an ADS may bring a vehicle after performing the DDT Fallback in order to reduce the risk of a crash when a given trip cannot or should not be completed;

7. "On-demand autonomous vehicle network" shall mean a transportation service network that uses a software application or other digital means to dispatch or otherwise enable the pre-arrangement of transportation with fully autonomous vehicles for purposes of transporting passengers or goods, including for-hire transportation and transportation of passengers or goods for compensation;

8. "Operational design domain or ODD" shall mean operating conditions under which a given automated driving system is specifically designed to function, including, but not limited to, environmental, geographical, and time-of-day restrictions, and/or the requisite presence or absence of certain traffic or roadway characteristics;

9. "Person" shall mean a natural person, corporation, business trust, estate, trust, partnership, limited liability company, association, joint venture, governmental agency, public corporation, or any other legal or commercial entity;

10. "Request to intervene" shall mean notification by an automated driving system to a human driver, that the human driver should promptly begin or resume performance of part or all of the dynamic driving task; and

11. "SAE J3016" shall mean the Taxonomy and Definitions for Terms Related to Driving Automation Systems for On-Road Motor Vehicles published by SAE International in April 2021.

§ 1291. Operation of fully autonomous vehicles without a human driver. 1. A person may operate a fully autonomous vehicle on the public roads of this state without a human driver provided that the automated driving system is engaged and the vehicle meets the following conditions:

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

(b) The fully autonomous vehicle is capable of operating in compliance with the applicable traffic and motor vehicle safety laws and regulations of this state when reasonable to do so, unless an exemption has been granted by the department; and

(c) When required by federal law, the vehicle bears the required manufacturer's certification label indicating that at the time of its

manufacture it has been certified to be in compliance with all applicable Federal Motor Vehicle Safety Standards, including reference to any exemption granted by the National Highway Traffic Safety Administration.

2. Prior to operating a fully autonomous vehicle on the public roads of this state without a human driver, a person shall submit a law enforcement interaction plan to the department which shall describe:

(a) The means of communicating with a fleet support specialist who is available during the times the vehicle is in operation;

(b) The means of safely removing the fully autonomous vehicle from the roadway and steps to safely tow the vehicle;

(c) The means to recognize whether or not the fully autonomous vehicle is in autonomous mode; and

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

§ 1292. Licensing. Notwithstanding the provisions of article nineteen of this chapter, when an automated driving system installed on a motor vehicle is engaged:

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

2. The automated driving system is considered to be licensed to operate the vehicle.

§ 1293. Insurance. Before operating a fully autonomous vehicle on public roads in this state, a person shall submit proof of financial responsibility satisfactory to the department that the fully autonomous vehicle is covered by insurance or proof of self-insurance that satisfies the requirements of article six of this chapter.

§ 1294. Duties following crashes involving fully autonomous vehicles. In the event of a crash:

1. The fully autonomous vehicle shall remain on the scene of the crash when required by article twenty-two of this chapter; and

2. The owner of the fully autonomous vehicle, or a person on behalf of the vehicle owner, shall promptly report any crashes or collisions consistent with article twenty-two of this chapter.

§ 1295. On-demand autonomous vehicle network. An on-demand autonomous vehicle network shall be permitted to operate pursuant to state laws governing the operation of transportation network companies, taxis, or any other ground transportation for-hire of passengers, with the exception that any provision of article forty-four-B of this chapter that reasonably applies only to a human driver does not apply to the operation of fully autonomous vehicles with the automated driving system engaged on an on-demand autonomous vehicle network.

§ 1296. Registration and title. 1. A fully autonomous vehicle shall be properly registered in accordance with article four of this chapter and the vehicle shall be identified on the registration as a fully autonomous vehicle.

2. A fully autonomous vehicle shall be properly titled in accordance with article forty-six of this chapter and the vehicle shall be identified on the title as a fully autonomous vehicle.

§ 1297. Controlling authority. Notwithstanding any law, rule or regulation to the contrary:

1. Unless otherwise provided in this chapter and notwithstanding any other provision of law, fully autonomous vehicles and automated driving systems are governed exclusively by this article. The department is the

sole and exclusive state agency that may implement the provisions of this article;

2. Fully autonomous vehicles and automated driving systems operating pursuant to this article shall not be subject to section twelve hundred twenty-six of this chapter; and

3. No state agency, political subdivision, municipality, or local entity may prohibit the operation of fully autonomous vehicles, automated driving systems, or on-demand autonomous vehicle networks, or otherwise enact or keep in force rules or ordinances that would impose taxes, fees, or other requirements including performance standards, specific to the operation of fully autonomous vehicles, automated driving systems, or on-demand autonomous vehicle networks in addition to the requirements of this article.

§ 1298. Operation of a motor vehicle with an automated driving system by a human driver. 1. A person may operate a motor vehicle equipped with an automated driving system capable of performing the entire dynamic driving task if:

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

(b) the automated driving system is capable of being operated in compliance with title seven of this chapter when reasonable to do so unless an exemption has been granted by the department.

2. Nothing in this article prohibits or restricts a human driver from operating a fully autonomous vehicle equipped with controls that allow for the human driver to control all or part of the dynamic driving task.

§ 2. The vehicle and traffic law is amended by adding a new section 383-a to read as follows:

§ 383-a. Equipment required for certain automated motor vehicles. 1. For purposes of this section, the terms "fully autonomous vehicle," "automated driving system," and "human driver" shall have the same meanings as defined in section twelve hundred ninety of this chapter.

2. A fully autonomous vehicle which is designated to be operated exclusively by the automated driving system for all trips is not subject to motor vehicle equipment laws or regulations of this state which (a) relate to or support motor vehicle operation by a human driver; and (b) are not relevant for an automated driving system.

§ 3. The vehicle and traffic law is amended by adding a new section 301-c to read as follows:

§ 301-c. Inspection criteria for fully autonomous vehicles. Section three hundred one of this article and any regulations promulgated by the commissioner therewith shall only apply to a fully autonomous vehicle in a manner consistent with the provisions of section three hundred eighty-three-a of this title.

§ 4. This act shall take effect on the ninetieth day after it shall have become a law. Effective immediately, the addition, amendment and/or repeal of any rule or regulation necessary for the implementation of this act on its effective date are authorized to be made and completed on or before such effective date.