WEST VIRGINIA CODE CHAPTER 17H ARTICLE 1

WV Legislature

§17H-1-1. Short Title.

This article may be cited as the “Fully Autonomous Vehicle Act”.

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§17H-1-2. Statement of intent and purpose.

The Legislature finds that continuing advances in technology have improved and are expected to continue to improve the safety and operation of fully autonomous vehicles such that these vehicles should be legally permitted to be operated in West Virginia pursuant to the provisions of this act.

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§17H-1-3. Definitions.

The following words and phrases when used in this article shall have, unless the context clearly indicates otherwise, the meanings given to them in this section.

"Automated driving system" or "ADS" means 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.

"Dynamic driving task" or "DDT" means 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:

(1) Lateral vehicle motion control via steering;

(2) Longitudinal motion control via acceleration and deceleration;

(3) Monitoring the driver environment via object and event detection, recognition, classification, and response preparation;

(4) Object and event response execution;

(5) Maneuver planning; and

(6) Enhanced conspicuity via lighting, signaling, and gesturing.

"DDT fallback" means 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 upon operational design domain exit, or the response by an automated driving system to achieve minimal risk condition given the same circumstances.

"Fully autonomous vehicle" means a motor vehicle equipped with an automated driving system (ADS) designed to function without a human driver as a level 4 or 5 system under SAE J3016.

"Human driver" means 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 (DDT).

"Minimal risk condition" means a condition in 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.

"On-demand autonomous vehicle network" means 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

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passengers or goods, including for-hire transportation and transportation of goods or passengers for compensation.

“Operational design domain” or “ODD” means operating conditions under which a given ADS 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.

“Person” means a natural person, corporation, business trust, estate, trust, partnership, limited liability company, association, joint venture, governmental agency, public corporation, or any legal or commercial entity.

“Platooning” means a situation when no more than three fully autonomous vehicles are traveling in concert, pursuant to a pre-determined written travel plan that identifies the vehicles and proposed route.

“Request to intervene” means notification by an ADS to a human driver, that the human driver should promptly begin or resume performance of part or all of the DDT.

“SAE J3016” means the Taxonomy and Definitions for Terms Related to Driving Automation Systems for On-Road Motor Vehicles published by the Society of Automotive Engineers (SAE) International in April, 2021.

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§17H-1-4. Construction.

Nothing in this article shall be construed to:

(1) Prohibit a human driver from operating a fully autonomous vehicle to control all or part of the DDT;

(2) Prohibit a fully autonomous vehicle from operating without a human driver; or

(3) Prohibit a person from operating a vehicle with ADS that is not a fully autonomous vehicle on the public roads of this state.

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§17H-1-5. Operation of fully autonomous vehicles without a human driver.

(a) A person may operate a fully autonomous vehicle on the public roads of this state without a human driver provided that the ADS is engaged and the vehicle meets the following conditions:

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

(2) 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 of Transportation; and

(3) 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.

(b) Prior to operating a fully autonomous vehicle on the public roads of this state without a human driver, a person as defined in this article shall submit a law enforcement interaction plan to the department that describes:

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

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

(3) How to recognize whether the fully autonomous vehicle is in autonomous mode; and

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

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§17H-1-6. Operation of a fully autonomous motor vehicle with an ADS by a human driver.

(a) A person may operate a motor vehicle equipped with an ADS capable of performing the entire dynamic driving task (DDT) if:

(1) The ADS will issue a request to intervene whenever the ADS is not capable of performing the entire DDT, with the expectation that the person will respond appropriately to the request; and

(2) The ADS is capable of being operated in compliance with the applicable provisions of this article, unless an exemption has been granted by the Department of Transportation or the National Highway Traffic Safety Administration.

(b) 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 DDT.

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§17H-1-7. Operation of fully autonomous commercial and motor carrier vehicles.

(a) A fully autonomous vehicle that is also a commercial vehicle under West Virginia law may operate pursuant to state laws governing the operation of commercial motor vehicles, except that any provision that by its nature reasonably applies only to a human driver does not apply to a vehicle operating with the ADS engaged.

(b) A fully autonomous vehicle that is also a motor carrier vehicle requiring a commercial driver's license pursuant to federal or state law may operate pursuant to Federal and State laws governing commercial drivers and the operation of commercial motor vehicles, except any provision which by its nature reasonably applies only to a human driver shall not apply to a fully autonomous vehicle operating with the ADS engaged. This section shall not apply to a school bus.

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§17H-1-8. Operation of an on-demand autonomous motor vehicle network.

An on-demand autonomous motor 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 such laws that reasonably applies only to a human driver would not apply to the operation of fully autonomous vehicles with the ADS engaged on an on-demand autonomous vehicle network.

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§17H-1-9. Licensing, titling, and registration.

(a) When an automated driving system (ADS) installed on a motor vehicle is engaged:

(1) The ADS is considered the driver or operator for the purpose of assessing compliance with applicable traffic or motor vehicle laws and shall be considered to satisfy electronically all physical acts required by a driver or operator of the vehicle; and

(2) The ADS is considered to be licensed to operate the vehicle.

(b) A fully autonomous vehicle shall be properly registered in accordance with the laws of this state. If a fully autonomous vehicle is registered in this state, the vehicle shall be identified on the registration as a fully autonomous vehicle. The requirements under this article relating to exhibiting a driver's license and registration card are satisfied if the license and vehicle registration card are in the fully autonomous vehicle physically or electronically, and available for inspection by a police officer.

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§17H-1-10. Insurance.

Before operating a fully autonomous motor vehicle on public roads in this state without a human driver, a person shall submit proof of financial responsibility satisfactory to the Department of Motor Vehicles that the fully autonomous vehicle is covered by insurance or proof of self-insurance that satisfy the applicable laws of this state.

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§17H-1-11. Control.

(a) Unless otherwise provided in this article and notwithstanding any other provision of this code, fully autonomous vehicles and automated driving systems are governed exclusively by this article. The Department of Transportation is the sole and exclusive state agency that may implement the provisions of this article.

(b) No state agency, political subdivision, municipality, or local entity may prohibit the operation of fully autonomous vehicles, ADS, 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, ADS, or on-demand autonomous vehicle networks in addition to the requirements of this act.

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§17H-1-12. Platooning.

(a) General rule. The department shall be the lead state agency on fully autonomous vehicle platooning under this section.

(b) Platoon restrictions. A platoon shall observe the following restrictions:

(1) A maximum of three vehicles shall be in a platoon;

(2) Vehicles in a platoon shall travel only on limited access highways or interstate highways, unless otherwise permitted by the Department or the West Virginia Division of Highways;

(3) The department or the West Virginia Division of Highways, as applicable under subdivision (2) of this subsection, may restrict movement under this section for operational or safety reasons, including, but not limited to, emergency conditions; and

(4) Consistent with applicable federal and state laws, the lead vehicle in a platoon may operate with a driver and non-lead vehicles may operate with an ADS engaged, with or without a driver.

(c) Plan for general platoon operations. A person may operate a platoon on a highway of this state if the person files and reviews a plan for general platoon operations with the department. The department shall review the plan in consultation with the State Police and the Division of Highways, as applicable. If the plan is not rejected by the department within 30 days after receipt of the plan, the person may operate the platoon.

(d) Non-lead vehicles. Non-lead vehicles in a platoon are not subject to violations of this code relating to following too closely.

(e) Visual identifiers required. Each vehicle in a platoon must be marked with a visual identifier. The department, after consultation with the State Police and the Division of Highways shall establish the criteria and placement of the visual identifier.

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§17H-1-13. Fully autonomous vehicles not exempt from state laws pertaining to ownership.

Unless expressly stated in this section, fully autonomous vehicles, whether traveling individually or in a platoon, are not exempt from any other laws or rules applicable to the ownership and operation of any non-fully autonomous vehicle in this state.

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§17H-1-14. Duties following crashes involving fully autonomous vehicles.

In the event of a crash:

(1) The fully autonomous vehicle shall remain at the scene of the accident when required by State law consistent with its capability under §17H-1-5; and

(2) The owner of the highly automated motor vehicle, or a person on behalf of the vehicle owner, shall promptly report any crashes or collisions consistent with §17C-4-1, *et seq*. of this code.

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§17H-1-15 Fully autonomous vehicle equipment standards.

A fully autonomous vehicle that is designed to be operated exclusively by an ADS for all trips is not subject to motor vehicle equipment laws or rules of this state that:

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

(2) Are not relevant for an ADS.

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