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2022 APR -7 PM 1:16

TITLE 18 TRANSPORTATION AND HIGHWAY
CHAPTER 24 AUTONOMOUS MOTOR VEHICLES
PART 1 GENERAL PROVISIONS - DEFINITIONS AND TESTING

18.24.1.1 ISSUING AGENCY: New Mexico department of transportation, Post Office Box 1149 Santa Fe, New Mexico 87504-1149 (505) 795-1401.
[18.24.1.1 NMAC - N, 04/19/2022]

18.24.1.2 SCOPE: This rule covers autonomous motor vehicle testing on public roadways in New Mexico.
[18.24.1.2 NMAC - N, 04/19/2022]

18.24.1.3 STATUTORY AUTHORITY: Sections 67-3-2, 67-3-11, and 67-3-14 NMSA 1978, and H.B. 270 2021 Legislative Session.
[18.24.1.3 NMAC - N, 04/19/2022]

18.24.1.4 DURATION: Permanent.
[18.24.1.4 NMAC - N, 04/19/2022]

18.24.1.5 EFFECTIVE DATE: April 19, 2022, unless a later date is cited at the end of a section.
[18.24.1.5 NMAC - N, 04/19/2022]

18.24.1.6 OBJECTIVE: The objective of these regulations is to establish the notification requirements for entities that wish to test autonomous motor vehicles on public roadways in New Mexico.
[18.24.1.6 NMAC - N, 04/19/2022]

18.24.1.7 DEFINITIONS: As used in these rules the context clearly indicates otherwise, the following definitions apply:

A. Definitions beginning with "A":

(1) **"Active safety system"** means the vehicle systems that sense and monitor conditions inside and outside the vehicle for the purpose of identifying perceived present and potential dangers to the vehicle, occupants,and other road users, and automatically intervene to help avoid or mitigate potential collisions via various methods,including alerts to the driver, vehicle system adjustments, and active control of the vehicle subsystems (brakes, throttle, suspension, etc.).

(3) **"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; "automated driving system" is used specifically to describe a level three, four or five driving automation system as defined in Society of Automotive Engineers Standard J3016, as published in the *Taxonomy and Definitions for Terms Related to Driving Automation Systems for On-Road Motor Vehicles*.

(4) **"Autonomous commercial motor vehicle"** means a commercial motor vehicle, as defined in Subsection J of Section 66-1-4.3 NMSA 1978, that is equipped with and may be controlled by an automated driving system.

(5) **"Autonomous motor vehicle"** means a motor vehicle that is equipped with and may be controlled by an automated driving system and includes an autonomous commercial motor vehicle.

(6) **"Autonomous motor vehicle operator"** means the person who engages the automated driving system of an autonomous motor vehicle or autonomous commercial motor vehicle.

(7) **"Autonomous motor vehicle tester"** or **"tester"** means the entity who is testing autonomous motor vehicles on New Mexico public roadways.

(8) **"Autonomous motor vehicle testing"** or **"autonomous commercial motor vehicle testing"** means activities taken in full or in part to evaluate and assess:

(a) the automated driving system's performance of the dynamic driving task; and

(b) the automated driving system's performance with respect to applicable safety areas as defined by the federal national highway traffic safety administration for autonomous motor vehicle operations.

B. Definitions beginning with "B" [RESERVED]

C. **"Commission"** means the New Mexico state transportation commission.

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2022 APR -7 PM 1:17

D. Definitions beginning with "D":

(1) **"Department"** means the New Mexico department of transportation.

(2) **"Department secretary"** means the cabinet secretary of the New Mexico department of transportation or his designated representative.

(3) **"Driving automation"** means the performance of part of all of the dynamic driving task by hardware or software on a sustained basis.

(4) **"Dynamic driving task"** as defined in Society of Automotive Engineers Standard (SAE) J3016 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:

(a) lateral vehicle motion control via steering;

(b) longitudinal vehicle motion control via acceleration and deceleration;

(c) monitoring the driving environment via object and event detection, recognition, classification, and response preparation;

(d) object and event response execution;

(e) maneuver planning; and

(f) enhancing conspicuity via elements including but not limited to lighting, signaling, and gesturing.

(5) **"Dynamic driving task fallback"** means the response by the user or by an automated driving system to either perform the dynamic driving task or achieve a minimal risk condition after occurrence of a dynamic driving task performance-relevant system failure(s) or upon exit of the automated driving system's operational design domain.

E. Definitions beginning with "E" [RESERVED]

F. Definitions beginning with "F":

(1) **"Fallback-ready user"** means the user of a vehicle equipped with an engaged level 3 automated driving feature who is able to operate the vehicle and is receptive to automated driving system-issued requests to intervene and to evident dynamic driving task performance-relevant system failures in the vehicle compelling him or her to perform the dynamic driving task fallback.

(2) **"Federal motor vehicle safety standards"** or **"FMVSS"** means a motor vehicle safety standard, as defined in 49 U.S.C Section 30102, issued by the National Highway Traffic Safety Administration.

(3) **"Fully autonomous motor vehicle"** means an autonomous motor vehicle that is equipped with an automated driving system designed to function as a level 4 or level 5 system under SAE J3016 and that may be designed to function either:

(a) solely by use of the automated driving system;

(b) by a human driver when the automated driving system is not engaged.

G. Definitions beginning with "G" [RESERVED]

H. Definitions beginning with "H" [RESERVED]

I. Definitions beginning with "I" [RESERVED]

J. Definitions beginning with "J" [RESERVED]

K. Definitions beginning with "K" [RESERVED]

L. **"Levels of driving automation"** means the functionality of an automated driving system and allocation of roles between a human user (if any) and the driving automation system in performing the dynamic driving task and fallback. Levels of driving automation is categorized into six levels by the SAE in Standard J3016, *Taxonomy and Definitions for Terms Related to Driving Automation Systems for On-Road Motor Vehicles*. The six levels include:

(1) Level 0 means 'no driving automation' in that the performance by the driver of the entire dynamic driving task even when enhanced by active safety systems.

(2) Level 1 means 'driver assistance' in that the sustained and operational design domain-specific execution by a driving automation system of either the lateral or the longitudinal vehicle motion control subtask of the dynamic driving task (but not both simultaneously) with the expectation that the driver performs remainder of the dynamic driving task.

(3) Level 2 means 'partial driving automation' in that the sustained and operational design domain-specific execution by a driving automation system of both the lateral and longitudinal vehicle motion control subtasks of the dynamic driving task with the expectation that the driver completes the object event detection and response subtask and supervises the driving automation system.

(4) Level 3 means 'conditional driving automation' in that the sustained and operational

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design domain-specific performance by an automated driving system of the entire dynamic driving task with the expectation that the dynamic driving task fallback-ready user is receptive to automated driving system-issued requests to intervene, as well as to dynamic driving task performance-relevant system failures in other vehicle systems and will respond appropriately.

(5) Level 4 means 'high driving automation' in that the sustained and operational design domain-specific performance by an automated driving system of the entire dynamic driving task and dynamic driving task fallback without any expectation that a user will respond to a request to intervene.

(6) Level 5 means 'full driving automation' in that the sustained and unconditional (i.e., not operational design domain-specific) performance by an automated driving system of the entire dynamic driving task and dynamic driving task fallback without any exception that a user will respond to a request to intervene.

M. Definitions beginning with "M":

(1) **"Minimal risk condition"** means a stable, stopped condition to which a user or an automated driving system may bring a vehicle after performing the dynamic driving task fallback in order to reduce the risk of a crash when a given trip cannot or should not be completed.

(2) **"Monitor"** means a general term referencing a range of functions involving real-time human or machine sensing and processing of data used to operate a vehicle, or to support its operation.

(3) **"Monitor automated driving system performance"** means the activities and automated routines for evaluating whether the driving automation system is performing part or all of the dynamic driving task appropriately.

(4) **"Monitor the driving environment"** means the activities and automated routines that accomplish real-time roadway environmental object and event detection, recognition, classification, and response preparation (excluding actual response), as needed to operate a vehicle.

(5) **"Monitor vehicle performance"** means the activities and automated routines that accomplish real-time evaluation of the vehicle performance, and response preparation, as needed to operate a vehicle.

N. Definitions beginning with "N":

(1) **"National highway traffic safety administration"** or **"NHTSA"** means the operating administration of the United States department of transportation that is delegated the responsibilities described in 49 CFR Section 1.94.

(2) **"NMDOT program administrator"** means that person assigned by the NMDOT to oversee and coordinate the autonomous motor vehicle testing program and when applicable the program manager's activity.

(3) **"Notification"** means the act of providing required information.

(4) **"Notification receipt"** means formal acknowledgment of having received a notification.

O. Definitions beginning with "O":

(1) **"Object and event detection and response"** means the subtasks of the dynamic driving task that include monitoring the driving environment (detecting, recognizing, and classifying objects and events and preparing to respond as needed) and executing an appropriate response to such objects and events (i.e., as needed to complete the dynamic driving task and dynamic task fallback).

(2) **"Operate"** means collectively, the activities performed by a (human) driver (with or without support from one or more level 1 or 2 driving automation features) or by an automated driving system (level 3-5) to perform the entire dynamic driving task for a given vehicle during a trip.

(3) **"Operational design domain"** means the specific conditions under which a given driving automation system or feature thereof is designed to function, including, but not limited to, driving modes.

(4) **"Owner"** means the holder of the legal title of a vehicle.

P. **"Program manager"** or **"contractor"** means, when applicable, that person, firm, or organization selected by the NMDOT for the purpose of administering the autonomous motor vehicle testing program in New Mexico.

Q. Definitions beginning with "Q" [RESERVED]

R. **"Request to intervene"** means an alert provided by an automated driving system to a driver or fallback-ready user indicating that they should promptly perform the dynamic driving task fallback, resume manual operation of the vehicle, or achieve a minimal risk condition.

S. Definitions beginning with "S":

(1) **"SAE J3016"** means the Society of Automotive Engineers current standard for the *Taxonomy and Definitions for Terms Related to Driving Automation Systems for On-Road Motor Vehicles.*

(2) **"System failure"** means a malfunction in an automated driving system and other vehicle

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2022 APR -7 PM 1:17

system that prevents the automated driving system from reliably sustaining dynamic driving task performance (partial or complete).

(3) "Sustained" (operation of a vehicle) means performance of part or all of the dynamic driving task both between and across external events, including responding to external events and continuing performance of part or all of the dynamic driving task in the absence of external events.

T. "Trip" means the traversal of an entire travel pathway by a vehicle from the point of origin to a destination.

U. Definitions beginning with "U":

(1) "Usage specification" means a particular level of driving automation within a particular operational design domain.

(2) "User" means a general term referencing the human role in driving automation.

(3) "User receptivity" means an aspect of consciousness characterized by a person's ability to reliably and appropriately focus their attention in response to a stimulus.

V. Definitions beginning with "V" [RESERVED]

W. Definitions beginning with "W" [RESERVED]

X. Definitions beginning with "X" [RESERVED]

Y. Definitions beginning with "Y" [RESERVED]

Z. Definitions beginning with "Z" [RESERVED]

[18.24.1.7 NMAC - N, 04/19/2022]

18.24.1.8 RESPONSIBILITY: It shall be the responsibility of each division and section within the department to carry out their pertinent functions relating to programming, design and contracting for each project concerning the autonomous motor vehicle testing program. The department shall handle all phases of the autonomous motor vehicle testing program.

[18.24.1.8 NMAC - N, 04/19/2022]

18.24.1.9 AUTONOMOUS MOTOR VEHICLE TESTING AND OPERATION:

A. The testing and operating of autonomous motor vehicles on public roads in New Mexico require compliance with all applicable federal and state laws and regulations and municipal ordinance that govern motor vehicle operations, unless an exemption or waiver has been granted from the governing authority.

B. Vehicles equipped with an automated driving system shall meet and follow all applicable federal laws, regulations, and guidelines governing motor vehicles; meet all applicable certificates, title and registration, licensing, and insurance requirements; and be capable of complying with all applicable traffic and motor vehicle safety laws and regulations of the state of New Mexico, unless an exemption or waiver has been granted from the governing authority.

C. For autonomous motor vehicle testing or operating with a human driver:

(1) The person testing or operating the autonomous motor vehicle may be issued a traffic citation or other applicable penalty in the event of a failure to comply with traffic and motor vehicle laws.

(2) Only a trained employee, contractor or other person authorized by the company developing the automated driving system may operate or monitor the performance of the vehicles and automated driving system.

D. For fully autonomous motor vehicle testing or operating without a driver:

(1) Testing or operation of vehicles that do not have a person present in the vehicle shall be allowed only if such vehicles are fully autonomous, and if prior to commencing testing or operation of the fully autonomous motor vehicles, an autonomous motor vehicle testing statement and certification has been submitted to the New Mexico department of transportation acknowledging:

(a) When required by federal law, the fully autonomous motor vehicle is equipped with an automated driving system that in compliance with all applicable federal law and federal motor vehicle safety standards and the vehicle bears the required certification label(s) including reference to any exemption granted under applicable federal law.

(b) 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 motor vehicle will achieve a minimal risk condition.

(c) The fully autonomous motor vehicle is capable of complying with all applicable traffic and motor vehicle safety laws and regulations of the state of New Mexico that do not relate to or support motor vehicle operation by a human driver, and the person testing or operating the fully autonomous motor vehicle

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2022 APR -7 PM 1:17

may be issued a traffic citation or other applicable penalty in the event the vehicle fails to comply with traffic and motor vehicle laws.

(d) The fully autonomous motor vehicle registered owner is required to ensure it meets all applicable certificate, title registration, licensing, and insurance requirements.

(e) Compliance with the law enforcement protocol and submission of a Law Enforcement Interaction Protocol outlined in Section 18.24.1.10 NMAC.

(2) If a person fails to submit the required documents outlines above, the New Mexico department of transportation has the authority to immediately issue a cease and desist letter revoking any permissions to operate a fully autonomous motor vehicle on New Mexico's public roads, until the person has submitted the statement and is in compliance with laws and regulations relating to fully autonomous motor vehicles. [18.24.1.9 NMAC - N, 04/19/2022]

18.24.1.10 LAW ENFORCEMENT INTERACTION PROTOCOL:

A. Prior to testing or operating a fully autonomous motor vehicle on New Mexico public roadways without a driver, the autonomous motor vehicle owner shall provide the New Mexico department of public safety and the New Mexico department of transportation a copy of a law enforcement interaction protocol that will instruct first responders in the vicinity of the operational design domain how to interact with the fully autonomous motor vehicle in emergency and traffic enforcement situations. This interaction protocol shall be on file with and available through the New Mexico state police.

B. The law enforcement interaction protocol shall include:

(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 vehicle for the roadway;

(3) How to recognize whether the vehicle is in autonomous mode and steps to safely ow the vehicle;

(4) A description of the cities where the vehicle will be in operation;

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

C. For the purpose of this section, vehicle owner, registration, insurance, and contact information for the fully autonomous motor vehicle can be accessed through the New Mexico motor vehicle division system. Exchange of information, issuance of citations and repair orders with the fully autonomous motor vehicle owner shall be done through the electronic mail or physical mailing address provide, which can be accessed through the MVD system.

D. The law enforcement interaction protocol submitted by the vehicle owner will detail how compliance with the relevant sections of Part 3, Article 7 of Chapter 66, Motor Vehicles, will be ensured in the event of a collision.

(1) The fully autonomous motor vehicle's owner contact information, registration, and insurance information shall be noted on the New Mexico crash report.

(2) If injury to a person, damage to any vehicle, or damage to any other property occurred in the collision, the officer shall provide the fully autonomous motor vehicle owner's name, address, and insurance information to the drivers of all other vehicles, any injured parties involved in the collision, and owners of damaged property.

(3) If the fully autonomous motor vehicle violates a traffic law resulting in the collision, the officer may issue a citation to the registered owner of the vehicle.

E. If the fully autonomous motor vehicle that is operated on a roadway doesn't display license plates for the current registration year, officers shall issue a citation to the vehicle owner.

F. If the fully autonomous motor vehicle does not have documents on file with the New Mexico motor vehicle division that show it meets the financial responsibility requirements under Section 66-5-205 NMSA 1978, officers shall issue a citation to the registered owner of the vehicle.

G. If a fully autonomous motor vehicle becomes disabled as a result of a collision or malfunction, and the owner is unable to provide for its custody or removal, the officer shall remove the vehicle or cause it to be removed for any of the following:

(1) pursuant to Section 66-7-350 NMSA 1978;

(2) for seizure pursuant to law;

(3) for obstruction of traffic;

(4) when disabled at a gore point;

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2022 APR -7 PM 1:17

(5) when disabled or abandoned in a hazardous location.

H. Officers shall inventory the fully autonomous motor vehicle prior to its removal, documenting the contents and condition of the vehicle on the vehicle removal report.

[18.24.1.10 NMAC - N, 04/19/2022]

18.24.1.11 LOCATION: The testing or operations of autonomous motor vehicles shall not be restricted by geographic location or roadwaytype other than as defined by the automated driving system's operational design domain inclusive of any other restrictive limitations inherent to a vehicle's operation.

[18.24.1.11 NMAC - N, 04/19/2022]

18.24.1.12 NOTIFICATION INFORMATION:

A. Prior to testing or operating a fully autonomous motor vehicle, and in addition to the law enforcement interaction protocol, the vehicle owner shall supply the New Mexico department of transportation with the following:

- **(1)** owner and business name;
- **(2)** mailing address;
- **(3)** physical address;
- **(4)** contact information including;
  - **(a)** business telephone number;
  - **(b)** business fax number;
  - **(c)** email address;
- **(5)** business type (sole proprietorship, partnership, LLP, LLC, corporation);
- **(6)** state where incorporated;
- **(7)** business principal;
- **(8)** upon request, make a list of authorized agents and drivers (if applicable);
  - **(a)** driver's credentials (CDL if applicable);
  - **(b)** vehicles being tested including:
  - **(c)** year;
  - **(d)** make;
  - **(e)** model;
  - **(f)** vehicle identification number (VIN).
- **(9)** level of automation being tested.
- **(10)** operational design domain being test including:
  - **(a)** roadway classifications.
    - **(i)** freeway;
    - **(ii)** highway;
    - **(iii)** arterials;
    - **(iv)** streets;
    - **(v)** unimproved;
    - **(vi)** urban;
    - **(vii)** rural;
    - **(viii)** other - not included above.
  - **(b)** environmental limitations:
    - **(i)** snow;
    - **(ii)** ice;
    - **(iii)** limited visibility;
    - **(iv)** night driving;
    - **(v)** other - not included above.
  - **(c)** speeds;
  - **(d)** geo-fencing.
- **(11)** description of the minimal risk condition for system failure.
- **(12)** location or areas testing will occur.
- **(13)** dates and frequency of testing.
- **(14)** level of autonomous being tested.
- **(15)** demonstration of having an instrument of insurance, surety bond, or proof of self insurance in an amount of at least $5 million.

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(16) proof of registration and licensing for each autonomous motor vehicle being tested and operated.

2022 APR -7 PM 1:17

B. The vehicle owner shall supply the New Mexico department of transportation with the forementioned information biennially or when changes occur with the information previously provided, whichever occurs first.

[18.24.1.12 NMAC - N, 04/19/2022]

18.24.1.13 PROCEDURES TO BE FOLLOWED BY THE DEPARTMENT:

A. The department will make available on on-line information and notification form for submitting the information required in Subsection A of 18.24.1.12 NMAC.

B. Upon submittal of the required information the notifier will receive an acknowledgment receipt form the department. If a person fails to submit that notification required under 18.24.1.12 NMAC, the New Mexico department of transportation has the authority to immediately issue a cease and desist letter suspending operation of the autonomous vehicle on New Mexico's public roads, until the notification has been submitted.

C. The department will maintain a database of current autonomous motor vehicle testing occurring in New Mexico.

D. The database will include information that is ~~on crashes, collisions and violations that are~~ self-reported by the registered autonomous motor vehicle owner.

[18.24.1.13 NMAC - N, 04/19/2022]

18.24.1.14 FEES: It will be the responsibility of the autonomous vehicle owner to pay all necessary registration, titling, and licensing fees as required under all other relevant regulations specific to motor vehicle registration titling and licensing.

[18.24.1.14 NMAC - N, 04/19/2022]

HISTORY OF 18.24.1 NMAC:

Pre-NMAC Regulatory Filing History: None

Other History: Content promulgated from law enacted by HB270, 2021 Regular Legislative Session.