

**California Department of Motor Vehicles
Request for Informal Feedback on Proposed Draft Regulatory Language for
Autonomous Vehicles**

Background

The Department of Motor Vehicles (department) is requesting stakeholder input via informal written feedback on proposed draft regulatory language.

Senate Bill 1298 (Chapter 570; Statutes of 2012) enacted California Vehicle Code Section 38750, which authorized the department to adopt regulations on safe testing and deployment of autonomous vehicles on public roads in California, with or without a driver physically located in the driver's seat of the vehicle. The department divided the development of the autonomous vehicle regulations into two phases – testing with a driver, and driverless testing and deployment. Accordingly, the department promulgated regulations governing autonomous vehicle testing with a driver that became effective on September 16, 2014, and driverless testing and deployment regulations that became effective on April 2, 2018. Additionally, the department promulgated regulations governing light-duty autonomous delivery vehicles weighing less than 10,001 pounds that were approved on December 16, 2019.

On January 27, 2023, and July 14, 2023, the department, in conjunction with the California Highway Patrol, held public workshops, to facilitate discussions with stakeholders on the unique safety, transportation, economic, and workforce impacts associated with the operation of autonomous heavy-duty vehicles. On September 14, 2023, the department facilitated a meeting with first responders servicing the Bay Area/San Francisco region on strategies to improve first responder interactions with driverless autonomous vehicles. The department held a second meeting with first responders on November 3, 2023, in San Diego.

The department's top priority continues to be the safety of the traveling public. This draft regulatory language reflects the department's continued interest in creating a framework that facilitates the safe testing and deployment of autonomous technology on public roads, addresses public safety, and encourages innovation. The department has thoughtfully considered and prioritized the input gained from public workshops and meetings with stakeholders to develop potential draft regulatory language. The department continues to work on this language and is seeking informal input on this language from stakeholders.

The draft regulatory language is intended only to encourage public feedback and is not a formal regulatory proposal.

Regulatory Highlights

The following section highlights several elements in the draft regulations. Please review the attached regulations text for a more complete view of potential changes to the autonomous vehicle testing and deployment regulations.

Operation of Autonomous Commercial Motor Vehicles

The draft regulations remove the current prohibition on operation of autonomous vehicles with a gross vehicle weight rating of 10,001 pounds or greater and create a regulatory path for manufacturers to test and deploy autonomous commercial motor vehicles (heavy-duty autonomous vehicles) on public roads.

The draft regulatory framework would allow for operation of autonomous commercial motor vehicles on roads where the posted speed limit is 50 miles per hour or greater and on frontage access roads – essentially allowing for long-haul deliveries along hub-to-hub routes and in less complex operational areas. The department requests input on what might be the appropriate criteria for establishing long-haul operational design domains.

For safety reasons, certain commercial vehicle operations are also excluded from the draft regulatory framework, including household movers, commercial vehicles used to transport passengers, oversize loads, hazardous materials, and bulk liquids requiring a tank endorsement.

Manufacturers would be required to meet existing state and federal commercial vehicle requirements for the type of vehicle being operated and the type of commerce being engaged, including compliance with all California weigh-station regulatory signs and devices and vehicle inspections requirements. Autonomous commercial vehicle test drivers, remote drivers, and remote assistants would need to comply with any applicable state and federal commercial driver requirements, including licensing and hours-of-service restrictions. Manufacturers would be allowed to receive compensation for transporting goods during testing.

Phased Permit Process

For both light-duty and heavy-duty operations, manufacturers would be required to initially hold a permit to test with a safety driver in the vehicle and then apply in subsequent phases for a Driverless Testing Permit and Deployment Permit. To further document their overall safety approach, manufacturers would be required to submit a Safety Case with each permit application that describes how they are comprehensively addressing safety at an organizational, operational and vehicle level.

Light-Duty Operations

To apply for a Driverless Testing Permit for light-duty operations, a manufacturer would be required to conduct testing with a Drivered Testing Permit within the proposed operational design domain for a defined number of days and for a minimum number of miles (e.g., X number of miles), as well as provide DMV with an assessment supporting the manufacturer's safety claims.

To apply for a Deployment Permit, a manufacturer would be required to hold a testing permit for defined number of months and demonstrate a minimum number of miles tested in California (e.g., X number of miles), as well as provide an assessment of testing supporting the manufacturer's safety claims.

Heavy-Duty Operations

To apply for a Driverless Testing Permit for heavy-duty operations on frontage streets and roads or where the posted speed limit is 50 mph or greater, a manufacturer would be required to conduct testing with a Drivered Testing Permit within the proposed operational design domain for both a defined period of time (e.g., X months) and mileage (e.g., X number of miles) prior to the date of the driverless testing application and provide DMV with an assessment supporting the manufacturer's safety claims.

To apply for a Deployment Permit, a manufacturer would be required to hold a testing permit for a specified period of time (e.g., X number of months) and demonstrate a minimum number of miles tested in California (e.g., X number of miles), as well as provide an assessment of testing supporting the manufacturer's safety claims.

The department requests input on what might be the appropriate thresholds for the amount of testing (both time and mileage) that must be completed by a light-duty and heavy-duty autonomous vehicle manufacturer in order to progress to the next permitting phase.

Expanded Data Reporting Requirements

In support of the department's role related to monitoring and tracking the safe operation of autonomous vehicles on public roads, the draft regulations expand both the frequency and type of data reported to the department during testing and deployment. For both light-duty and heavy-duty operations, changes to data reporting requirements could include aligning crash reporting with the National Highway Traffic Safety Administration's Standing General Order and monthly reporting on disengagements, vehicle immobilizations and hard braking events. This expanded data reporting will increase public transparency and enhance conversations and coordination with local governments.

Incidents Involving Operation of Autonomous Vehicles on Public Roads

The draft regulations further define the department's processes for obtaining information from a manufacturer on any incidents involving the operation of their autonomous vehicles and for reviewing whether the manufacturer has taken steps to address the cause of any incidents. The proposed "Preliminary Information Notice" process would require manufacturers to provide preliminary information on an incident within 24-72 hours, depending on the incident. The additional "Request for Information" process would require manufacturers to submit any additional substantive information within 10 days. A manufacturer's failure to comply with these DMV requests for information could serve as a basis for a permit suspension, revocation, or restriction.

Testing and Deployment Permit Restrictions

In addition to DMV's current authorities to suspend or revoke a permit, the draft regulations propose to allow the department greater discretion to impose restrictions on a manufacturer's permit, based on certain safety and operational circumstances. These temporary operational restrictions could include reductions in the manufacturer's fleet, hours of operation, or geographic area of operation. Such restrictions could be lifted after the manufacturer provides the department with data verifying that the circumstances initially prompting the operational restriction have been remediated.

Interactions with First Responders

The draft regulations include provisions to further enhance interactions between first responders and driverless autonomous vehicles, including the vehicle's ability to recognize emergency vehicles and respond to directions from first responders. An external microphone and speakers would be required to enable first responder communication with any remote assistants, and a visual indicator would inform law enforcement of the autonomous vehicle's operational state. To enable ongoing communication and coordination with first responders, manufacturers would be required to review and update their Law Enforcement Interaction Plan more frequently and provide ongoing training to first responders in their geographic area of operation.

Note: In developing the draft regulations, the department recognizes there are open questions related to law enforcement's ability to cite autonomous vehicles for moving violations, as well as how other human driver-oriented elements of vehicle operation should be applied to autonomous driving systems. The department anticipates continued discussions on how to best address these other issues.

Requirements for Autonomous Vehicle Remote Drivers and Remote Assistants

Remote personnel may provide support to an autonomous vehicle in certain circumstances, such as when the vehicle achieves a minimal risk condition or while interacting with first responders. The draft regulations apply existing test driver requirements to remote drivers and remote assistants, including holding the proper class of license for the type of vehicle being operated, maintaining a clean driving record, and completion of a training program. Manufacturers would be required to assess and describe to the department the maximum number of vehicles that each remote driver and remote assistant could safely be assigned to monitor.

Input received will be treated as informal feedback.

Please submit any input regarding the attached potential draft regulatory language and above questions by email to AutonomousVehicles@dmv.ca.gov, no later than October 14, 2024. Submissions must include the name of the person or organization; the department will not accept anonymous feedback. Please do not include any sensitive personally identifying information such as social security number, driver license number, or financial account number on the request. All input received are a part of the public record and may be publicly accessible.