California Department of Motor Vehicles

Public Workshop

Heavy-Duty Autonomous Vehicles Regulations
July 14, 2023, at 9:00am

California Public Utilities Commission Auditorium
505 Van Ness Avenue
San Francisco, CA 94102
Webcast via Facebook Live
Webcast via YouTube

Facilitators:
Department of Motor Vehicles
California Highway Patrol

I. Opening

   A. Introductions

   B. Housekeeping

II. Discussion of Regulatory Considerations (attached)

III. Next Steps

IV. Closing Remarks

Current Adopted Regulatory Text

Stay secure. Use the QR code scanner built into your iOS or Android device. Only use a newer phone (Android 8 and later; iOS 11 and later) and the native QR code reader that came with your phone to scan. Non-native QR code reader app downloaded from an app store may act as malware and/or adware, which may compromise your mobile browser.
Or, visit the California Code of Regulations for Testing of Autonomous Vehicles or Deployment of Autonomous Vehicles for more information.

Regulatory Considerations for Discussion

Background

Senate Bill 1298 (Chapter 570; Statutes of 2012) enacted California Vehicle Code (CVC) Section 38750 which requires the Department of Motor Vehicles (DMV) to adopt regulations establishing rules for the use of autonomous vehicles (AVs) on public roads, with or without the presence of a driver inside the vehicle. The department initially adopted regulations to allow for testing of AVs with a driver behind the wheel in May 2014. Regulations to allow testing without a driver (driverless testing) and deployment (public use) of AVs were subsequently adopted and became effective in April 2018. Regulations allowing the testing and deployment of autonomous motor trucks (delivery vehicles) weighing less than 10,001 pounds were approved in December 2019.

Throughout these regulatory efforts, the DMV's focus continues to be on the safe operation of AVs on California public roads and the safety of the public who will share the road with these vehicles. The department's regulatory framework is intended to promote the continued development of AV technology, while also providing for the safe and responsible testing and deployment of AVs in California.

In recognition of the unique safety, inspection, and enforcement considerations with Heavy-Duty commercial vehicles, the current regulations exclude AVs over 10,001 pounds from testing and deployment. In January 2023, the DMV and California Highway Patrol (CHP) held a public workshop to solicit initial input on potential topics that could be addressed in a potential future Heavy-Duty AV rulemaking. The department received substantive input from representatives of manufacturers, labor, local government, and others regarding how to safely and effectively allow for Heavy-Duty AVs on California's public roads.

The following regulatory concepts are based on preliminary feedback provided to the department and CHP and include a subset of the safety-related and other requirements that could be included in a future Heavy-Duty AV rulemaking. These regulatory considerations are being shared for initial comment in what is intended to be an iterative process to encourage public dialogue and collect substantive feedback on the content of any future AV rulemakings.

Regulatory Concepts for Consideration

I. Heavy-Duty Autonomous Vehicle (AV) Operational Restrictions
   a. Potential limitations on commercial AVs operating under the following conditions
      - Transporting passengers
      - Transporting hazardous materials or bulk liquids
      - Transporting oversized loads and/or household movers
      - Double Trailers

b. Potential limitations on commercial AV operation when the following conditions are present
    - Construction zones
    - Rolling closures
    - Crash scenes

II. Phased AV Permit Process and Data Reporting

a. Testing with a Safety Driver
    - Requirements for Heavy-Duty AV Test Drivers and Remote Operators
    - Data reporting during testing, including:
        - Autonomous miles driven
        - Disengagement events
        - Submission of NHTSA Standing General Order (SGO) Crash Reporting to DMV
    - Thresholds, metrics or certifications that should be required before testing without a driver

b. Driverless Testing
    - Data reporting during driverless testing, including:
        - Autonomous miles driven
        - Disengagement events
        - Non-Crash Events
        - NHTSA SGO Crash Reporting submitted to DMV
    - Thresholds, metrics or certifications that should be required before deployment, with or without a driver

c. Compensation during Testing
    - Potential restrictions on compensation for HD AV services during testing

d. Deployment
    - Data reporting during deployment, including:
        - Autonomous miles driven
        - Disengagement events
        - NHTSA SGO Crash Reporting submitted to DMV
        - Non-Crash Events

III. Inspection Requirements

- Ability to comply with Commercial Vehicle Safety Alliance (CVSA) prescribed inspections for the type of vehicle operated
- Potential implementation of CVSA Enhanced Inspection Process for Heavy-Duty AVs
- Ability to comply with the provisions of CVC Section 34505.5 – 90-day inspections, in addition to any CVSA daily enhanced inspection requirements

IV. AV Interaction with Law Enforcement and Emergency Vehicles

- Ability of AVs (including remote support functions) to detect, recognize, and respond to law enforcement and emergency vehicles
- Ability of first responders to recognize if AV is in autonomous mode (both while operating on road and stopped)

V. Anticipated economic impacts of a possible regulatory proposal

- Businesses (including small businesses)
- Jobs
- Revenue generation

VI. Public suggestions for regulatory language

VII. Other discussion items