

November 21, 2022

Thomas P. Keane, Associate Administrator Federal Motor Carrier Safety Administration U.S. Department of Transportation 1200 New Jersey Ave. SE Washington, DC 20590

Re: Agency Information Collection Activities; New Information Collection: Human Factors Considerations in Commercial Motor Vehicle Automated Driving Systems, Docket Control No. FMCSA-2022-0163

Dear Associate Administrator Keane:

The Autonomous Vehicle Industry Association ("AVIA") writes in response to the Federal Motor Carrier Safety Administration's ("FMCSA") proposed information collection entitled *Human Factors Considerations in Commercial Motor Vehicle Automated Driving Systems.*<sup>1</sup> Comprised of the world's leading technology, ridesharing, trucking, and automotive companies, AVIA's mission is to realize the benefits of autonomous vehicles (*i.e.*, SAE Levels 4- and 5-capable vehicles) and support the safe and expeditious deployment of these technologies, including in commercial motor vehicles ("CMV").

AVIA appreciates FMCSA's interest in understanding the role of human behavior and addressing driver distraction in Level 2 ("L2")- and Level 3 ("L3")-equipped CMVs. In light of this interest, AVIA encourages FMCSA to further evaluate CMVs equipped with a Level 4 ("L4") automated driving system ("ADS"), which are designed to avoid many of the issues presented by lower levels of automation where a human driver's engagement in non-driving secondary tasks can be "highly detrimental" to driving performance. In comparison to environments that are potentially "ripe for overreliance," L4 CMVs offer significant safety benefits, as the ADS can handle the entire driving task and reach a minimal risk condition in emergencies without human input, removing the need for a handoff of control to a potentially distracted human driver.

In regard to the proposed information collection, AVIA is concerned that, as written, the information collection appears to conflate two distinct technologies—each of which involves different levels of human interaction. The apparent focus of the proposed studies is on "how CMV drivers engage in Society of Automotive Engineers (SAE) Level 2 (L2) and Level 3 (L3) automated driving system (ADS)-equipped CMVs,"<sup>4</sup> and the studies "will collect data on the effects of non-driving secondary tasks and readiness to resume control of an L2- or L3-equipped

<sup>&</sup>lt;sup>1</sup> Agency Information Collection Activities; New Information Collection: Human Factors Considerations in Commercial Motor Vehicle Automated Driving Systems, 87 Fed. Reg. 57750 (Sept. 21, 2022).

<sup>&</sup>lt;sup>2</sup> See id. at 57751.

 $<sup>^3</sup>$  Id.

<sup>&</sup>lt;sup>4</sup> Agency Information Collection Activities; New Information Collection: Human Factors Considerations in Commercial Motor Vehicle Automated Driving Systems, 87 Fed. Reg. 57750 (Sept. 21, 2022).



CMV."<sup>5</sup> This language conflates L2 vehicles that feature what the SAE J3016 standard describes as "partial driving automation,"<sup>6</sup> and L3 vehicles with "conditional driving automation."<sup>7</sup> The standard also specifies that an ADS refers only to Levels 3, 4, and 5. The distinction between L2 technologies and an L3 ADS is critical, representing the difference between vehicles that require constant human engagement and ones that require human input only in specific situations. Consistent use of standard terminology helps avoid misunderstandings of the distinct capabilities and limitations of each technology.

AVIA also encourages FMCSA to present the results of the information collection in a manner that: (1) clearly distinguishes between L2 and L3 CMVs; (2) explains how the methodologies used in the collection were designed to recognize these differences; and (3) describes the implications of FMCSA's findings for each. Such actions would further alleviate public misunderstanding of emerging vehicle technologies and could help FMCSA evaluate the handoff challenges presented by L2 and L3 vehicles in comparison with the safety benefits of L4-capable vehicles.

Distinguishing between levels of automation is key to appropriately addressing the capabilities and needs of different technologies and helps ensure that studies like the one proposed provide useful and accurate information. AVIA members have developed various training and operational safety strategies to address handoff concerns in the autonomous vehicle testing process, and we would be happy to discuss those approaches with FMCSA. AVIA appreciates FMCSA's continued interest in AVs and stands ready to engage with FMCSA on this information collection and beyond.

Sincerely,

Ariel S. Wolf General Counsel

Autonomous Vehicle Industry Association

<sup>&</sup>lt;sup>5</sup> *Id*.

<sup>&</sup>lt;sup>6</sup> Taxonomy and Definitions for Terms Related to Driving Automation Systems for On-Road Motor Vehicles - J2016\_202104, SAE, <a href="https://www.sae.org/standards/content/j3016\_202104/">https://www.sae.org/standards/content/j3016\_202104/</a> (last visited Nov. 11, 2022).

<sup>&</sup>lt;sup>7</sup> *Id*.

<sup>&</sup>lt;sup>8</sup> *Id*.