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Docket Operations, M-30 U.S. Department of Transportation (DOT) 1200 New Jersey Avenue SE Room W12-140 West Building Ground Floor Washington, DC 20590-0001

Re: Safe Integration of Automated Driving Systems-Equipped Commercial Motor Vehicles

To Whom It May Concern:

The U.S. Chamber of Commerce's Technology Engagement Center ("C_TEC") appreciates the opportunity to provide comments to the Federal Motor Carrier Safety Administration ("FMCSA") in response to the above-referenced proceeding. C_TEC applauds FMCSA for taking action in the ANPRM to address novel issues pertaining to ADS-equipped commercial motor vehicles ("CMVs"), the modernization of outdated regulations, and ensuring that the Federal government retains the authority to regulate interstate commerce. However, there are several questions contained in the ANPRM that are premature for FMCSA to consider as well as other questions that do not take a technology-neutral approach. FMCSA should also look to C_TEC's "Automated Vehicle Policy Principles" in for additional guidance. These principles outline an industry and consensus-based approach to regulating automated vehicles. C_TEC looks forward to working with FMCSA on addressing these important questions in this ANPRM and in any future, related regulatory actions.

¹ 84 Fed. Reg. 24449 (May 28, 2019) *available at* https://www.govinfo.gov/content/pkg/FR-2019-05-28/pdf/2019-11038.pdf.

Ensuring a Safety First and Technology-Neutral Approach

C_TEC believes that it is critical that the integration of ADS-equipped CMVs needs to be conducted with safety being the number one priority. As FMCSA is responsible for overseeing the safe operation of ADS-equipped CMVs, FMCSA should ensure any future regulatory actions to advance ADS-equipped CMVs prioritize safety. In addition, FMCSA should recognize that the transportation industry is undergoing a rapid transformation, and that the AV industry includes a wide range of stakeholders including traditional original equipment manufacturers (OEMs), suppliers, technology companies, and other new entrants. Modifications to the Federal Motor Carrier Safety Regulations ("FMCSRs") to accommodate advances in ADS technology should consequently be technology-neutral and support a level playing field for all stakeholders deploying ADS-equipped CMVs.

In addition, and to ensure that ADS-equipped CMVs perform as safely as a human driver or operator, FMCSA and other regulators should consider C_TEC's "Automated Vehicle Policy Principles." Specifically, the principle titled "Advance Safe Automated Vehicle Development, Testing and Deployment" promotes safety assurance and states the following:

"...To demonstrate that an ADS-equipped vehicle is at least as safe as a human driver, C_TEC recognizes the need for metrics beyond vehicle miles traveled and disengagements. Therefore, policymakers should encourage the broad AV industry to collaboratively develop a technology-neutral and transparent performance-based model for AV safety decision-making in conjunction with leading standards bodies.

Also, to increase consumer trust, C_TEC supports a comprehensive test of the safety of a vehicle's decision-making and perception systems. Consistent with the USDOT recognition that on-road testing is one of several aspects for ADS safety assurance, C_TEC recognizes that ADS/AV safety testing can be performed along multiple paths, for example, (i) on-road testing; (ii) verification of the vehicle's decision-making to an industry accepted, performance-based safety model; and (iii) testing of the vehicle's perception system using data sets."

Modernizing the Definition of a Driver

In AV 3.0, FMCSA stated that "going forward FMCSA regulations will no longer assume that the CMV driver is always a human or that a human is necessarily present onboard a commercial vehicle during its operation." Furthermore, FMCSA clarified that "in the case of vehicles that do not require a human operator, none of the human-specific FMCSRs...apply." C_TEC applauds FMCSA for endorsing this approach, and supports a future rulemaking codifying this guidance, including through potential amendments to the definition of the terms "driver" and "operator". For example, establishing in the FMCSRs that the Part 395 restriction on driver hours of service do not apply to a commercial vehicle while operated by a Level 4 or 5 ADS and without needing any human presence or intervention would build on important

² U.S. Department of Transportation, "Automated Vehicles 3.0: Preparing for the Future of Transportation" (October 2018) *available at* https://www.transportation.gov/sites/dot.gov/files/docs/policy-initiatives/automated-vehicle-30.pdf

concepts established in AV 3.0. Taking this step would increase certainty for manufacturers and developers of ADS-equipped CMVs as well as motor carriers who utilize those vehicles.

Finally, it is important to note that the definition of a driver contained in the FMCSRs may be distinct from the definition of a driver proposed or adopted by another modal administration. Consequently, C_TEC cautions regulators from applying the definition of a driver from one modal administration to another without consulting affected stakeholders.

Commercial Driver's License Endorsements

C_TEC concurs with FMCSA's interpretation that commercial driver's license ("CDL") endorsements should remain in place and apply to all human drivers and operators of an ADS-equipped CMV. Also, this requirement should apply to dedicated and stand-by remote drivers responsible for any portion of the Dynamic Driving Task ("DDT"), as defined in SAE J3016. C_TEC agrees with FMCSA's position that it is premature for FMCSA to modify CDL requirements at this point, but believes that regulators should be open to modernizing this requirement if new circumstances merit reconsideration. Due to the diverse approaches being taken by ADS developers, C_TEC discourages FMCSA from promulgating any other specific requirements related to remote drivers beyond existing requirements for commercial motor vehicle drivers.

Driver Rules and Qualifications

The ANPRM requests comment on a number of questions pertaining to certain qualifications and requirements of human operators in regards to physical qualifications, distracted driving, and drug and alcohol testing. C_TEC supports and is committed to the safe operation of commercial motor vehicles in all circumstances, and believes that all requirements and prohibitions contained in 49 CFR parts 382, 391, 392.80, and 392.82 should apply to any human responsible for the DDT of an ADS-equipped CMV, and whether the person is physically onboard or remotely located. However, FMCSA should recognize that there are rapid technological advancements occurring throughout the industry and should consider any revisions to these regulations if sufficient data from ADS-equipped CMV deployments indicates that new flexibility is needed.

<u>Limitations on the Number of Vehicles Managed Remotely</u>

The ANPRM poses a question regarding the remote monitoring of multiple CMVs, and whether a limit should be placed on that number. C_TEC notes that in this early stage, ADS developers are pursuing a range of implementation models that could include "remote drivers" as defined in J3016, as well as a diverse set of other remote responsibilities that may not include engaging in the DDT. During operation of SAE Levels 4 and 5 ADS, such remote human roles would similarly serve as redundancies since, per SAE 3016, a Level 4 or 5 ADS is capable of monitoring its own performance and does not require any human intervention or response to reach DDT fallback safely. Due to the wide range of operational models under development, and lack of clarity on what would be involved in various "remote management" roles, C_TEC believes it would be premature to define any remote role beyond "remote driver" based on the

J3016 definition, and ascribe any specific limit on the number of vehicles managed remotely. FMCSA should continue to conduct evaluations of the potential need to limit the number of vehicles remote operators should be monitoring at any given time.

Notification and External Marking Requirements

C_TEC believes that a technology-neutral approach is required when considering to update the FMCSR's pertaining to ADS-equipped CMVs. Questions 8.1 and 8.3 regarding "Roadside Inspections" request comment, respectively, on whether a motor carrier should notify FMCSA if they are operating a Level 4 or 5 ADS-equipped CMV and if markings are required to indicate the ADS Level of a vehicle. C_TEC believes that a notification requirement specific for Level 4 and 5 vehicles would run contrary to the technology-neutral approach that that DOT endorsed in AV 3.0. While a marking requirement for ADS-equipped CMVs would also not be technology-neutral, C_TEC recognizes that a non-physical marking requirement may be needed under circumstances where there is no human in the vehicle for law and regulatory enforcement purposes. Importantly, obvious markings understood by the general public to denote an ADS-equipped CMV may change human driver behavior around the CMV, which could have positive or negative consequences. C_TEC encourages FMCSA to work with ADS developers and law enforcement to determine what markings may be appropriate and research the potential impacts of those markings.

Responsibilities of Motor Carriers and Developers

The ANPRM raises a series of important questions regarding the specific responsibilities of manufacturers and developers of ADS-equipped CMVs and the motor carriers. Specifically, Questions 8.4 and 8.5, respectively, ask whether motor carriers should be responsible for ADS-equipped CMVs being equipped with a malfunction indicator and if a motor carrier should ensure that an ADS-equipped CMV should be able to pull over for Federal and State authorities and first responders. C_TEC believes that if regulators decided to take additional steps to address these questions, the manufacturer rather than motor carrier should be responsible for meeting these requirements because both pertain to functions that are included in the design and construction of the vehicle. However, at this point, C_TEC cautions FMCSA and other relevant federal entities from pursuing regulatory action on these questions considering development of these technologies is still ongoing, and encourages continued study and evaluation. In general, greater clarification of the delineation of manufacturer verses motor carrier responsibilities is important to the future of successfully deploying Level 4 and 5 CMVs, and FMCSA and DOT should continue to monitor and facilitate stakeholder discussions to determine these responsibilities.

Federal Regulation of Commercial Motor Vehicles

Regulations governing the operation of commercial motor vehicles have long been exclusive federal responsibilities because uniform regulations improve commercial motor vehicle safety and are necessary to ensure the efficient flow of interstate commerce. C_TEC supports FMCSA's position in this ANPRM that states should not adopt regulations or prohibitions on ADS-equipped CMVs because of the need for a uniform structure to facilitate

interstate commerce. A single, uniform federal regulatory framework for commercial motor vehicles is critical to promote innovation and ensure America's economic competitiveness.

Conclusion

FMCSA has a critical role to play in advancing the deployment of ADS-equipped CMVs and modernizing motor carrier regulations while ensuring safety. C_TEC thanks FMCSA for its leadership on this ANPRM and looks forward to engaging with FMCSA as this rulemaking moves forward.

Respectfully submitted,

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