



Commercial Vehicle Safety Alliance

Improving uniformity in commercial motor vehicle safety and enforcement

July 28, 2019

Docket Management Facility
U.S. Department of Transportation
1200 New Jersey Ave., SE
West Building, Ground Floor
Room W12-140
Washington, DC 20590

RE: Docket Number: NHTSA-2019-0036
Safe Integration of Automated Driving Systems-Equipped Commercial Motor Vehicles

The Commercial Vehicle Safety Alliance (CVSA) respectfully submits the following comments regarding docket number NHTSA-2019-0036, related to the implementation of automated driving systems (ADS) in commercial motor vehicles.

CVSA is a nonprofit association comprised of local, state, provincial, territorial and federal commercial motor vehicle safety officials and industry representatives. The Alliance aims to achieve uniformity, compatibility and reciprocity of commercial motor vehicle inspections and enforcement by certified inspectors dedicated to driver and vehicle safety. Our mission is to improve uniformity in commercial motor vehicle safety and enforcement throughout the United States, Canada and Mexico by providing guidance and education to enforcement, industry and policy makers.

CVSA commends the National Highway Traffic Safety Administration (NHTSA) for conducting this open process of gathering stakeholder input as the agency considers implementation of ADS. As regulators evaluate the impacts of ADS on interstate transportation, they should consider the effects of this technology on the law enforcement community and provide clear, uniform and enforceable standards. Automation will have an impact on how the roadside commercial motor vehicle inspection program is conducted, and a dialog with the law enforcement community on the requirements and capabilities of ADS to self-monitor vehicle systems' safety status and interact with law enforcement is needed. There are many questions regarding how ADS-equipped vehicles will interact with commercial motor vehicle inspectors and meet current safety regulations that need to be considered. These considerations range from how a vehicle will recognize that it is being signaled by law enforcement to pull over for an inspection to how required documentation will be made available for an inspector to examine. Currently, the driver of a commercial motor vehicle plays a crucial role in the inspection process, by performing tasks like activating required lights, applying the brakes, disconnecting/reconnecting glad hands, listening for instructions from the inspector while under the vehicle to inspect the braking system and

opening locked/sealed trailers for inspection of proper securement of cargo. If a vehicle is operating without a driver, how will these important aspects of the roadside inspection process be carried out?

In the advance notice of proposed rulemaking (ANPRM), NHTSA asks for comments on the 100-series Federal Motor Vehicle Safety Standards (FMVSS), which the notice states are “designed to reduce the likelihood of a crash occurring or, failing that, reducing the severity of a crash by reducing the velocity of vehicles involved in a crash.” When considering revisions to the FMVSS to prepare for ADS deployment, NHTSA should grant CVSA’s attached petition, submitted on Dec. 17, 2018. In the petition, CVSA asks NHTSA to publish an ANPRM to solicit feedback on amending the FMVSS to require all heavy-duty vehicles, truck tractors, buses and semi-trailers to be manufactured with a universal electronic vehicle identifier. Universal deployment of this technology would allow roadside inspectors to interact with a much larger portion of the commercial motor vehicle industry, ensuring their compliance with safety regulations and reducing the likelihood of a crash occurring.

The federal government entrusts the states with the responsibility of enforcing the Federal Motor Carrier Safety Regulations (FMCSRs) and the Hazardous Materials Regulations (HMRs) through the Motor Carrier Safety Assistance Program (MCSAP). The states use funds through the MCSAP to conduct enforcement activities, targeting commercial motor vehicles, drivers and motor carriers that present a safety risk to the driving public with the goal of reducing crashes on the roadways. According to the Federal Motor Carrier Safety Administration, the agency regulates 524,058 motor carriers, 5.9 million commercial drivers and 12.1 million commercial motor vehicles. Given the size of the industry, the states do not have the resources to inspect every vehicle, driver and motor carrier operating on our roadways on a regular basis. In order to maximize resources, the states use a combination of methods to identify vehicles, drivers and motor carriers for intervention and enforcement. As a result, inspectors interact with only a small fraction of the commercial motor vehicles currently operating on our roadways.

The ability to electronically identify a commercial motor vehicle while it is in motion reduces the need to stop vehicles for inspection, improving efficiencies for the law enforcement community and the motor carrier industry. Unfortunately, however, use of the technology is currently voluntary and the bad actors in the transportation industry are unlikely to participate. Requiring all commercial motor vehicles to be equipped with technology that allows them to be identified electronically by law enforcement would revolutionize the way commercial motor vehicle roadside monitoring, inspection and enforcement are conducted, exponentially growing the program from 4 million inspections conducted annually to 40 million or more. Universal expansion of this technology would improve the effectiveness of commercial motor vehicle enforcement programs while reducing costs, for both enforcement and industry, all while improving safety.

In addition, the immediate electronic identification of a commercial motor vehicle will aid in establishing the vehicle-to-enforcement (V2E) connectivity necessary for the electronic inspection of ADS-equipped commercial motor vehicles without impeding commerce by stopping and delaying automated or connected commercial motor vehicles. Most importantly, establishing a way for all commercial motor vehicles to be identified

electronically would benefit the public by improving safety, taking unsafe vehicles, drivers and motor carriers off the roadways. As industry continues to grow and more and more people take to the roads, it is imperative that we leverage technology, where possible, to improve the efficacy of our enforcement programs. We encourage NHTSA to grant CVSA's petition and work with the relevant agencies and stakeholders to establish this capability.

CVSA acknowledges the potential for ADS to enhance human driver safety performance or, at a crossroads in the future, to replace the human driver altogether while also exceeding the best level of safety performance of the human driver. We have not yet reached that point and CVSA urges NHTSA to proceed with caution and not to remove or relax *necessary* safety regulations to enable the testing of unproven ADS on public roads. Motor vehicle regulations were established to address safety needs. Empirical evaluation of durability, reliability and performance of ADS and their components, as well as the required communications networks on which some functionality may rely cannot be assumed. CVSA members, including law enforcement agencies responsible for commercial motor vehicle safety, are being asked basic safety questions regarding ADS about which they have limited operational information. As these technologies advance, it is critical that safety protocols be established and shared with ADS technology providers, vehicle manufacturers, commercial motor vehicle operators, safety regulators and law enforcement agencies.

The Alliance works to closely monitor, evaluate and identify potentially unsafe transportation processes and procedures as well as to help facilitate and implement best practices for enhancing safety on our highways. Commercial motor vehicle safety continues to be a challenge and we need the involvement of all affected parties to help us better understand these issues and put into place practical solutions.

If you have further questions or comments, please do not hesitate to contact me by phone at 301-830-6149 or by email at collinm@cvsa.org.

Respectfully,



Collin B. Mooney, MPA, CAE
Executive Director
Commercial Vehicle Safety Alliance



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Improving uniformity in commercial motor vehicle safety and enforcement

December 17, 2018

The Honorable Heidi King
Deputy Administrator
National Highway Traffic Safety Administration
1200 New Jersey Avenue, SE
Washington, DC 20590-9898

RE: Petition for Rulemaking – Require Commercial Motor Vehicles to be Manufactured to Wirelessly Broadcast a Universal Electronic Vehicle Identifier

Dear Deputy Administrator King,

The Commercial Vehicle Safety Alliance (CVSA) petitions the National Highway Traffic Safety Administration (NHTSA) to publish an advance notice of proposed rulemaking (ANPRM) in regards to amending the Federal Motor Vehicle Safety Standards (FMVSS) found in Title 49 Code of Federal Regulations (C.F.R.) Part 571 to explore the benefits and feasibility of establishing a new FMVSS requirement for the remote electronic identification of heavy-duty vehicles, truck tractors, buses and semi-trailers being operated in the United States and to inform the original equipment manufacturers (OEMs) and facilitate the early voluntary adoption of such technology.

CVSA is a nonprofit association comprised of local, state, provincial, territorial and federal commercial motor vehicle safety officials and industry representatives. The Alliance aims to achieve uniformity, compatibility and reciprocity of commercial motor vehicle inspections and enforcement by certified inspectors dedicated to driver and vehicle safety. Our mission is to improve commercial motor vehicle safety and uniformity throughout Canada, Mexico and the United States, by providing guidance and education to enforcement, industry and policy makers.

Request

CVSA petitions NHTSA to initiate an ANPRM in order to facilitate a discussion among stakeholders regarding the advantages and associated benefits of amending the FMVSS to require all heavy-duty vehicles, truck tractors, buses and semi-trailers to be manufactured with the capability for quick remote identification of a commercial motor vehicle for inspection and enforcement purposes. There are a number of technology options through which this could be achieved. For example, the electronic identifier could be communicated through the proposed dedicated 5.9 GHz spectrum, or other related communication platforms, surrounding the advancement of automated driving systems (ADS) in conjunction with automated and connected commercial motor vehicles as part of the basic safety message. This immediate electronic identification of a commercial motor vehicle will aid in establishing the vehicle to enforcement (V2E) connectivity necessary for the wireless inspection of an

automated or connected commercial motor vehicle without impeding commerce by stopping and delaying automated or connected commercial motor vehicles and advance the vision and guiding principles outlined in Preparing for the Future of Transportation: Automated Vehicles 3.0 (AV 3.0). Publishing an ANPRM would initiate much needed discussion on this crucial step forward in commercial motor vehicle safety technology.

Justification

The federal government entrusts the states with the responsibility of enforcing the Federal Motor Carrier Safety Regulations (FMCSRs) and the Hazardous Materials Regulations (HMRs) through the Motor Carrier Safety Assistance Program (MCSAP). The states use funds through the MCSAP to conduct enforcement activities, targeting vehicles, drivers and motor carriers that present a safety risk to the driving public. According to FMCSA, the agency regulates 524,058 motor carriers, 5.9 million commercial drivers and 12.1 million commercial motor vehicles. Given the size of the industry, the states do not have the resources to inspect every vehicle, driver and motor carrier operating on our roadways on a regular basis. In order to maximize resources, the states use a combination of methods to identify vehicles, drivers and motor carriers for intervention and enforcement.

Currently, inspectors use screening technology programs and tools, as well as inspection selection procedures and inspector observation to identify inspection targets to be examined during a roadside inspection. Third party screening technologies that are currently in use help to increase the number of vehicles, drivers and motor carriers that enforcement community comes into contact with; however, some of these technologies are used voluntarily and others are deployed with varying degrees of effectiveness. Since technologies exist today that would allow automated roadside identification of nearly all commercial motor vehicles, if this proposed concept were universally deployed, this would revolutionize the way commercial motor vehicle roadside monitoring, inspection and enforcement are conducted. It would improve the effectiveness of enforcement programs while reducing costs, for both enforcement and industry, all while improving safety. In order to move forward with full deployment, however, enforcement must have a universal mechanism for electronically identifying ***all*** commercial motor vehicles. We believe this can be accomplished with minimal cost and disruption, and we believe the safety and economic benefits will be substantial for the enforcement community, motor carrier industry and driving public.

While many questions still exist surrounding this concept, establishing a universal electronic vehicle identifier requirement for all commercial motor vehicles will have tremendous benefit. Jurisdictions will save time and see improved efficiencies as inspectors are able to more accurately target vehicles, drivers and motor carriers in need of an intervention while allowing safe, compliant vehicles to deliver their freight more quickly and efficiently.

Most importantly, establishing a universal electronic vehicle identifier requirement for all commercial motor vehicles would benefit the public by improving safety, taking unsafe vehicles, drivers and motor carriers off the roadways. As industry continues to grow and more and more people take to the roads, it is imperative that we leverage technology where possible to improve the efficacy of our enforcement programs.

It is important to note that establishing a universal vehicle identifier requirement within the FMVSS creates no additional regulatory burden for the motor carrier. Further, for the regulated motor carrier industry, there are no credible privacy concerns. The universal vehicle identifier, potentially tied to the vehicle identification number (VIN), would transmit only information that is already required to be displayed or made available by regulation. All this requirement would do is change how that information is presented to the enforcement community.

Further, the need for a universal vehicle identifier becomes more critical as the industry moves forward to implement driver assistive truck platooning and increasingly advanced driver assistance systems and partially or fully automated driving systems, which will require new methods and levels of safety checks. NHTSA's vehicle to vehicle (V2V) and vehicle to infrastructure communications (V2I), which we understand is planned for medium and heavy vehicles, is an ideal platform upon which to achieve this electronic identification and for our vehicle to enforcement (V2E) initiative to become a reality. As driver assistive technologies evolve in commercial vehicle use, the proper identification and monitoring of these commercial motor vehicles becomes increasingly necessary. No matter the method, this proposed requirement would enable efficient identification and inspection/screening of vehicle systems to help ensure safe operation of commercial motor vehicles, including those being operated with or without a human operator on board.

CVSA works to closely monitor, evaluate and identify potentially unsafe transportation processes and procedures as well as to help facilitate and implement best practices for enhancing safety on our highways. Commercial motor vehicle safety continues to be a challenge and we need the involvement of all affected parties to help us better understand these issues and put into place practical solutions. We appreciate the agency's commitment to safety and stakeholder involvement.

If you have further questions or comments, please do not hesitate to contact me by phone at 301-830-6149 or by email at collinm@cvsa.org.

Respectfully,



Collin B. Mooney, MPA, CAE
Executive Director
Commercial Vehicle Safety Alliance

CC: The Honorable Raymond P. Martinez, Administrator, Federal Motor Carrier Safety Administration