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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 Comments: Federal Motor Carrier Safety Administration
Advanced Notice of Proposed Rulemaking (ANPRM)
Docket Number FMCSA-2018-0037
Safe Integration of Automated Driving Systems-Equipped Commercial
Motor Vehicles
Federal Register Notice: May 28, 2019**

Navistar, Inc. (Navistar), a leading manufacturer of medium and heavy duty commercial vehicles under the International brand, appreciates the opportunity to submit comments to this very important rulemaking effort. Commercial Motor Vehicles with Automated Driving Systems (ADS CMV's) have the potential to provide significant safety benefits and Navistar recognizes that the safe integration of ADS CMV's is of the upmost importance especially when implementing new technologies that control the vehicle. As stated in the ANPRM, FMCSA is considering changes to its rules to account for significant differences between human operators and ADS CMV's. Navistar recognizes the need and appropriateness for regulatory changes to allow for this safe introduction of ADS CMV's and to foster improvements in operating efficiencies of CMV's to obtain broader acceptance of ADS CMV's if those safety benefits are to be fully recognized.

Responses to Questions:

1. Do the FMCSRs require a human driver?

Navistar agrees with the Volpe Study, and as many others have previously commented, that the current FMCSA regulations do not require a human driver be in control of a CMV at all times. The FMCSA should change the regulation(s) or provide an interpretation or guidance to clarify this.

Regarding the definition of “Driver”. The US DOT Automated Vehicles 3.0 Guidance Policy stated:

“Department’s policy is 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”

“As a starting point and going forward, the Department will interpret and, consistent with all applicable notice and comment requirements, adapt the definitions of “driver” and “operator” to recognize that such terms do not refer exclusively to a human, but may in fact include an automated system.”

Navistar believes that the term “Driver” should refer exclusively to a human driver. Otherwise, we would envision significant barriers or just general confusion in the introduction or implementation of ADS CMV’s as the current regulations were intended for a human driver. The ADS, when a vehicle is operating in a fully autonomous mode that requires no human driver, needs to be clearly distinguished from a human driver as some of the regulations will apply differently to a human driver versus the ADS. An ADS, while in control of the vehicle, should simply be called the ADS.

Therefore, an ADS CMV Driver should be a human in control of an ADS CMV when the ADS CMV is not operating in the fully autonomous mode and requires a human driver.

An ADS remote driver should be a human in control of an ADS CMV from a remote location.

An Automated Driving System (ADS) is in control of an ADS CMV when no human driver is required.

2. Commercial Driver’s License (CDL) Endorsements

Human Drivers that control and operate an ADS CMV should continue to be required to have a CDL Endorsement the same as CMV drivers today. We agree with FMCSA in that it would be difficult, given the different ADS technologies and their command and control operating systems, and the rapid development and pace of change of these systems and technologies, that a special or specific CDL does not seem appropriate at this time for an ADS CMV Driver. As the ADS technology

advances and matures there may be some benefits to some standardized knowledge or skills for operating ADS CMV's in the future.

3. Drivers Hours of Service (HOS) Rules

Navistar agrees with FMCSA's preliminary approach on how the HOS rules should continue to be used; that is, any time a human is at the controls of an ADS CMV, either in the driver's seat or operating it remotely, the time should be recorded as on-duty, driving.

Navistar generally agrees with FMCSA that any time the human driver is working without having the responsibility for taking control of the ADS CMV (because it is operating in a fully autonomous mode within its intended Operational Design Domain (ODD)) should be considered on-duty, not driving. However, caution needs to be used as a person onboard a fully autonomous CMV who performs only non-driving tasks, (e.g., cargo inspection) should not be considered a driver simply by riding in the CMV. So further review and interpretation or guidance is needed.

For scenarios in which the human is in a sleeper-berth on a vehicle controlled by ADS technology, the human driver may record his/her duty status in the same manner as a team driver with hours off-duty in the passenger seat or sleeper-berth time.

5. Distracted Driving and Monitoring

The distracted driving and monitoring requirements should be the same for ADS CMV Drivers and Remote Drivers as current CMV drivers unless there is valid reason to do otherwise.

6. Safe Driving

The safe driving requirements should be the same for ADS CMV Drivers and Remote Drivers as current CMV drivers unless there is valid reason to do otherwise.

7. Inspection, Repair and Maintenance

The FMCSR's require all CMVs to be systematically inspected, repaired, and maintained, and all parts must be in safe and proper operating condition at all times. In the foreseeable future, the proper functioning and operation of ADS CMV's most likely will be assessed prior to operation through a combination of pre-trip human inspection and system self-diagnostics as CMV's are today. The ADS CMV will have to perform the necessary self-diagnostics of the ADS Operating System to ensure proper operation. If the level of a fault would compromise the safe operation of a vehicle, then the ADS should not engage, or engage in a safe and limited mode, until the fault is remedied. As with any new technology or feature, the vehicle manufacturer, or ADS operating

system manufacturer, would have to provide the necessary information and/or training on inspecting, maintaining and repairing the ADS CMV.

8. Roadside Inspections

While it is premature to determine if ADS CMV's operators should contact FMCSA for informational or operational purposes, or if an ADS CMV needs special marking or identification, an ADS CMV does need to have the awareness to be able to recognize and pull over in response to Federal and State officials or move out of the way of first responders?

As it stands today, most states that allow ADS CMV's to operate within their jurisdiction require pre-notification and approval to be able to do so. FMCSA recognizes, and Navistar would like to emphasize the importance of having Federal oversight and the FMCSA must continue to work with the states and the industry to ensure a smooth and efficient flow of interstate commerce.

9. Cybersecurity

ADS CMV's pose another access point that needs to be protected against cyber hacking. NHTSA, FMCSA, along with other Government Agencies and the industry need to continue to develop requirements and best practices to protect the entire vehicle from cybersecurity attacks.

Additional Comments:

As FMCSA noted in this notice, some of their regulations, the Federal Motor Carrier Safety Regulations (FMCSR), refer directly to NHTSA's Federal Motor Vehicle Safety Standards (FMVSS). As a vehicle manufacturer that is responsible to comply with the FMVSS's, Navistar would like to reiterate the importance of NHTSA and FMCSA working closing together on any regulatory changes that impacts both the FMCSR's and FMVSS's.

Conclusion:

In conclusion, Navistar appreciates the opportunity to comment on this significant rulemaking activity and recognizes the effort FMCSA is putting forth to understand and eliminate the barriers for the implementation of ADS CMV's. ADS vehicles have the potential to significantly improve the safety on our highways along with improving the efficiencies of interstate commerce and the economy. As a manufacturer of CMV's who is developing ADS CMV technology, we look forward on continuing to work with FMCSA and the other DOT Agencies on the safe introduction of ADS CMV's.

Sincerely

A handwritten signature in dark ink that reads "Richard C Kempf". The signature is written in a cursive, slightly slanted style.

Richard Kempf

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