Consumer Technology Association

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BY ELECTRONIC SUBMISSION

Docket Management Facility
U.S. Department of Transportation
West Building Ground Floor, Room W12-140
1200 New Jersey Avenue, SE
Washington, DC 20590-0001

Re: Request for Comments on Advance Notice of Proposed Rulemaking Regarding Framework for Automated Driving System Safety

Docket No. NHTSA-2020-0106

Dear Sir or Madam:

The Consumer Technology Association ("CTA")® submits these comments on the National Highway Traffic Safety Administration's ("NHTSA") Advanced Notice of Proposed Rulemaking regarding a Framework for Automated Driving Systems ("ADS") Safety, Docket No. NHTSA-2020-0106 (the "ANPRM"). CTA's membership, some 2000 American businesses, includes a wide range of companies working to bring self-driving vehicle ("SDV") innovations to America's roadways. Our members include vehicle and component manufacturers, software developers, and transportation platforms, among others. Approximately 80 percent of these companies are small businesses and startups. CTA strongly supports NHTSA's initiative to consider, in a systematic way, how ADS and SDVs should be addressed by the agency. CTA agrees with NHTSA's approach of focusing initially on a framework for ADS and SDV safety that does not stifle market-based innovation. CTA supports the agency's emphasis on permitting SDV technology to be safely deployed in as efficient a manner as possible.

CTA supports NHTSA's priorities in creating a framework for SDVs. Safety is, and must remain, the paramount concern in evaluating any ADS technology or SDVs. Likewise, we value NHTSA's commitment to remain technology neutral and promote innovation. More, this commitment by the agency feeds back into the overarching safety principal by providing SDV industry players across the continuum with sufficient flexibility to test and experiment. SDVs have life-saving, and life-improving, potential for the public. Staying technology-neutral and encouraging innovation will help to unlock and encourage these benefits.

We commend NHTSA's decision to move forward with developing the framework in anticipation of increased SDV activity. Although CTA agrees that SDVs have not yet arrived commercially, SDVs are quickly being developed. As NHTSA understands, the automotive industry is beginning to move beyond the current FMVSS and we appreciate the agency's desire to take actions that will provide certainty for commercial operators without stifling innovation. The road to SDV deployment will be a global competition. Some other countries, such as France and Germany, may allow for the commercial deployment of SDVs as soon as 2022.

SDV developers, like most commercial operators, respond to certainty. That said, the public and SDV industry will not benefit from regulation for regulation's sake—NHTSA should avoid developing FMVSS or other rules regarding SDVs unless it is appropriate to do so based on a demonstrated safety need. In its ANPRM, NHTSA recognizes the potential unintended consequences from the premature development of FMVSS. Accordingly, NHTSA can and should also seek to provide certainty and clarity to the industry through guidance, grants of exemptions, and disclosure/reporting requirements, rather than solely through the use of rulemakings. All of these items are necessary parts of any ADS safety framework that NHTSA ultimately develops.

As a general matter, CTA encourages NHTSA to move forward with developing a technology-neutral, performance-based proposed framework for evaluating ADS. We urge the agency to allow a flexible approach in which any necessary SDV testing appropriately assesses the performance of a SDV and facilitates public trust and confidence. If designed and implemented correctly, the framework NHTSA is considering for ADS safety will foster innovation and advancement within the transportation field. Doing so is crucial to realizing the tremendous potential of SDV technologies to expand mobility, reduce emissions, drive economic growth, and enhance safety.

Technology Neutrality

NHTSA should continue viewing technology neutrality as a priority within the ADS safety framework context. Thus, our comment on Question 4 from the ANPRM: How would your framework assist NHTSA in engaging with ADS development in a manner that helps address safety, but without unnecessarily hampering innovation?

Any framework for ADS safety must use consistent performance-based metrics and technology-neutral compliance testing. The use and implementation of performance-based standards, wherever such standards are put in place, is the best method for ensuring this neutrality going forward. Industry players and NHTSA should work together to develop any relevant standards with a focus on measurable outcomes. NHTSA should use objective, performance-based standards that all industry participants can strive to meet regardless of their specific approach, instead of requiring the use of specific technology or equipment. Doing so will advance NHTSA's safety goals by fostering innovation that uses market forces and results in safe and efficient SDV technology. Performance-based standards should be risk-based and safety outcome oriented, accounting for the operating environment and other factors, rather than one size fits all.

Taking steps to foster innovation now will ultimately result in better and safer vehicles on the nation's roadways.

While CTA supports the use of performance-based metrics for SDVs, we also discourage NHTSA from pursuing the implementation of component-level performance measures. Given that SDVs are a nascent and quickly-changing technology, the imposition of component-level metrics would be counterproductive to ensuring that the industry continues to innovate.

Flexibility

In a similar vein as technology neutrality, promoting a flexible approach to vehicle and ADS testing (to the degree needed) is equally important to ensure that the safety framework will be implemented in the most appropriate manner. Any framework from NHTSA should account for the fact that there will be many different types of SDVs and there may be the need for varied criteria and processes based on the type and purpose of an SDV. To the degree NHTSA develops a framework for ADS safety, the agency should continue to allow multiple avenues to satisfy any standards so entities can choose the way that works best for them.

The United States Department of Transportation (USDOT) has already taken important steps towards the promotion of this flexible approach in the recent Automated Vehicles Comprehensive Plan (AVCP). In recent years, the USDOT has focused on ensuring a consistent, safety-first environment for the regulation of all types of SDVs. With the release of the AVCP, the Department has moved forward with ensuring that all use-cases for SDVs are not treated exactly the same. For example, an autonomous shuttle designed to be compliant with the Americans with Disabilities Act should be treated differently from a driverless package delivery vehicle that will never have a human inside. Continuing to promote flexibility within the ADS safety framework will allow safety advances from SDVs to be shared with traditional automobiles. The result will benefit all drivers and pedestrians.

Difference between ADS and Manual Driving

The big difference between the ADS safety framework being considered by NHTSA and the current FMVSS, which typically apply to human-operated vehicles, is that the ADS framework will essentially focus on the driver (i.e., the ADS function). In contrast, the driver in a human-operated vehicle is typically not subject to regulation by NHTSA. It appears that NHTSA is grappling with this issue in its ANPRM. But, the SDV industry needs a model in place that does not rely on a patchwork of different regulatory and licensing regimes. A framework for ADS safety is a major step towards this standardization.

As NHTSA considers a potential framework for ADS safety, it is relevant that driver error is the cause of most vehicle crashes. As one example, a study by NHTSA determined that the critical reason for a vehicle crash was assigned to the driver 94 percent of the time. NHTSA, Critical Reasons for Crashes Investigated in the National Motor Vehicle Crash Causation Survey (Feb. 2015). By automating the driving function of vehicles, SDVs can provide even greater safety to vehicle occupants and pedestrians. These safety benefits should be taken into account by NHTSA when creating an ADS safety framework.

Iterative Process and Use of Research Data

As noted by NHTSA, testing SDVs is an iterative process. In addition to the potential frameworks described by NHTSA in the ANPRM, SDV companies should be able to use their testing data to fulfill any applicable performance requirements. In particular, if companies can show improvement in how their products perform, CTA believes that such data should be taken into account by NHTSA.

CTA also supports efforts to ensure that NHTSA's framework is informed by lessons learned through other USDOT efforts, particularly the USDOT's Connected Vehicle Safety Pilot Program, which enhanced the industry and agency's understanding of how SDVs perform in real-life situations. Similarly, NHTSA can also gain helpful information from industry efforts at standardization, such as the Automated Vehicle Safety Consortium's work creating industry best practices, methods, and measures. CTA encourages NHTSA to rely on such previous efforts as it develops the framework discussed in the ANPRM.

Cybersecurity

In the ANPRM, NHTSA lists eight issues which could impact the ability of an ADS to carry out its intended plans in a safe and reliable manner, and requests comments as to which of these it should prioritize as it continues the research necessary to develop a safety framework. 85 Fed. Reg. 78058, 78064 (Dec. 3, 2020). NHTSA also notes that the agency will analyze relevant aspects of cybersecurity relating to vehicle safety to the extent permitted by law. CTA agrees that cybersecurity risks may impact the safety of SDVs. Accordingly, CTA supports the inclusion of cybersecurity (where it is related to vehicle safety) as one of NHTSA's research priorities.

Sincerely,

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