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Summary: Request for Public Comments for Testing and Verifying Compliance of Transport Vehicle with a Fully Automated Driving System on Public Roads

Agency: National Highway Traffic Safety Administration (NHTSA)

Parent Agency: Department of Transportation (DOT)

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Action:

Notice of request for public comments

Action Reply: Public Comment

Date Submitted: August 20, 2019

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Attachments: (File Name)

DOT-NHTSA-ADS-DV-Safety-Compliance_David-DeVeau.pdf

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Definitions:

FMVSS; Federal Motor Vehicle Safety Standards
ADS; Automated Driving System
DV; Dedicated Vehicle
NCAP; New Car Assessment Program
VIN; Vehicle Identification Number

Introductory

The following public comments within the capacity of an independent safety advocate are intended to address the NHTSA's efforts to gather input from stakeholders and the public regarding what approaches to propose to address potential challenges to the verification of the compliance with the FMVSS oversight of ADS-DV to include lack of traditional manual controls.

These comments are in regards toward support of cooperation for the DOT / NHTSA / NCAP Rating System for all road vehicles that by nature of specifying applicable testing will clarify safety requirements for initial approval for public release of the ADS-DV and to propose a means for the FMVSS oversight to continue assurance of public safety over the life cycle of the vehicle.

The primary concern; is after a safety feature is approved for road service the only authority to assure continued public safety is to monitor fleet performance and to require timely crash reports.

The secondary concern; is during the road vehicle registered private or public service there must be authority to assure all safety features are performing within approved standards.

The question; is how to continue officially certified assurance of each road vehicle safety feature performance before a safety failure puts the public at risk and damages public perception of the potential to advance road safety.

Conclusion

The principle of the ADS-DV potential to advance public road safety and to broaden transportation availability is of growing interest.

The growing concern of official safety assurances is a major hurdle that must be overcome to continue advancement.

The first step of updating NCAP to add ratings for automated safety features into the crash rating with an advanced and clearly understood measurement system is well underway.

The second step is to continue performance oversight and to assure clear public notification of present conditions of all road safety features.

Going forward there must be continued means to officially test fleet wide safety designs in new vehicles as defined by DOT/ NHTSA / NCAP. There must also be an official DOT / NHTSA means to monitor safety feature performance of each registered vehicle that will further enable an on the road assessment of potential fleet wide safety feature failures.

Further consumer safety can be clearly conveyed throughout the life cycle of registered road vehicles with a VIN based NHTSA Certified Safety Inspection as shown with these following Sticker Examples.

Safety Sticker Examples

PASS



FAIL



PASS:

Private Service:

New Safety Sticker after a year and no more than 15 months

Public Service:

New Safety Sticker after 6 months and no more than 9 months

FAIL:

Highest Priority:

Immediate or up to 30 days

High Priority:

Within 30 days or up to 60 days

Low Priority:

Within a year and no more than 15 months

Safety Sticker Premise

Quarterly Sticker Colors:

January, February, March / BLUE
April, May, June / GREEN
July, August, September / YELLOW
October, November, December / BROWN

Highest Priority FAIL:

Same Quarter / Repair or Replacement of Safety Feature Required
Immediately or within the next three months
Same quarter sticker is used

High Priority FAIL:

Next Quarter / Repair or Replacement of Safety Feature Required
During the next three months and no more than six months
Next quarter sticker is used

Low Priority FAIL:

Next Year / Repair or Replacement of Safety Feature Required
During twelve months and no more than fifteen months
Next year, same quarter sticker is used

Private Use PASS:

Next Road Safety Inspection Per Year and Quarter on Sticker
After twelve months and no more than fifteen months
Next year, same quarter sticker is used

Public Use PASS:

Next Road Safety Inspection Per Year and Quarter on Sticker
After six months and no more than nine months
Same year or next year, every other quarter sticker is used

Definitions:

A Highest Priority FAIL is defined as *a life threatening safety feature design failure* and repair or part replacement must be performed for vehicle to remain in service.

A High Priority FAIL is defined as *a life threatening safety feature design failure* and parts and/or repair procedures are available.

A Low Priority FAIL is defined as *a potential life threatening safety feature design failure* and/or parts or repair procedures are not available.

A PASS Sticker indicates that there is *no known potentially life threatening safety feature design failures*.

Summary

Presently most states that require yearly safety inspections only allow up to sixty days to repair or replace failed safety features.

This federal system will require immediate resolve or allow up to thirty days for the highest priority safety failures. Allows more than three months and up to six months for high priority failures and upward of fifteen months for a low priority potential failure to repair or replace or to get an extension until parts are available by official public notice with a fail sticker.

The time frame for a failed low priority and a passing sticker is the same before the next inspection is due that will link to the system per VIN. However the difference is very significant for consumer protection to remind us every time we see a fail sticker that the vehicle has a potential safety issue and for manufacturers that have vehicles on the road with these failed stickers to hasten means to resolve the issue before the next NHTSA Safety Inspection.

In conjunction with NCAP approval testing, this NHTSA safety inspection system will continue to assure compliance of FMVSS throughout the life cycle of all registered road vehicles' safety feature designs.

Specifically to ADS-DV safety feature failures to be given the highest priority fail status. There can be no delay for repair in these types of vehicles, from tire tread wear to software, that can compromise maximum safety performance. This safety inspection system will ensure all vehicles without traditional manual driver control ability that are given the highest priority failures are immediately resolved or taken off the road until part replacements or repairs are performed to pass inspection.

Further this safety inspection system will ensure all road vehicles with a fail sticker can not be sold, leased, rented, or hired and is a clear solution for assuring our vehicles are safe and the vehicles on the road with us are also road worthy.

DOT / NHTSA / Safety Inspection



Road Worthiness
Safety
STICKER