Automated Driving Systems 2.0: No Surprises

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On September 12, 2017, the Department of Transportation released revised voluntary guidance for companies developing autonomous technology. The guidance builds on the 2016 Federal Policy, stressing several safety elements: vehicle system safety, operational design domains, object and event detection, fallback, validation, human machine interface, cybersecurity, crashworthiness, post-crash behavior, data recording, consumer education, and laws. Highlights include:

"NHTSA's Enforcement Authority" and Federal, State, and Local Laws

The proposed voluntary guidance emphasizes NHTSA's "broad enforcement authority to address existing and new automotive technologies and equipment." In application, the voluntary guidance reinforces federal preemption which places priority on federal law over state law where the two conflict. Specifically, the guidance makes it clear that both the federal government and the states have roles to play with regard to the testing and subsequent marketing of highly autonomous vehicles. The spheres where the states can set laws and policies include:

- Creating a tech-agnostic environment for testing and deployment
- Maintaining licensing and registration of vehicles
- Reporting and communicating with first responders and law enforcement
- Enforcing traffic laws while reviewing and remove conflicting laws and regulations that create barriers for deployment (i.e. requiring steering wheels, etc.)
- Conducting safety inspections

Related Services

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- Regulating vehicle insurance requirements
- Regulating liability including allocation of liability where owners, operators, passengers, manufacturers, and other entities are at play

The Importance of Standards Organizations

As we have repeatedly noted in past Alerts and events, the role of standards organizations will continue to grow as NHTSA recognizes the need to adopt best practices and design principles. The guidance directly references the work of organizations including the International Standards Organization (ISO) and SAE International while suggesting that these standards and those of other industries (aviation, space, and military) will influence future guidance.

Designing for Fallback Strategies

The guidance encourages companies to document their processes for transitioning to a "minimal risk condition" when problems arise or the autonomous system is unable to operate safely. The inclusion of this provision is noteworthy, as the section contemplates the transition through lower levels of autonomy that allow drivers to resume control of systems.

Vehicle Cybersecurity

The guidance encourages companies to include ongoing safety risk assessments for each technology that incorporates best practices and design principles published by the National Institute of Standards and Technology (NIST), SAE International, and other relevant bodies. The guidance further encourages participation in the Auto-ISAC, the information sharing organization for the transportation sector.

What Happens Next

NHTSA is taking comments on these new guidelines with the expectation that they will continue to evolve. In addition, some issues, such as privacy, have been left to other federal agencies, including the FTC, to address. Moreover, although these new guidelines are voluntary, failure to follow them could be evidence of negligence and thus potentially expose a manufacturer to tort liability. Amidst this uncertainty, Congress continues to consider legislation that could affect the testing and deployment of automated driving systems.

Senate Committee Hears Testimony on Whether to Include Heavy Trucks in Autonomous Vehicle Legislation

The Senate Commerce, Science, & Transportation Committee took testimony on how the government should treat heavy trucks when it comes to regulating the development, testing, and deployment of automated driving systems. The Committee heard from representatives of the trucking industry, safety groups and the nation's largest trucking union were held.



Navistar CEO Troy Clark testified that he saw autonomous technology as an extension of safety technology already in place and that greater levels of safe driving technology will help reduce human error that accounts for 94% of all accidents. Clarke's testimony was supported by Deborah Hersman, President and CEO of the National Safety Council (and former Chair of the National Transportation Safety Board). She noted that our roadways were not made for passenger and commercial vehicles to operate independently of each other and that both types of vehicle would benefit from new automated technology. She pointed out that rear end collisions with trucks had three times more fatalities than rear end collisions with passenger cars. However, Ken Hall of the Teamsters raised various concerns and urged the committee that US workers should are not left behind in the process of automation. He gave examples of concerns as to how large trucks will be able to maneuver around a warehouse or a drop yard and not injure workers occupying the same space.

Overall, committee members disagreed about whether heavy trucks should be included in the autonomous vehicle legislation which Chairman John Thune (R-SD) and committee member Gary Peters (D-MI) released in draft last week. Independent of these efforts, the House of Representatives unanimously approved its own bill on the subject, H.R. 3388, (9/8/17 Client Alert) and chose to exempt from coverage trucks weighing over 10,000 pounds. The draft Senate bill applies to heavy trucks. Copies are available from the Butzel Long legislative team.

Opposition to including heavy commercial vehicles centered on concerns about the risks posed by 80,000-pound automated trucks and massive job losses that could accompany a transition to fully autonomous vehicles. Industry representatives stated that their focus was on technologies at the SAE Automation Levels 2 and 3, which require a driver in the vehicle, and that they would accept legislation that was limited to trucks operating at those levels of autonomy.

Criticism of New NHTSA Guidance on Automated Driving Systems

Although ostensibly the hearing addressed whether to include heavy trucks in autonomous vehicle legislation, Democratic Senator Richard Blumenthal used his time during the hearing to criticize the National Highway Traffic Safety Administration's (NHTSA) new policy guidance, calling it "anemic" because of its reliance on voluntary self-assessments by manufacturers. Blumenthal warned that a voluntary-only regime would "discredit the technology" in the eyes of consumers and set back the cause of achieving broad adoption of devices that could save lives. Chairman Thune responded that gaps or weaknesses in NHTSA's policies highlight the need for comprehensive legislation.

Conclusion

The Automated Driving Systems 2.0 is now open for public comment including ways to improve the usefulness of the voluntary guidance. Contact your Butzel attorney for more information or to assist with drafting and filing comments.

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