
The U.S. Department of Transportation released a policy outlining best practices for safe design, development, testing and deployment of automated vehicle technologies. Attorneys at Morrison & Foerster LLP discuss the components of the policy and how it may apply to other industries.

BY KATIE THOMSON AND ANDREW BARR

On Tuesday, Sept. 20, the U.S. Department of Transportation (USDOT) released a new federal policy designed to expedite the development and deployment of autonomous vehicle (AV) technologies in the U.S. (21 ECLR 38, 9/28/16) The policy strives to balance the USDOT’s mission of maintaining a high level of safety throughout the automobile industry with industry’s interest in facilitating innovation in the AV sector. The new policy applies to the full array of AVs, ranging from driver assisted to wholly autonomous technologies. Although the policy pertains to automobiles, a number of aspects of the new policy are likely relevant to autonomous technologies developed or used in other modes of transportation. The policy is effective immediately; however, the Department will accept stakeholder comments for 60 days.

Vehicle Performance Guidance for AVs: The policy contemplates that entities seeking to develop and deploy AVs would submit a detailed assessment to the USDOT that would allow it to evaluate the safety of proposed design, testing, and deployment. The “pre-market approval” tool is not a prescriptive “one-size-fits-all” approach. Rather, the tool will enable USDOT to use its expertise to assess the safety and reliability of a wide range of AV technologies by evaluating 15 critical safety-based parameters.

Model State Policy: USDOT intends to occupy the field when an automobile is fully automated. However, to the extent individuals continue to have responsibility for vehicle operations, USDOT contemplates states retaining their traditional regulatory oversight (e.g., licensing; setting forth insurance requirements). USDOT also encourages states to work together to establish a coherent and cohesive set of laws to facilitate the development and deployment of AVs across the country.

Current Regulatory Tools: The new policy sets out the range of existing regulatory tools that USDOT can draw upon to expedite the development and deployment of AVs (e.g., limited exemp-
Modern Regulatory Tools: The policy describes 12 potential new tools that the USDOT could use to aid in providing both timely and safe deployment of innovative technologies.

Notably, the policy envisions greater transparency in data collection and sharing among all stakeholders to expedite the development and deployment of AVs. The data can be used to better understand and mitigate the risks presented by an array of AV technologies. The policy also addresses privacy and cybersecurity related to the use of AVs.

It appears that NHTSA may be borrowing this data collection and sharing model from, or at least certain material aspects of it are similar to, the Federal Aviation Administration’s (FAA) use of Safety Management Systems (SMS). In the aviation context, SMS are designed to facilitate industry-wide innovation while simultaneously protecting the proprietary data shared by the particular stakeholder. Certain statutory protections permit the FAA to balance data collection and sharing on the one hand, with the ability to provide a high level of assurance to stakeholders that their information will be secure on the other. Though NHTSA does not currently enjoy the same statutory protections as the FAA, this data collection and sharing initiative appears to be a laudable first step towards creating a culture of safety without unduly inhibiting this transformative technology.

That said, it will be interesting to see how stakeholders respond to this call for information sharing. Because NHTSA’s call for data sharing is voluntary, it is unclear whether informal pressures will be sufficient to shepherd the industry into complying with NHTSA’s proposed approach, or whether NHTSA will have to promulgate a rule to mandate data sharing. Regardless, NHTSA’s initial effort to marshal data and encourage data sharing will likely be useful in both garnering public confidence in the technology and also permitting innovators to be both safe and efficient as the industry matures.

Another aspect of the policy, the proposed “Model State Policy,” contemplates both that the federal government will occupy the field (preempt) when it comes to fully automated AVs, and also that each of the individual states will adopt a similar framework when dealing with vehicles still subject to human intervention. The USDOT seems to believe, and reasonably so, that a uniform system will be imperative if the AV industry is to flourish throughout the country. Thus, where not expressly preempted, the USDOT is envisioning a system, similar to the “Uniform Codes” that are largely accepted throughout the country, to govern AVs on the state level.

As software becomes more integral to the proper and safe operation of cars, airplanes, trains and vessels, stakeholders may see similar policies crop up in their particular areas of interest.

This Model State Policy, though simple enough on paper, will likely be the subject of much discourse and debate until a court or Congress speaks to the preemption issue. The USDOT has maintained that any AV that is fully automated (e.g., operates entirely through software) will be subject to federal rules and restrictions. A key driver of this field preemption seems to be the USDOT’s belief that widespread recalls and software updates can be accomplished overnight, and a patchwork of state regulators may lead to a less safe environment for AVs.

It would be surprising if this federal preemption is not subject to significant pushback from the states. Looking again to the FAA as an analog, the FAA has maintained that it has field preemption over aircraft operating in the National Airspace System. This effectively means that the FAA’s position is that it is the sole regulator of how and where aircraft may operate (though the FAA and courts have been clear that localities can regulate where an aircraft takes off or lands). Though this policy wasn’t without challenge over the past few decades, with the advent of small Unmanned Aerial Systems (UAS), the FAA’s position regarding the scope of its safety authority is now seeing a host of new challengers. For example, several states and cities have expressly regulated UAS operations despite the federal field preemption, usually on the basis that the federal rules don’t go far enough to protect the locality’s interests.

The same could, and likely will, happen with AVs. Until a federal court or Congress affirmatively adopts a preemptive role for the USDOT, a flurry of sometimes inconsistent and overlapping rules may make the deployment and operation of AVs precarious when crossing state lines. Obviously, industry and the USDOT both have vested interests in this not being the case, but until the Model State Policy is adopted throughout the federal system, stakeholders should be careful to understand both the state and federal rules pertaining to AVs.

As noted, the policy is effective immediately, but will still benefit from a 60-day comment period. It is imperative that interested stakeholders provide comments during this time period to ensure that the Department is able to make fully informed decisions that will allow for innovation to continue.

Following what has quickly become a best practice for innovative technologies, the USDOT plans to update the policy annually, and expects to allow stakeholders and other interested parties to submit comments prior to such updates. Although the policy will likely be updated and improved over the next few years, it seems that the USDOT is expecting the basic tenets of the policy as written to be materially unchanged for the foreseeable future.


**Why Is This Policy Important?**

In announcing the new policy, USDOT Secretary Anthony Foxx noted that the policy will serve as a long-term, flexible framework for the Department and its stakeholders to follow as AV development and deployment accelerates and increases penetration in the transportation sector. The policy touches on all key areas of interest to entities working on these technologies (e.g., software and vehicle design standards, safety performance, data collection and sharing, and privacy and cybersecurity).

Moreover, just as the USDOT appears to be borrowing aspects of the FAA’s current safety regime, notably the SMS, it seems likely that the lessons learned from this policy will implicate the rules and regulations governing other burgeoning technologies (such as UAS). Accordingly, the policy, which explicitly applies only to AVs, could be seen as auguring the federal government’s approach to automated-transportation technologies generally. Similarly, because it believes that widespread federal governance over AV software will facilitate a safer transportation environment, the USDOT very well may believe that a uniform system of governance will benefit the wider transportation network operating throughout the U.S. As software becomes more integral to the proper and safe operation of cars, airplanes, trains and vessels, stakeholders may see similar policies crop up in their particular areas of interest. Thus, even non-traditional AV stakeholders have an interest in commenting on the policy, as it may end up shaping the policy that ends up governing their industry.

**What’s Next?**

The USDOT will consider comments received and, as it deems appropriate, make revisions to the policy within one year. The USDOT also plans to release a new rule before the end of the year that will ensure that all new vehicles, not just AVs, have the necessary technology in place to communicate with each other and that such information is exchanged in a safe and secure manner in order to protect the security of the vehicles as well as the privacy of the individuals therein.