Q&A With Kelly Nantel, ANSI/ASSP Z15.3 Chair

The ANSI/ASSP Z15.3 Subcommittee on Management Practices for the Safe Operation of Partially and Fully Automated Motor Vehicles is developing a technical report. PSJ sat down with the subcommittee chair to learn more.

**PSJ:** What is the primary audience for the technical report? Who will benefit from its guidance?

**Kelly:** Our primary audience is fleet safety professionals. Our goal is to help organizations develop policies, procedures and management processes regarding the selection and use of partially and fully automated vehicles. Technology is advancing at a rapid pace, and although we do not know exactly what the future holds, we wanted to develop some initial guidance based on the information we do have at this point.

**PSJ:** Let’s talk a little about the types of technology the report addresses. There are so many words being used, seemingly interchangeably—terms such as automated, autonomous, self-driving. But these words refer to many different things, isn’t that right?

**Kelly:** Yes, words matter when it comes to this technology. When we talk about partially automated vehicles, this is in reference to vehicles that have automated functions such as acceleration and steering. At the same time, these vehicles require an alert, attentive driver behind the wheel who is monitoring the environment and ready to take over whenever necessary. When we talk about fully automated or autonomous vehicles, these are machines that handle the entirety of the driving task. It’s important for workers to know about the technology in their vehicles and what it does, but also what it doesn’t do.

**PSJ:** While there are certainly risks involved with any technology, these technologies are usually thought to create added safety for drivers and passengers. What are some of the potential benefits of automated vehicles?

**Kelly:** We know that human error accounts for about 94% of all crashes. A fully automated vehicle will not get drowsy, distracted or have an extra glass of champagne before it hits the road. It will not drive at reckless speeds or run red lights. In today’s world, even if you are a safe driver, there is no guarantee that the driver next to you is paying attention. Granted, plenty of work remains for the safe development and deployment of fully automated vehicles on a mass scale, but this type of technology holds incredible promise for its potential to save lives and prevent injuries. In the meantime, as we turn more and more toward partially automated vehicles, remember that you are still your car’s best safety feature.

**PSJ:** On the flip side, what are some of the risks involved with automated vehicles?

**Kelly:** Complacency and confusion are definite risks, particularly when it comes to partially automated vehicles. It is important for organizations and their employees to understand that they still must be alert and attentive at all times even if they are in a partially automated vehicle that can perform highway driving, for example. We sadly already have seen fatal crashes in which drivers of partially automated vehicles reportedly did not heed warnings to take control of the wheel. There also is a risk associated with mixed levels of automation that we anticipate having on our roads for a couple decades or more. Some vehicles will be fully automated, while others may be partially automated or not at all. This could create confusion because human drivers’ behavior can be unpredictable, and it could be difficult for fully automated vehicles to account for that fact.

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PSJ: How soon are we likely to see fully automated vehicles become the norm on U.S. roadways?
Kelly: This is a great question. The technical report does not predict a specific timeframe, and all of this is subject to change, but automakers and tech companies are pushing hard to test fully automated vehicles. They could be available soon as part of ride-share services in certain cities, and more fully automated vehicles could be on the way in the next few years. But it likely will be at least a decade or two, or even more, before they really become the norm. It will take even longer for the U.S. fleet to turn over entirely, or almost entirely, to fully automated vehicles.

PSJ: Some states are preparing for automation on their roadways. What are some factors that states should consider as they prepare?
Kelly: Some of this falls outside the technical report, but states likely will have to determine how they are going to identify and register these vehicles, whether traffic law changes will be needed to accommodate the vehicles, how law enforcement will address new issues related to the vehicles, and how drivers, bicyclists, pedestrians and other road users will be educated about automated vehicles to ensure as safe a transition as possible. Liability is another big question.

PSJ: What are some things that drivers can do to prepare themselves to safely engage with automated vehicles?
Kelly: It sounds obvious, but the best advice for human drivers is that they should stay aware and alert at all times regardless of whether the vehicle next to them is automated or not. Fully automated vehicles, when they hit the roads, will be programmed to obey all traffic laws. They should come to a full stop at stop signs, adhere to speed limits and so on. Human drivers should be aware of these details and know not to expect a rolling stop, a friendly wave to merge into the next lane or other behaviors that are much more common among human drivers.

PSJ: What are some steps that employers should take now to prepare for increased automated vehicle use?
Kelly: Take advantage of the resources that are starting to appear, including this technical report. Although there is some uncertainty as to when and where fully automated vehicles will be available, there is little doubt that they will be on the way at some point in the near future. If you start educating yourself now, it will help with the inevitable transition down the road.