



THE INSURANCE ANGLE

A prime example of just how disruptive autonomous trucks will be to the logistics status quo can be seen by considering how this technology will affect the insurance industry.

In theory, mass deployment of autonomous trucks, driving the roadways with other autonomous vehicles and coordinated by vehicle-to-vehicle (V2V) and vehicle-to-infrastructure (V2I) communication systems, will be much safer and efficient than our current driving model, with human drivers behind the steering wheels.

But no technology is perfect. And, sooner or later, there will be accidents — including major, catastrophic ones. And, at that point, just like today, lawyers and insurance companies will step into the picture and begin to investigate the crash, assign blame and negotiate or adjudicate injuries and awards for any damage done.

When there's a major highway accident today, the first assumption is that human/driver error is to blame. Humans get tired. They make errors in judgment. They lose track of other vehicles in dynamic, fast-changing traffic conditions. They get impatient. They get distracted. Even when drivers involved in an accident are diligent and safe, creative lawyers can sway juries to blame the fleet and driver.

Autonomous vehicle systems are expected to be much more predictable. Gray legal areas related to human factors will be gone, replaced by a wealth of hard sensor data and programmed algorithms. However, figuring out what exactly, went wrong, and how and why a crash occurred means the engineering, manufacturing and maintenance will all have to be scrutinized.

Autonomous vehicles will be equipped with a host of real-time telemetry-capture systems — including multiple cameras — that will present a clear picture of everything that happened up to and during an accident. “What” happened will be clearly documented. “Why” will be the subject of detailed debates between countless “expert” witnesses with both sides trying to assign blame.

If that data shows that the truck was the cause of the accident, then the obvious target for lawyers looking for a big settlement will be the fleet — because some things will never change, after all. And this is where things begin to get

murky, because the fleet is relying on technology developed by other parties to operate its vehicles on public roadways.

Liability cases tend to involve any deep pocket participants, so the automated vehicle companies and partners also will likely be fair game.

This is not to say, however, that fleets will not have some very serious responsibilities to follow in the interest of public safety. Autonomous vehicle systems, like any transportation technology, will require specialized maintenance to ensure that they perform at peak levels at all times.

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Doing so will require a whole host of new tasks for technicians on top of existing requirements like checking tires, lights, powertrain components, etc. In an autonomous future, they'll also have to calibrate and fine-tune sensor arrays, run scans and other diagnostic checks on computer systems, replace electronic control modules, all the way down to making sure that camera lenses and LiDAR arrays are clean and clear of dust and debris.

But what if the truck has been away from its fleet domicile for several days, or even weeks? Who is responsible, in the highly likely instance, a dirty camera lens, for example, is cited as the cause of a crash? The last truck stop where the vehicle was fueled? Because, as I've noted before, it seems to me that truck stops will have to hire human attendants to do everything from fuel autonomous trucks, to perform pre-



and post-trip inspections, double-check cargo securement and — yes — make sure various autonomous sensor arrays are clean, clear and working properly.

But let's suppose that all of the truck's sensors were in good working order, and the crash was caused by another technological glitch — say some scrambled code or some sort of cellular or Wi-Fi failure. Who is responsible for the crash in an instance like that?

Again, the fleet is operating a truck using technological systems developed by someone else. As I sit here and ponder this, a very basic legal question begins to take shape — one that will likely have to be decided in the courts over time: If a truck is under autonomous control, who, exactly, is operating, or driving, that truck?

Clearly a fleet is operating the truck. But it is relying on another party's expertise and technology to do so. Where does blame lie when a clearly established system failure occurs and leads to an accident? Will the law decide that an autonomous system is simply a stand-in for a human driver and that the fleet assumed the risk of failure when it opted to purchase this technology and is therefore liable?

Or will the courts decide that the technology developers — be they OEMs or third-party tech companies — bear

responsibility for insuring their autonomous systems in the event of a failure and accident? Will they be willing to shoulder that responsibility given the vast amounts of settlement money at stake?

Legal finger pointing may become extreme as all the engaged parties in a liability lawsuit try to toss the hot blame potato to each other.

All of these issues are very unclear at the moment and will likely have to be hashed out in court over a long period of time. But it's just one aspect of fleet management that shows how transformative, or disruptive, autonomous trucks will be for our society when they begin to be deployed in large numbers in real-world operations.

About the Author: Jack Roberts is a transportation journalist who has been covering North American commercial vehicles for 25 years and has developed a reputation as a leading authority/futurist concentrating on new trucking technology, including autonomous vehicles, battery-electric trucks and emerging blockchain technology.



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