

Technology Law Analysis

April 11, 2018

ARE WE PREPARED FOR THE DRIVERLESS FUTURE YET?

This article was originally published in the 10th April 2018 edition of



In the wake of the Tempe car crash, road-safety advocates have now called for rules around autonomous vehicles to be tightened rather than loosened.

An autonomous self-driving Uber vehicle recently failed to avoid hitting a 49-year-old woman on a street in Tempe, Arizona, in a first of its kind incident. The fatality comes at a critical juncture for the nascent industry, causing some to question the pace at which the technology is advancing.

Policymakers, law enforcement agencies and judiciary around the world need to brainstorm on how to best regulate and assign liability in such scenarios, as such incidents raise novel and complex issues without legal precedence. Germany has already attempted to clarify rules by enacting a set of regulations in May 2017 requiring a person to remain present in an autonomous vehicle at all times and assigning liability on the manufacturer in case of an accident on autonomous mode.

AI & ETHICS

Autonomous vehicles will no doubt drive themselves, and do much more. They may accurately arrive at your house, ready for your morning commute. They may also detect which groceries you require (from your fridge—or your glucose monitor), and autonomously go fetch some unless you have already subscribed to a quicker drone-enabled grocery delivery system.

The attempts to fully automate such an otherwise lethal technology have given not only inventors but also regulators, academics and journalists much to ponder. By far, the question receiving the most prominent discussion is the “trolley problem”, a longstanding ethical paradox. This is based on an ethical conundrum in a situation where a runaway trolley is hurtling down a railway track towards five people who are tied up and unable to move. You have the option of pulling a lever which diverts the trolley towards a single individual tied to another track, killing him instead of the original five people. The problem then becomes about choice. Do nothing, and the trolley kills five people on the main track. Pull the lever, diverting the trolley on to the side track where it will kill that one person. This problem gets to the heart of some of the oldest debates in moral philosophy.

Machines however do not introspect. A self-driving vehicle executes a “decision” in milliseconds. No ethical considerations are in play. Rather, the decision would result from a set of pre-existing preferences installed by coders. Policymakers will need to think about the road-based equivalent of this track-based trolley problem, deciding whether to and how to code “societal values” into autonomous vehicles.

In August 2017, the German government made it illegal to programme an autonomous vehicle with demographic preferences when faced with the prospect of causing injury. It can only take actions to do least harm to people, and humans take precedence over property. The idea here is to take out the issue of choice and ethical dilemma altogether by having the vehicles mathematically decide which decision would cause least human damage.

ARE DRIVERLESS CARS SAFER?

The fundamental reason for autonomous vehicles having the backing of all major industry players is that it holds the key to a better, safer and cleaner transportation ecosystem and a better human experience. While, statistically, driverless cars appear to be safer than normal cars, one must keep in mind that crash statistics for human-driven cars are compiled from all sorts of driving situations, and on all types of roads and weather conditions. However, much of the data on self-driving cars’ safety comes from only the sunny western states of the US, recorded on unidirectional, multi-lane highways. With time, data on fully automated systems will naturally expand to cover more roads, terrains and geographies. Until such time, statistics on autonomous vehicles will need to be taken with a pinch of salt.

Many cities and states in the US permit the testing of autonomous vehicles on public roads, with varying degrees of licensing and regulation. Boston, for example, requires such vehicles to pass a driving test in a limited area before heading out into the wider city. California requires companies testing autonomous vehicles to provide annual safety reports. Arizona was a particularly attractive environment for autonomous vehicle makers as its streets are in regular grids, the weather is reliably dry and warm, and its regulators have been unusually welcoming. There is legislation, currently in the works in Washington, DC, proposing to exempt autonomous vehicles from certain existing safety

Research Papers

Structuring Platform Investments in India For Foreign Investors

March 31, 2025

India's Oil & Gas Sector— at a Glance?

March 27, 2025

Artificial Intelligence in Healthcare

March 27, 2025

Research Articles

2025 Watchlist: Life Sciences Sector India

April 04, 2025

Re-Evaluating Press Note 3 Of 2020: Should India's Land Borders Still Define Foreign Investment Boundaries?

February 04, 2025

INDIA 2025: The Emerging Powerhouse for Private Equity and M&A Deals

January 15, 2025

Audio

CCI's Deal Value Test

February 22, 2025

Securities Market Regulator's Continued Quest Against “Unfiltered” Financial Advice

December 18, 2024

Digital Lending - Part 1 - What's New with NBFC P2Ps

November 19, 2024

NDA Connect

Connect with us at events, conferences and seminars.

NDA Hotline

Click here to view Hotline archives.

Video

Wyapak Desai speaking on the danger of deepfakes | Legally Speaking with Tarun Nangia | NewsX

standards. However, in the wake of the Tempe car crash, road-safety advocates have now called for rules around autonomous vehicles to be tightened rather than loosened.

THE ROAD AHEAD

The extent to which the Tempe car crash will change attitudes towards autonomous vehicles, or influence the regulation of the industry, depends to a large extent on the culmination of various investigation reports. Having said that, while it is important that regulations do not discourage or become an obstacle in the path of technological advancement, such advancement should not be at the cost of public safety. It is true that self-driving cars don't get tired, angry, frustrated or drunk, but neither can they react to uncertain and ambiguous situations with the same skill or anticipation of an attentive and experienced human driver. This suggests that perhaps the two still need to work together until the technology is rendered seamless and foolproof?

– [Huzefa Tavawalla](#) & [Siddharth Ratho](#)

You can direct your queries or comments to the authors

DISCLAIMER

The contents of this hotline should not be construed as legal opinion. View detailed disclaimer.

This Hotline provides general information existing at the time of preparation. The Hotline is intended as a news update and Nishith Desai Associates neither assumes nor accepts any responsibility for any loss arising to any person acting or refraining from acting as a result of any material contained in this Hotline. It is recommended that professional advice be taken based on the specific facts and circumstances. This Hotline does not substitute the need to refer to the original pronouncements.

This is not a Spam mail. You have received this mail because you have either requested for it or someone must have suggested your name. Since India has no anti-spamming law, we refer to the US directive, which states that a mail cannot be considered Spam if it contains the sender's contact information, which this mail does. In case this mail doesn't concern you, please unsubscribe from mailing list.

April 01, 2025

Vaibhav Parikh, Partner, Nishith Desai Associate on Tech, M&A, and Ease of Doing Business

March 19, 2025

SIAC 2025 Rules: Key changes & Implications

February 18, 2025