

# [Who should be liable for accidents caused by self-driving cars?](https://assignbuster.com/who-should-be-liable-for-accidents-caused-by-self-driving-cars/)

Evaluation of the Automated and Electric Vehicles Act 2018: Who Should be Liable for Accidents Caused by Self-driving Cars?

Self-driving vehicles, which are “ capable of safely completing journeys without the need for a driver in all normally encountered traffic, road and weather conditions” (Great Britain. Department for Transport, 2015, p. 18), are on the verge of becoming reality. Automated vehicles are believed to bring enormous economic, environmental and social advantages to our society; including dramatically decreasing the number of traffic accidents by eliminating the most common source of accidents, human error ( ibid .). According to the survey conducted by the government of the United Kingdom, 86 percent of collisions occurred in 2015 are caused by drivers’ fault (Great Britain. Government Actuary’s Department, 2017). As completely automated cars do not expect involvement of human drivers, it is theoretically possible for fully automated cars to eliminate all traffic accidents resulting from their negligence. In fact, recent research has estimated that even existing safety drive support systems has successfully reduced a total of approximately 40 percent of all passenger-vehicle collisions (Benson et al ., 2018). However, no technology can be absolutely safe. Completely automated vehicles still possibly cause collisions due to various mechanical or software issues; a case in point is a fatal accident caused by a test self-driving car of Uber Technologies Inc. in 2018 (Wakabayashi, 2018). As a result, this new technology has generated a new question of who should be liable for accidents caused by self-driving cars. In answer to this question, the United Kingdom has introduced the Automated and Electric Vehicles Act 2018, which received Royal Assent on 19 July 2018. This essay will argue that, although the approach adopted by the Act is reasonable, an additional measure should be introduced to deal with the potential difficulty of legally proving existence of defects in self-driving cars and claiming for damages against manufacturers. In order to justify this argument, firstly, the Act will be evaluated, secondly, another possible solution will be critically analysed, and finally, the difficulty to claim for damages against manufacturers will be explored.

The feature of the Automated and Electric Vehicles Act 2018 is maintaining the existing “ insurance route” rather than adopting product liability action against manufacturers in the first instance (Parliament. House of Commons, 2018, p. 10). In the United Kingdom, a person is not allowed to drive a car on a public road unless the car is insured in respect of third-party risks (Road Traffic Act 1988). The Act has made it clear that the compulsory motor insurance scheme under the Road Traffic Act 1988 is also applicable to automated cars, and, where an accident is caused by an autonomous vehicle when driving itself on a road, liability for damage caused by the vehicle shall be compensated by the insurer of motor insurance taken out by a driver, even though negligence of a driver is not generally a cause of an accident. On the other hand, if a driver fails to update safety-critical software and an accident occurs as a result of such failure, the driver will be liable for the damage suffered by the victim. Further, this Act also provides that, if and when the amount of insurers’ liability to the injured party in respect of the accident is settled, they have a statutory right to claim against any other person who was liable for the accident, e. g. manufacturers, under existing laws.

It appears that the liability framework established by the Act strikes a reasonable balance between two chief purposes of liability law, which are (i) protecting victims through providing them with appropriate compensation, and (ii) reducing the risk of accidents by incentivising relevant persons to take adequate preventive measures (Lohmann, 2016) on three grounds. Firstly, the Act has introduced the same structure of liability to autonomous cars as that of conventional cars, which enables victims of accidents to be compensated promptly and adequately (Great Britain. Department for Transport, 2018). This approach can be particularly helpful for victims because they will not need to check whether a car which crashed into them is automated or conventional and can obtain compensation quickly from the driver’s insurer as is conventionally done. Because some drivers may want to continue to drive conventional cars (Lohmann, 2016), it is predictable that there will be both conventional cars and automated cars on the public road for the foreseeable future. Should there be different liability systems for conventional cars and automated cars, the process to obtain compensation would be exceedingly complex for victims, especially in cases of multi-vehicle accidents involving both types of vehicles. As it is not victims who will bring automated cars on the public road, it is not fair to place additional burden on victims to cope with such complexity. Secondly, a driver is still possibly held to be directly liable to a victim if he fails to timely install software update; this could incentivise him to update software in a timely manner. Unlike the Act, Marchant and Lindor (2012) have proposed that liability for crashes caused by autonomous vehicles will be assumed by manufacturers thereof under product liability laws. This argument has also been supported by several researchers (e. g. Gurney, 2013; Goodrich, 2013). However, it seems that this proposal has not appropriately taken into account the fact there will still be the responsibility which should be assigned to drivers such as software updating. Finally, the insurer, after compensating the victim, will have a right to claim against a manufacturer if there is a “ defect” in the car (Consumer Protection Act 1987. s. 2(1)). As persons who can improve safety of autonomous vehicle best are manufacturers of those vehicles, by imposing liability on manufacturers, they should also be incentivised to produce safer cars to mitigate their liability (Schellekens, 2018). Accordingly, through allocating liability for accidents involving automated vehicles to insurers, drivers and manufacturers, the Act seems to successfully achieve the main purposes of liability law in this new field.

On the other hand, it is suggested to release all parties including drivers and manufacturers from liabilities regarding accidents involving self-driving cars and to create a national insurance fund to compensate for all damages suffered by victims (Schroll, 2015). This suggestion is mainly based on an argument that, if car manufacturers face a high risk of being claimed for a significant amount of damages under product liability laws, the manufacturers might become reluctant to introduce automated cars to the market until they are fully convinced that their cars are absolutely safe, even though completely autonomous vehicles may offer considerable benefits to our society ( ibid .). Kalra et al . (2009) has pointed out the same argument as a reason why manufacturers’ liability for the accidents should be limited. This argument, however, seems unconvincing. As manufacturers have already invested considerable time and resources in the development of autonomous cars, it is doubtful that imposing liability on manufacturers will actually be a serious obstacle for innovation (Schellekens, 2018). The fact that major manufacturers including BMW (DeMattia, 2016), Volvo, Google and Mercedes (Gorzelany, 2015) have expressed that they will accept all liability if their autonomous cars cause crashes may indicate that manufacturers’ liability does not have a chilling effect on innovation of self-driving cars. Moreover, considering that manufacturers may generate significant amount of profits from automated cars market, which is expected to achieve a scale of 65. 3 billion dollars by 2027 (Market Research Future, 2016), it does not seem fair to deny their liability for the accidents. It is necessary to hold both drivers and manufacturers liable for accidents of autonomous cars to provide them with incentive to take appropriate preventive measures.

Although it has been demonstrated that the Act seems to offer reasonable framework to achieve the two main purpose of liability law, in order to strongly incentivise manufacturers to improve safety of autonomous cars, insurers’ claims against manufacturers should be effective and practicable (Schellekens, 2018). Whether a product liability action will be successful is essentially dependent on proof of the existence of a “ defect” (Consumer Protection Act 1987. s. 2(1)) in the product (Cardwell, 1987), which is often difficult for a claimant who normally do not have enough knowledge of mechanics of the product. In fact, product liability actions are uncommon and “ unpopular” with claimants in the European Union (Schellekens, 2018; p. 317). Especially, considering that accidents involving self-driving cars will mostly be resulted from malfunction of software ( ibid .), proving a defect in such software might be exceedingly difficult for the insurers because they are generally not acquainted with software analysis and cannot collect enough data to find a defect in software without cooperation of manufacturers. This might be an obstacle for the insurers to bring actions against the manufacturers and could be protection for manufacturers, which could reduce the effect to incentivise manufacturers to take appropriate preventive measures. Therefore, alongside the Act, a specific measure to resolve such difficulty should be introduced so that the Act can serve for the purposes of liability law better. This measure can be, for example, shifting a burden of proof regarding the existence of a defect to manufacturers or imposing an obligation on manufacturers to submit relevant software data to the insurers.

To sum up, this essay has evaluated Autonomous and Electric Vehicles Act 2018 based on two main purposes of liability law, which refer to protecting victims and incentivising potential perpetrators to take preventive measures, and then critically analysed another possible answer to the question of who should be liable for accidents involving autonomous cars, which suggests to release all parties from all liability. In general, this essay has argued that the liability framework for crashes involving self-driving vehicles established by the Autonomous and Electric Vehicles Act 2018 is reasonable to achieve the purposes of liability law; however, whether this framework actually works well could depend on effectiveness and practicability of actions of the insurers against the manufacturers. Therefore, the difficulty of legally proving the existence of a defect in a self-driving vehicle, which could constitute a limiting factor on such actions, should be addressed to make such framework more effective.

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Reflective Report

I have chosen Schroll (2015) as one of references of my essay. I found this article incidentally when I was looking around a number of sources related to my topic through UCL database.

It has suggested a national insurance scheme for accidents involving self-driving cars and argued that no one should be directly liable to victims of the accidents. I found this idea fairly new and completely different from an idea incorporated in the Autonomous and Electric Vehicles Act 2018, which is a topic of this essay. Additionally, I could find other reliable articles and books related to the topic from its footnotes. I believe that my argument in the essay has become more convincing by responding to this idea.

By reading this article, I realised that, in order to my own argument stronger, it is particularly important to find convincing counterargument and response to it. I will continue to try to find counterargument which is of high quality in my future study.