

Automated Lane Keeping Systems—Time to relax, rewind and...expect the unexpected?

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Personal Injury analysis: Scarlett Milligan, barrister specialising in Personal Injury (PI) at Temple Garden Chambers, discusses the latest developments in relation to autonomous vehicles, particularly the government's consultation on Automated Lane Keeping Systems on Great British motorways, and considers how PI practitioners should prepare for claims involving autonomous vehicles.

Introduction

At the time of writing (August 2020), the government's latest data (see: [Transport use during the coronavirus \(COVID-19\) pandemic](#)) indicates that while the use of cars, light commercial vehicles, and heavy goods vehicles (HGVs) has risen (and on some occasions matched pre-lockdown levels), the use of the National Rail network, buses, and the London Tube were still significantly lower than pre-lockdown levels. While many people remain working at home, on furlough, or unemployed, it is fair to say that there remains a certain amount of apprehension around using public transport.

Thus, as people increasingly return to their workplaces, there is a risk that many will commute via car or taxi rather than public transport, thereby increasing road congestion and emissions. It therefore feels particularly pertinent that the government's Centre for Connected and Autonomous Vehicles (CCAV) has announced its call for evidence on Automated Lane Keeping Systems (ALKS) (see: [Safe use of Automated Lane Keeping System on GB motorways: call for evidence](#)), which will be a major step forward in the world of electric, automated and driverless technologies. It is said that this technology may be available in cars from spring 2021 (see: [UK government announces Automated Lane Keeping System call for evidence](#)). This article focuses on some of the legal and practical challenges posed by ALKS; however, a word of caution is necessary: this article has been written during a period of consultation, and in an area which has provoked strong views and responses across different industries. The prospect of substantial change in a short space of time is therefore a very real one.

Overview of ALKS

This short article is not the appropriate place to describe all of the technical features, benefits and drawbacks of ALKS. The CCAV's call for evidence provides a comprehensive and helpful summary of ALKS, and the UN's Automated Lane Keeping System (ALKS) Regulation (see: [Proposal for a new UN Regulation on uniform provisions concerning the approval of vehicles with regards to Automated Lane Keeping System](#)) is essential further reading for enthusiasts or specialists in this area.

The CCAV's definition of ALKS (taken largely from the UN's ALKS Regulation) is as follows:

'Automated Lane Keeping System (ALKS)—A system for low speed application which is activated by the driver and which keeps the vehicle within its lane for travelling speed of 60 km/h or less by controlling the lateral and longitudinal movements of the vehicle for extended periods without the need for further driver input.' (see p 9 of the [consultation document](#))

For the purposes of this article, key features and characteristics of ALKS include:

- being designed for 'situations of heavy, slow moving traffic on a motorway' (see p 15 of the [consultation document](#))
- their use is restricted to roads where pedestrians and cyclists are prohibited, which suggests that the technology may not be sufficiently sophisticated at present to detect and protect such persons

- the ability of the system to request that the driver take over the driving (known as a ‘transition demand’) in the event that the system cannot perform the driving task or if there is a severe vehicle or ALKS failure
- the ability of the driver to take over the driving even in the absence of the system initiating a transition demand
- the requirement that all ALKS must be capable of, and programmed to, bring the vehicle to a stop in the event that the driver does not respond to the transition demand

The practical and legal problems associated with transitions between ALKS and drivers

There is a serious concern that drivers who have activated their ALKS will become relaxed and disengaged from the world around them (possibly finding themselves a bit sleepy as they watch a rather humdrum film on their infotainment system) before being required to rapidly adjust to the tasks and responsibilities of driving. That they may have to do so is an inherently dangerous situation. It is worth noting that the UN ALKS Regulation specifies, at Reg 5.1.4 that ‘A transition demand shall not endanger the safety of the vehicle occupants or other road users’. This would appear to rule out transitions in the middle of an emergency brake, for example (which is also made explicit by Reg 6.2.5.3). However, it seems impossible to eradicate the risk that a transition (particularly one instigated by a serious vehicle or ALKS failure) would endanger a driver who was unable to become fully alert and ready to take on their driving responsibilities within ten seconds. Note also Reg 5.4.4.1.1 of the UN ALKS Regulation which acknowledges that ‘In case of a severe ALKS or vehicle failure the ALKS may no longer be capable of fulfilling the requirements of this Regulation, but it shall aim at enabling a safe transition of control back to the driver’. It is clear even at this preliminary stage that not all transitions will be without incident.

There is an ongoing debate as to whether drivers would be better prepared for these incidents if they were required by law to continually monitor their vehicle and the road conditions around them. Some argue that this awareness would enhance their ability to adopt the driving role at short notice and therefore conduct a transition successfully, whereas others have suggested (as the call for evidence does—see p 32, para 5.3 of the [consultation document](#)) that enabling drivers to perform other activities (including using infotainment systems) will keep them alert and help prevent them becoming sleepy. It should be made clear here that a driver who actually fell asleep should be detected by the ALKS system as being ‘unavailable’, resulting in a warning and a possible transition demand. For more detail see UN ALKS Regulation 6.1.3.1, which provides examples of driver monitoring, including eye blinking, eye closure and body movement; however, a tired and sleepy driver who manages to stave off sleep would nonetheless pose a safety risk for a short-notice transition demand.

The CCAV’s call for evidence gives an overwhelming impression that drivers need not monitor their vehicles while ALKS is engaged, and that drivers will be able to ‘disengage from the driving task’ (see p 19, para 2.26 of the [consultation document](#)) to enjoy the benefits of the infotainment system. This is striking, and does not necessarily follow from the UN ALKS Regulation; while the Regulations specify minimum safety features to ensure that driver attention and availability is maintained, there is nothing to indicate that drivers should no longer be monitoring their vehicle, or disengaging from the world around them. Yet the call for evidence treats this as a foregone conclusion.

The call for evidence even goes as far as to propose an ALKS exception to Rule 150 of the [Highway Code](#) (see p 29, para 4.10–4.12 of the [consultation document](#)), which mandates that drivers must exercise full and proper control of their vehicle at all times, and should not rely on driver assistance systems, or allow them to reduce their concentration levels. This is, to a degree, difficult to reconcile with the subsequent indication that the Highway Code will be ‘changed so that drivers of ALKS must be alert to a transition demand’ (see pp 30–31, para 4.17 of the [consultation document](#)); drivers are likely to ‘switch off’ and relax, or remain alert to the road conditions around them. The middle ground is, from a practical and realistic viewpoint, hard to envisage.

How will ALKS impact claims for personal injury and property damage?

The introduction of the [Automated and Electric Vehicles Act 2018 \(AEVA 2018\)](#) was a pivotal moment for the regulation of automated and driverless cars. Crucially, it created a swift remedy and cause of action against an insurer of the automated vehicle, provided that the accident was 'caused by an automated vehicle when driving itself on a road or other public place' (see [AEVA 2018, s 2\(1\)](#)). However, [AEVA 2018, s 8\(1\)](#) definition of a vehicle 'driving itself' requires the automated vehicle to be 'operating in a mode in which it is not being controlled, and does not need to be monitored, by an individual'. [AEVA 2018](#) therefore appears to be aimed at more advanced automated and driverless systems; indeed, that was the impression given by Parliament during the Bill's readings (see, for example: [Baroness Sugg's letter following the bill's second reading on 20 February 2018](#)).

Despite this, the CCAV's call for evidence, in seemingly rejecting the need for the monitoring of ALKS vehicles, indicates that Society of Automotive Engineers (SAE) Level 3 (see the helpful pictogram on [SAE Standards News: J3016 automated-driving graphic update](#)) ALKS vehicles may be covered by the [AEVA 2018](#) provisions. That said, para 5.5 of the [consultation document](#) does tentatively acknowledge that [AEVA 2018](#) may exclude ALKS on the basis that the vehicles will require some monitoring. This is the author's personal view, which is predicated on the view that driver monitoring will be crucial in systems which are, by design, not intended to control a large portion of the driving or be able to respond to a wide range of traffic-related incidents.

In the event that ALKS vehicles were to fall outside the scope of [AEVA 2018](#), those who found themselves injured or having suffered property damage following a collision with an ALKS vehicle would, as the law currently stands, need to pursue either a negligence claim against the ALKS driver, or a product liability claim against the ALKS vehicle in the event it malfunctioned. It may even be necessary to issue both of these claims, particularly where it is not obvious whether the driver or the vehicle was at fault, and where pre-action correspondence or pre-action disclosure of black box data has not resolved the issue swiftly.

Even if ALKS vehicles came within [AEVA 2018](#) provisions, the [AEVA 2018, s 2\(1\)](#) requirement that the accident be 'caused by' the automated vehicle could again leave a victim with no choice but to issue multiple claims if they have not been able to ascertain whether the ALKS system or the driver was at fault.

Some cases may clearly point in the direction of driver error, ALKS error, or a vehicle error. However, there will no doubt be grey areas which the courts will need to resolve. For example, is it correct to classify an accident as being 'caused by' an ALKS system which transitioned normally, but was not handled properly by a driver due to their 'fight or flight' reaction? Would the driver be negligent in this scenario, or would their conduct be considered a reasonable response in the agony of the moment?

Victims, insurance companies and courts will also need to grapple with significant gaps within our product liability laws, which have not been resolved by [AEVA 2018](#). These are outside the scope of this short article.

It is therefore clear that while the government is intent on maintaining 2021 as the delivery date for automated vehicle technologies in the UK, the arrival of this technology will not be without its complications, both legal and practical.

Interviewed by Sabina Habib.