# Regulation of Automated Road Vehicles in Britain: The Automated and Electric Vehicles Act 2018

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It is a privilege to be invited to speak to the interdisciplinary institute for automated systems[2]. I am a British barrister whose undergraduate degree was in literature, who qualified in law as a postgraduate, who practises in cases dependent upon experts in medicine and engineering and who lectures and researches at the Centre for Transport Studies at Imperial College in London. So a multidisciplinary approach is close to my heart. It is a pleasure to speak to you today.

## *Background: British and German approaches to Civil liability for Road Traffic Accidents*

The birth of the motor car can be traced to the Benz car of 1885[3]. The first motor car was a marvel in a century already crowded by innovation. This was also the age of electric lighting and of the telegraph. In electricity, the "battle of the currents" between Westinghouse and Edison was starting. In motor vehicles, another technological battle would soon be fought: the battle of the fuels, between electricity and oil. The internal combustion engine prevailed then, but we are now entering the second age of electric vehicles.

Since the late nineteenth century, countries have legislated for motor cars in various ways. Germany and Britain adopted different approaches, though some elements (for example, compulsory motor insurance) became common to both systems.

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[1] This lecture does not represent the views of any other barrister at Temple Garden Chambers, is not intended as legal advice in any particular case and should not be relied upon as such. Alex is online at https://tgchambers.com/member-profile/alex-glassbrook/ and on Linked In at https://www.linkedin.com/in/alex-glassbrook/

[2] https://www.rifas.de

[3] https://mercedes-benz-publicarchive.com/marsClassic/en/instance/ko/Benz-patent-motor-car-Model-1-1885---1886.xhtml?oid=4376&relId=1001

I will not give an account today of all of the differences between German and British road traffic regulation. I will concentrate upon civil liability for automated vehicle accidents, because that is where the law of automated vehicles has started to take shape (notably with the German Road Traffic Act as amended on 16 June 2017[4] and the British Automated and Electric Vehicles Act 2018, enacted on 19 July 2018[5] and brought into force on 21 April 2021[6]).

I will not give a detailed account of German law, but will go into detail in relation to the law of England and Wales.

For brevity, I will use the term "British" law, but it is important to note that there are legal differences between England and Wales, Scotland and Northern Ireland. I am a member of the Bar of England and Wales, so speak to the law in those jurisdictions. There are differences between English and Welsh laws. Legislating for vehicle safety standards and road traffic offences, for example, are matters reserved to the parliament at Westminster, but some aspects of road transport law (for example, licensing of taxis) are devolved to the Welsh Senedd[7]. So future transport law might take different paths, on some matters, in England and Wales respectively.

I return to our two broader perspectives. In drawing some of the contrasts between the British and German systems, I am especially indebted to Professor Sebastian Lohsse, for his essay *The Development of Traffic Liability in Germany*, which is the fourth chapter in the volume *The Development of Traffic Liability* published by Cambridge University Press in 2010. That book is volume 5 in the Cambridge series *Comparative Studies in the Development of the Law of Torts in Europe* and was edited by Professor Wolfgang Ernst.

Professor Lohsse wrote, in a phrase to which I shall return, that:

> "legislation dealing with the specific problems of a particular time has always been thought to be the proper means of responding to the needs of the Industrial Revolution"

[4] https://www.bmvi.de/SharedDocs/EN/Documents/DG/eight-act-amending-the-road-traffic-act.pdf?__blob=publicationFile

[5] https://www.legislation.gov.uk/ukpga/2018/18/contents/enacted

[6] By the Automated and Electric Vehicles Act 2018 (Commencement No.1) Regulations 2021, Statutory Instrument 2021/396

[7] Government of Wales Act 2006, section 108A ("Legislative competence" of the Senedd) and Schedule 7A(2), para.1 ("Reservations"), Head E (Transport). The English and Welsh laws quoted in this lecture are as they were on 17 June 2021.

The industrial revolution to which he referred was that of the nineteenth century. In particular, he describes how the "true strict liability" which emerged in Germany in relation to railway accidents shaped the development of the German system of road traffic accident law, which held a custodian of a vehicle liable for all but inevitable accidents and was, in his words:

> "modelled on strict liability, yet incorporating – however strict the notion of inevitable accidents was interpreted – elements of fault"[8]

That word – "fault" – has long been the insoluble problem of road traffic accident law. The German and British legal systems approach fault from different directions. We might generalise by saying that:

- the **German legal approach** has been to ensure the compensation of the victim, by **supposing liability unless the custodian of a vehicle could prove a narrow defence of inevitable accident**;

and, by contrast, that:

- the **British legal approach** has been to place the **burden of proving fault by the driver upon the victim**, and to **refute a "counsel of perfection" in driving** (as the Court of Appeal said, in the 2005 case of *Sam v Atkins*[9]).

**But those are generalisations**. When we examine the situation more closely, we see that the opposing argument has appeared in both national systems. As Professor Lohsse noted, the debate in Germany almost a century ago as to "whether the regimes of liability in the areas of railway, road and air traffic should be harmonised" generated **arguments** including (from "those representing the automobile associations' interests") **that the 'nearly strict' liability of the custodian of a vehicle, provided by the 1909 Motor Vehicle Act, should be repealed**. In his words:

> "They argued that, due to the technical improvements motor vehicles had undergone in the meantime, and due to the fact that motor vehicles were now socially accepted, any liability other than fault liability was no longer justified."

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[8] *The Development of Traffic Liability in Germany* by Sebastian Lohsse, in *The Development of Traffic Liability*, edited by Wolfgang Ernst (Cambridge, 2010, paperback edition 2014).
[9] [2005] EWCA Civ 1452; [2006] RTR 14

But that argument failed, and the nearly strict liability position remained in German law.

In Britain, language implying a nearly strict liability has occasionally surfaced. In ***Nettleship v Weston***[10], the **1971 Court of Appeal** case which established a single, immutable standard of care regardless of the experience of the driver, **Lord Denning** rationalised a single standard of care by reference to the existence of a compulsory motor insurance scheme which would ensure payment of compensation, regardless of the financial means of the liable driver. Those two aspects – fault and insurance – might be regarded as conceptually separate. But Lord Denning elided the two, and even went on to challenge fault as the basis of liability. Lord Denning said that:

> **"The high standard thus imposed by the judges is, I believe, largely the result of the policy of the Road Traffic Acts. Parliament requires every driver to be insured against third party risks. The reason is so that a person injured by a motor car should not be left to bear the loss on his own, but should be compensated out of the insurance fund. The fund is better able to bear it than he can. But the injured person is only able to recover if the driver is liable in law. So the judges see to it that he is liable, unless he can prove care and skill of a high standard […]. Thus we are, in this branch of the law, moving away from the concept: "No liability without fault." We are beginning to apply the test: "On whom should the risk fall? " Morally the learner driver is not at fault; but legally she is liable to be because she is insured and the risk should fall on her."**

And, in **2002 and 2003, the Court of Appeal** approached the apportionment of fault between a pedestrian and the driver of a vehicle in these terms

> **"The court "has consistently imposed upon the drivers of cars a high burden to reflect the fact that the car is potentially a dangerous weapon""**[11]

So, while Germany and Britain approach liability for road traffic accidents from **different legal directions**, they **do not approach the question of fault from a great distance apart**. Fault features in both systems (more prominently in Britain), and there is in both places a weighty concern for the safety of the victim (in Germany encoded in the "near-strict" approach of the legislation; in Britain written into the common law by judicial decisions).

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[10] [1971] 2 QB 691 at 700

[11] *Lunt v Khelifa* [2002] EWCA Civ 801, para.20; *Eagle v Chambers* [2003] EWCA Civ 1107, [2004] RTR 9, para.16.

Both of our countries are now experiencing another transport revolution. That movement – like its predecessor – presents both a new technology and the consequent need to reconsider liability, the part of fault, and how courts will decide responsibility for automated vehicle accidents.

For reasons of time, I will not contrast the provisions of the British statute with those of the German Road Traffic Act, which is undergoing further amendment to accommodate automated vehicles. I would be glad to discuss those points in the question and answer session after the event. I will go into detail in relation to the British law.

### *The Automated and Electric Vehicles Act 2018*

The Automated and Electric Vehicles Act 2018 is best viewed, at least in the first instance, as part of British motor insurance law, rather than as an Act defining liability law. It affects liability questions, by providing a particular scheme for litigation arising from an automated vehicle accident. It allows a direct action against the insurer of an automated vehicle. But it does not *explicitly* alter principles of liability. It does not use the phrase 'strict liability', for example. And it expressly adopts statutory law relating to contributory negligence.

A significant question, however, is whether the 2018 Act might alter the principles of fault liability in Britain, by its practical effects. In particular, might its focus upon the "cause" of an accident, and the lesser concentration upon fault, move British vehicle liability law towards near-strict liability? The underlying question is: how will judges interpret the Act on the facts of real AV cases, when they happen?

The Act works in this way:

Upon its enactment in July 2018, Part 1 of the Automated and Electric Vehicles Act 2018 extended third-party compulsory motor insurance, for a driverless future. As the House of Commons library briefing paper on the Act put it, in August 2018:

> "The application of 'intelligence' to cars is gathering pace and there is a strong push by manufacturers to develop automated vehicles which will drive themselves. Currently, insurance law is driver-centric: all (human) drivers have to have insurance in order to provide compensation for third parties for personal injury or property damage due to a driving related incident. The Government's view is that such principles need to be extended to cover automated vehicles when the car is the driver and the 'driver' is sometimes a passenger. **The intention behind the legislation is to emphasise that if**

**there is an insurance 'event' (accident) the compensation route for the individual remains within the motor insurance settlement framework, rather than through a product liability framework against a manufacturer**"[12].

The 2018 Act provides this by a direct action against the insurer of an automated vehicle under Section 2(1), which provides as follows:

> ***"2 Liability of insurers etc where accident caused by automated vehicle***
>
> **(1) Where -**
>
> **(a) an accident is caused by an automated vehicle when driving itself on a road or other public place in Great Britain,**
>
> **(b) the vehicle is insured at the time of the accident, and**
>
> **(c) an insured person or any other person suffers damage as a result of the accident,**
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> **the insurer is liable for that damage."**

The policy behind that direct liability was the avoidance of complex product liability claims in road traffic cases involving AVs, whose arrival was thought to be "gathering pace". As the House of Commons library paper put it:

> "The key policy point in this section is that following a claims 'event' the process follows the insurance route – as now – rather than becoming a 'consumer-manufacturer' product liability action, which is inevitably longer and more costly."[13]

Under the 2018 Act, the insurer is[14] liable to the victim, if Section 2 is satisfied, then (after the amount due to the victim has been settled) **the insurer has the choice of claiming against any other person liable to the victim, under section 5** (akin to a contribution claim, though the right under the Civil Liability (Contribution) Act 1978 does not apply[15]). **The insurer has defences including contributory negligence (under section 3** of the 2018 Act) and **can exclude or limit cover in limited circumstances relating to non-installation or modification of software (under section 4)**.

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[12] House of Commons library briefing paper CBP 8118, *Automated and Electric Vehicles Act 2018*, 15 August 2018, page 3, at https://commonslibrary.parliament.uk/research-briefings/cbp-8118/

[13] House of Commons library briefing paper CBP 8118 (above) at page 10.

[14] I use the present tense because the 2018 Act is in force (from 21 April 2021), though with the practical limitation that the Secretary of State has not yet (at the time of writing) published under section 1 the list of automated vehicles to which it applies.

[15] AEV Act 2018 section 6(5)

The 2018 Act sought to avoid complex and expensive product liability claims becoming a feature of road traffic accident claims by primary victims. Questions remained, however. In particular, there was the difficult question of when the Act would come into force. The 2018 Act legislated for a future technology. How to know when that technology had arrived? After much debate – informed to a large extent by discussion of the levels of vehicle automation – **parliament defined "automated" vehicles** (in section 1(1), cited in sections 1(4) and 8(2)) **as**:

> **"all motor vehicles that—**
>
> **(a) are in the Secretary of State's opinion designed or adapted to be capable, in at least some circumstances or situations, of safely driving themselves, and**
>
> **(b) may lawfully be used when driving themselves, in at least some circumstances or situations, on roads or other public places in Great Britain."**

However, during debate on the Bill, parliament had also elaborated upon the definition, adding a refinement which was enacted within the **"Interpretation" section of Part 1 of the Act, at section 8(1)(a):**

> **"(1) For the purposes of this Part—**
>
> > **(a) a vehicle is "driving itself" if it is operating in a mode in which it is not being controlled, and does not need to be monitored, by an individual;"**

It is that refinement of the definition of "automated vehicle" – "does not need to be monitored" – which has become a focal point of debate over the place within British motor insurance law of the **Automated Lane Keeping System (ALKS)**. As you know, ALKS is a system which steers and controls vehicle speed in lane for extended periods on motorways at speeds of 60 km/h (37 mph) or less. International regulation has been available since June 2020 (in the United Nations Economic Commission for Europe regulation[16]). But whether or not ALKS needs to be monitored by the user of the vehicle (in current, everyday language, the driver) is a point of deep controversy. Thatcham Research (the automotive research centre of the British insurance industry) has long urged the government not to classify a vehicle with ALKS as automated under the 2018 Act, citing "some concerning scenarios where ALKS may not operate safely without the driver intervening"[17].

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[16] UNECE article, *UN Regulation on Automated Lane Keeping Systems is milestone for safe introduction of automated vehicles in traffic,* 24 June 2020, at https://unece.org/transport/press/un-regulation-automated-lane-keeping-systems-milestone-safe-introduction-automated

[17] Thatcham Research article 23 October 2020, revised 26 March 2021, at https://www.thatcham.org/thatcham-research-abi-urge-govt-to-revise-alks-plans/.

On **21 April 2021, Part 1 of the AEV Act 2018 was brought into force**[18]. However, **no list of automated vehicles under section 1** of the Act was then published by the Secretary of State.

A week later, on 28 April 2021, the British government's Centre for Connected and Autonomous Vehicles (CCAV) published its paper summarising the responses to its consultation on the question of regulation of ALKS, and described its proposed way ahead[19]. It took a different path to that recommended by Thatcham Research. In that paper, **CCAV announced that the government:**

> **"expects that vehicles fitted with ALKS for use on GB roads will be automated vehicles under the Automated & Electric Vehicles Act 2018 …. However, rather than list all vehicles fitted with ALKS by default, individual models will be listed after they have received whole vehicle type approval (WVTA). This will enable the Secretary of State to review evidence that may have come to light before the formal decision as to whether to list the vehicle model is made." (page 41)**.

and CCAV stated that:

> **"Since no automated vehicle will yet have been listed upon commencement of AEVA, we will not be publishing the list." (page 42).**

So, the government (the Secretary of State for Transport) expects that a vehicle with ALKS will, if when such a vehicle receives whole vehicle type approval (by the Vehicle Certification Agency), be listed as an automated vehicle.

To summarise: **the Automated and Electric Vehicles Act 2018**:

- by focusing upon "causation" of an accident by a vehicle, and imposing primary liability upon an insurer, arguably takes British law further towards the **nearly strict tradition** of German road traffic liability law, signs of which have already appeared in British law
- is **in force** (as of 21 April 2021), but
- (as at the time of writing) **awaits the Secretary of State's identification of the vehicles to which it will apply, by the section 1 list. ALKS is likely to be the trigger** of that list, and of practical activation of the Act.

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[18] By the Automated and Electric Vehicles Act 2018 (Commencement No.1) Regulations 2021, Statutory Instrument 2021/396

[19] CCAV document *Safe Use of Automated Lane Keeping System (ALKS): Summary of Responses and Next Steps. Moving Britain Ahead* published on 28 April 2021, at https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/980742/safe-use-of-automated-lane-keeping-system-alks-summary-of-responses-and-next-steps.pdf.

***Conclusion***

I return to Professor Lohsse's comment in 2010, in the context of German traffic liability law, that:

> **"legislation dealing with the specific problems of a particular time has always been thought to be the proper means of responding to the needs of the Industrial Revolution"**

The wisdom of the point is demonstrated by the differences between the German and British approaches to regulation of motor vehicles. But, as I have noted, there is not a great distance between those different approaches. They are both strongly attracted to the polar point: who bears responsibility for innovation?

For our purpose, the first innovation was the invention of the motor car. Our current age of innovation – in which the internet has spread to objects, including vehicles – has been described as a further industrial revolution. The proper means of responding to that revolution through legislation is the subject of fulsome debate, in both of our countries and elsewhere.

Later this year, the Law Commissions of England, Wales and Scotland will conclude their three-year programme on legal reforms required by automated vehicles. The British government has recently indicated its direction on regulation of new technologies: a group of Conservative party members of parliament has published a paper describing a "new framework of regulation for competitiveness"[20], proposing that the common law be used as a means of providing "agile" and "adaptive"[21] regulation, to promote innovation.

Whether that essentially commercial aspiration correctly understands the role of the courts deciding liability cases remains to be seen. Experience bears out the maxim that each case depends upon its own facts. Each case is determined by independent judicial application of the law to those facts.

But there is a much more important purpose to legislation than commerciality. The Law Commissions' recommendations for near-future regulation of automated vehicles in the fields of

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[20] *Taskforce on Innovation, Growth and Regulatory Reform* by Rt Hon Sir Iain Duncan Smith MP, Rt Hon Theresa Villiers MP and George Freeman MP, May 2021, Page 7, §15, at https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/994125/FINAL_TIGRR_REPORT__1_.pdf

[21] Ibid, page 15, §§54, 55.

criminal and public law include the establishment of a safety regulator and continuous safety monitoring of automated vehicles while they are in use. Those are necessary reforms. They narrow the distance between national approaches to traffic regulation once more.

Commercial policy is a valid, significant motivator of legislative direction. But the primary concern must always be public safety. That is the particular and overriding responsibility of legislators in this field.

Legislating for safety in vehicle technologies is an international effort, as the work of UNECE demonstrates. Professor Wolfgang Ernst noted, in his introduction to *The Development of Traffic Liability* in 2010, the place of America as "a society especially shaped by the automobile", and that the study of traffic liability law was "always going to [give] a pivotal role" to American law. His concluding phrase was resonant, even when the possibility of autonomous vehicles and their legal consequences was only beginning to be discussed. But it is especially important now. As Professor Ernst wrote:

> **"Our present law is the legacy not just of European legal history in the twentieth century, but also of Western legal history as a whole."**

That reflects both the ubiquity of cars, and the essential, international character of regulation.

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