



accidents don't have to happen

Automated Vehicles

RoSPA's Response to the Law Commission's
Consultation Paper

Date: January 2019



Response to Law Commission Consultation Paper, Automated Vehicles

Introduction

The Centre for Connected and Autonomous Vehicles (CCAV) has asked the Law Commission of England and Wales and the Scottish Law Commission to undertake a far-reaching review of the legal framework for automated vehicles, and their use as part of public transport networks and on-demand passenger services.

The term automated vehicles refers to vehicles that are capable of driving themselves without being controlled or monitored by an individual for at least part of a journey.

This is the response of the Royal Society for the Prevention of Accidents (RoSPA) to the Law Commission consultation on automated vehicles. It has been produced following consultation with RoSPA's National Road Safety Committee.



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About you

What is your name?

Rebecca Needham.

What is the name of your organisation?

The Royal Society for the Prevention of Accidents (RoSPA).

Are you responding to this consultation in a personal capacity or on behalf of your organisation?

On behalf of RoSPA. This response has been produced following consultation with RoSPA's National Road Safety Committee.

If you want the information that you provide in response to this consultation to be treated as confidential, please explain to us why you regard the information as confidential. As explained in our privacy notice, we will take full account of your explanation but cannot give an assurance that confidentiality can be maintained in all circumstances.

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Human factors

Question 1

Do you agree that:

(1) All vehicles which "drive themselves" within the meaning of the Automated and Electric Vehicles Act 2018 should have a user-in-charge in a position to operate the controls, unless the vehicle is specifically authorised as able to function safely without one?

RoSPA Response

RoSPA agree that all vehicles which "drive themselves" should have a user-in-charge who is in a position to operate the controls, unless the vehicle is specifically authorised as able to function safely without one. This is for both safety and efficiency of the road network.

In some situations, intervention by a user-in-charge may be needed to avoid a collision. The user-in-charge may also be called upon in some situations to take over if the automated vehicle comes to a stop. This intervention would be needed to avoid traffic congestion and to allow the road network to continue running efficiently.

(2) The user-in-charge:

(a) must be qualified and fit to drive;

(b) would not be a driver for purposes of civil and criminal law while the automated driving system is engaged; but

(c) would assume the responsibilities of a driver after confirming that they are taking over the controls, subject to the exception in (3) below?

RoSPA Response

RoSPA strongly agree that the user-in-charge must be qualified and fit to drive in case they are called upon to intervene. This means the user-in-charge must have a full driving licence, be insured to drive the vehicle and not be impaired by drink or drugs. Any driver who requires glasses to drive must also have these to hand and wear them when taking over control of the vehicle.

RoSPA also agree that while the automated driving system is engaged, the user-in-charge would not be the driver for the purposes of criminal and civil law. When the automated system is engaged, the user-in-charge is not in control of the speed or direction of travel of the vehicle. Instead, when the system is engaged, the insurer and manufacturer should be liable for any damage.

Finally, RoSPA agree that the user-in-charge assumes the responsibilities of a driver after confirming they are taking over the controls, as they are then in control of the speed and direction of travel of the vehicle. They are then subject to the usual laws of driving under criminal and civil law, such as not engaging in distracting activities such as using a hand-held mobile phone. To make it clear who is driving, the automated driving system should follow an 'offer and confirmation' system, as suggested by the Association for British Insurers. This



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means that takeover (meaning that the usual responsibilities of driving resume) is only effective upon confirmation that the user in charge will take over the controls.

(3) If the user-in-charge takes control to mitigate a risk of accident caused by the automated driving system, the vehicle should still be considered to be driving itself if the user-in-charge fails to prevent the accident.

RoSPA Response

In the US, the draft Uniform State Law deems that the automated driving system continues to perform the entire dynamic driving task “until a human driver or operator terminates the performance”. However, if a human driver terminates the performance to mitigate a crash hazard caused by the automated driving system, “automated operation continues until the crash hazard is no longer present”.

RoSPA agrees that if a user-in-charge has taken all reasonable preventative action to mitigate the risk of accident caused by the automated driving system, the vehicle should still be considered to be driving itself if the user-in-charge fails to prevent the accident occurring. This is because in some cases, the accident could be caused by events preceding the vehicle handing over to the user-in-charge.

Question 2

We seek views on whether the label “user-in-charge” conveys its intended meaning.

RoSPA Response

RoSPA agree that the label ‘user-in-charge’ conveys its intended meaning. This is because the role described is taken up by someone who is a user of the vehicle while the automated system is engaged, but is considered to be in charge as they could be called upon to intervene by the vehicle system.

This is different from a ‘fallback’, as the user-in-charge role only applies in situations where takeover of the system by the individual is planned or following the vehicle coming to a safe stop. The user-in-charge role does not apply in urgent circumstances where the user is called upon to intervene at short notice as the vehicle is unable to come to a safe stop without human intervention.



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Question 3

We seek views on whether it should be a criminal offence for a user-in-charge who is subjectively aware of a risk of serious injury to fail to take reasonable steps to avert that risk.

RoSPA Response

RoSPA recognise that there are some situations in which effective intervention could prevent an accident from occurring and agree that if a user-in-charge is aware of a hazard which could cause an accident, they should intervene to try and prevent the accident occurring.

However, RoSPA are concerned that it could be difficult to determine when a user-in-charge is subjectively aware of a hazard. At trial, this would mean that a jury would be expected to infer that the user-in-charge was aware of a hazard that could cause an accident and did not intervene. There is a difference between deciding that the defendant *must* have been aware of a risk and that the defendant *should* have been aware of the risk. Under current legislation, failure to act may well be manslaughter if the event results in a third party death.

RoSPA also stress that for fully-automated vehicles, humans are not critical to safety. Instead, developers need to ensure that their automated driving systems are safe.

Question 4

We seek views on how automated driving systems can operate safely and effectively in the absence of a user-in-charge.

RoSPA Response

There are a number of challenges to overcome before vehicles are able to operate safely and effectively without a user-in-charge. For example, automated vehicles may be unable to operate in some conditions, such as in adverse weather conditions. RoSPA believe that it is likely to be a long period of time before these vehicles are able to operate safely and effectively without the need for a user-in-charge who can intervene if necessary.

Before these vehicles can operate safely and effectively without a user-in-charge, RoSPA also believe that there should be an obligation that those responsible for the vehicle, such as the individual who owns the vehicle or the licensed operator to maintain and update the vehicle to ensure that it can continue to operate safely and effectively.

Plans will also need to be made to ensure that the road network can continue to operate efficiently if the vehicle fails and comes to a stop at the side of the road. It could be a condition of the licence that the operator takes measures to resolve any disruptions to traffic flow.



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Question 5

Do you agree that powers should be made available to approve automated vehicles as able to operate without a user-in-charge?

RoSPA Response

RoSPA agree that appropriate powers should be made available to approve automated vehicles that are able to operate without a user-in-charge. RoSPA recognise the benefits that these kinds of vehicles could provide to those who do not hold a full driving licence, such as young people or those with mobility problems.

We are already seeing road safety benefits from driver assistance technology, such as electronic stability control, autonomous braking, lane departure warning systems, etc. RoSPA believes the further development of autonomous technology will offer enormous benefits by:

- Reducing road crashes and casualties significantly by reducing (or even eliminating) human error by drivers that contributes to a significant proportion of road crashes and casualties.
- Improving mobility for people unable to drive conventional cars, enhancing their mobility, independence and quality of life.
- Improving the use of road space, and reducing congestion, fuel consumption and emissions
- Reducing insurance premiums, especially for younger drivers, due to the lower crash risk.

However, again, these vehicles should only be approved when they can operate smoothly and effectively without a user-in-charge.

Question 6

Under what circumstances should a driver be permitted to undertake secondary activities when an automated driving system is engaged?

RoSPA Response

RoSPA believe that only autonomous vehicles which do not require human intervention at any time should allow passengers to undertake secondary activities, therefore these vehicle will by definition not have a driver.

Question 7

Conditionally automated driving systems require a human driver to act as a fallback when the automated driving system is engaged. If such systems are authorised at an international level:



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(1) should the fallback be permitted to undertake other activities?

(2) if so, what should those activities be?

RoSPA Response

RoSPA have concerns regarding a human driver acting as a fallback being able to switch their attention from a secondary activity back to the driving activity in hand quickly if they are needed to intervene in the driving task.

Some situations the vehicle will encounter could mean that the driver needs to intervene very quickly, possibly within seconds and in circumstances of danger. The fallback driver needs to be aware of the traffic ahead and behind the vehicle, the nature of the road, its speed limit and any vulnerable road users in the area. The fallback driver may also need to be aware of hazards specified on road signs that they have already passed.

Maintaining full concentration while the vehicle is driving itself for long periods will be very difficult; boredom, inattention and distraction will be difficult to overcome. How quickly will a driver need to react? How will they know when and how they need to take control? Will they understand the warnings given by the vehicle?

The concept of the vehicle handing back control to the fallback at very short notice due to an emergency situation is challenging for any driver. RoSPA are concerned that there will be a set of drivers who are new and inexperienced, gaining relatively little experience after qualifying, who will be less able to cope in this situation.

RoSPA believes that most existing road traffic laws and rules of the road should continue to apply to highly autonomous vehicles (ones with a driver who must remain able and ready to assume control). For example, the prohibitions on using hand-held mobile phones, drinking and driving should be retained, so that drivers are "able and ready" to assume control of the vehicle if necessary, and so they understand they must do this. There may even be a case for arguing that drivers who are not alert and ready to take control of the vehicle should face stricter penalties to emphasise the importance of the driver remaining alert. It may be feasible to relax these laws when fully autonomous vehicles that no longer need the driver to remain alert and ready to take control, have been introduced.

RoSPA believes that research would need to be conducted to determine what secondary activities, if any, are appropriate for the fallback user to be engaged in whilst the automated system is activated.



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Regulating vehicle standards pre-placement

Question 8

Do you agree that:

(1) a new safety assurance scheme should be established to authorise automated driving systems which are installed:

(a) as modifications to registered vehicles; or

(b) in vehicles manufactured in limited numbers (a "small series")?

RoSPA Response

RoSPA recognises that the process of testing artificial intelligence requires a new expertise, meaning some changes are likely to need to be made to current type approval processes.

Therefore, RoSPA agrees that a new safety assurance scheme should be set up for automated driving. We agree that the scheme should have powers to authorise automated driving systems which are installed either as modifications to registered vehicles or in vehicles manufactured in limited numbers (a "small series"). This could be a new agency or part of an existing agency.

RoSPA also agree that if UNECE Regulations were to be developed for highly automated vehicles operating in urban environments, it may no longer be necessary for the UK to have its own system of authorisation. However, until regulations are developed at an international level, a safety assurance scheme will be required.

(2) unauthorised automated driving systems should be prohibited?

RoSPA Response

RoSPA agree that unauthorised automated driving systems should be prohibited and the Road Vehicles Construction and Use Regulations 1986 should be amended to require that every automated driving system is authorised either at international or national level.

(3) the safety assurance agency should also have powers to make special vehicle orders for highly automated vehicles, so as to authorise design changes which would otherwise breach construction and use regulations?

RoSPA Response

RoSPA agrees that there may be a need to allow the safety assurance agency to have powers to make special orders for highly automated vehicles. This is because design changes in some new vehicles could breach the Construction and Use Regulations. For example, an automated driving system may not comply with the regulation "not leaving the vehicle unattended".



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However, RoSPA still believe that in line with the Construction and Use Regulations:

“A motor vehicle... and all parts and accessories of such vehicle... shall at all times be in such condition... that no danger is caused or is likely to be caused to any person in or on the vehicle... or on a road.”

Therefore, this should be negotiated with sufficient care, with safety being the overriding consideration.

Question 9

Do you agree that every automated driving system (ADS) should be backed by an entity (ADSE) which takes responsibility for the safety of the system?

RoSPA Response

RoSPA agrees that every automated driving system should be backed by an automated driving system entity, which in many cases is likely to be the vehicle manufacturer. The ADSE should be required to demonstrate that it has identified and managed safety risks to a legal standard of care. RoSPA also agrees that the ADSE should be required to demonstrate that it has undertaken safety tests, that it carries insurance, and that it has adequate resources to assume an ongoing responsibility for the system. This will be important in the instance of a component malfunction and the need for a vehicle recall.

Question 10

We seek views on how far should a new safety assurance system be based on accrediting the developers' own systems, and how far should it involve third party testing.

RoSPA Response

RoSPA has no comment.

Question 11

We seek views on how the safety assurance scheme could best work with local agencies to ensure that it is sensitive to local conditions.

RoSPA Response

RoSPA recognise that within the UK, driving environments vary from city to city and across the road network. Therefore, the operational design domain of a vehicle would need to be retrained. The challenge is to ensure that a safety assurance scheme is sufficiently expert and robust to understand the technology while still sufficiently sensitive to local conditions to be aware of the challenges they pose. Therefore, local highway authorities may have a significant role to play in creating a safe environment for automated technology. When fatal and serious crashes are identified and investigated (see response to question 14), if common fault failures are identified which related to the highway infrastructure these must be passed on to the highway authority and appropriate bodies so that national design guidance can be updated as and when required.



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Regulating safety on the road

Question 12

If there is to be a new safety assurance scheme to authorise automated driving systems before they are allowed onto the roads, should the agency also have responsibilities for safety of these systems following deployment?

RoSPA Response

RoSPA recognise the importance of this, however, we have no specific comment on which agency should carry out these functions.

If so, should the organisation have responsibilities for:

- (1) regulating consumer and marketing materials?**
- (2) market surveillance?**
- (3) roadworthiness tests?**

RoSPA Response

RoSPA agree that it is vital that consumer and marketing materials are regulated. This is to ensure that drivers have a full understanding of the technology and are not led to believe that these technologies are more capable than they really are. Drivers need to be aware of the situations in which these technologies can be used and how to stay alert for possible dangers. Limitations of the technology should be made clear through marketing, any test drives of the vehicle and in the owner's manual.

Although there are currently no market surveillance requirements in the Framework Directive on type approval, market surveillance will be required once automated vehicles are introduced to Britain's roads. The powers held by the DVSA and The Vehicle Safety Branch seem sufficient for conventional vehicles, but there may be new challenges arising from automated vehicles. Where vehicles drive themselves, concerns may arise from breach of traffic laws and collisions. This may require the safety assurance scheme to carry out market surveillance.

RoSPA also recognise that new tests for automated features need to be developed, but RoSPA does not have a view on which body should be responsible for setting standards and test procedures.



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We seek views on whether the agency's responsibilities in these three areas should extend to advanced driver assistance systems.

RoSPA Response

RoSPA agree that any agency that takes on the above responsibilities should also take on the same responsibilities for vehicles with advanced driver assistance systems. Many of these current concerns in this area are not confined to highly automated systems which drive themselves. There are also concerns about how consumers receive information about advanced driver assistance systems, and the lack of roadworthiness tests for such systems.

Question 13

Is there a need to provide drivers with additional training on advanced driver assistance systems?

RoSPA Response

RoSPA agree that at present, most drivers do not use the more advanced driver assistance systems. It therefore appears premature to consider changes to the main driving test. However, as these systems become more common, the issue will need to be revisited. For now, it seems feasible that this training could only be delivered on a voluntary basis.

If so, can this be met on a voluntary basis, through incentives offered by insurers?

RoSPA Response

RoSPA believe that an incentive from insurers may be one possible way of encouraging drivers to undergo voluntary training. However, we do recognise that many drivers choose not to undergo any training, such as Pass Plus and advanced training after taking their test, despite possible insurance premium reductions from insurers. Therefore, it is unclear what the take-up rate of this training may be.

Question 14

We seek views on how accidents involving driving automation should be investigated.

RoSPA Response

If automated cars malfunction, they are likely to do so in ways which are unfamiliar to coroners or police officers. Understanding the causes of such failure will involve new types of expertise. Therefore, RoSPA believe that it would be appropriate to create an accident investigation branch to deal with collisions in which the automated vehicle malfunctions. This would mean that the accident investigation branch could support the police with technical skills, knowledge, understanding and evidence. However, the primary purpose of police investigation must remain in place, that is, to identify whether a user in charge or automated vehicle caused the collision.



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We seek views on whether an Accident Investigation Branch should investigate high profile accidents involving automated vehicles? Alternatively, should specialist expertise be provided to police forces.

RoSPA Response

RoSPA agree that in some high profile cases, an Accident Investigation Branch could develop high levels of technical expertise and pool data over many individual incidents and could generate more information on the cause of the accident. This data would be very useful in understanding the underlying causes of accidents involving automated vehicles. However, the primary purpose of police investigation must remain in place.

Police forces will need support and training to allow them to investigate collisions involving automated vehicles and changes may need to be made to the current data collection procedure.

Question 15

(1) Do you agree that the new safety agency should monitor the accident rate of highly automated vehicles which drive themselves, compared with human drivers?

RoSPA Response

RoSPA recognise the need for the accident rate of highly automated vehicles to be monitored, as the Government has drawn attention to the safety benefits of automated vehicle technologies, stressing “the potential to improve road safety and reduce casualties”. Therefore, the accident rate for automated vehicles will need to be compared with the accident rate for conventional vehicles. RoSPA agrees that this should be monitored by the new agency.

(2) We seek views on whether there is also a need to monitor the accident rates of advanced driver assistance systems.

RoSPA Response

RoSPA believes that there is also a need to monitor the accident rates of advanced driver assistance systems if feasible, as this monitoring may reveal more systemic issues about human-machine interactions.



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Question 16

(1) What are the challenges of comparing the accident rates of automated driving systems with that of human drivers?

RoSPA Response

One challenge will be to know when to compare casualty rates from automated cars with *overall* casualty rates, and when to compare them with casualty rates for other car users. This is due to the vulnerability of particular road user groups and age groups. The issue of statistical significance may be an issue if the number of incidents are very low.

(2) Are existing sources of data sufficient to allow meaningful comparisons? Alternatively, are new obligations to report accidents needed?

RoSPA Response

RoSPA has no comment.



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Civil liability

Question 17

We seek views on whether there is a need for further guidance or clarification on Part 1 of Automated and Electric Vehicles Act 2018 in the following areas:

(1) Are sections 3(1) and 6(3) on contributory negligence sufficiently clear?

RoSPA Response

RoSPA has no comment.

Do you agree that the issue of causation can be left to the courts, or is there a need for guidance on the meaning of causation in section 2?

RoSPA Response

RoSPA does not believe that there is a need for guidance on the meaning of causation in section 2. This is because no-one can foresee the full effect of automated vehicles, or the many different possible circumstances surrounding the accidents which might result. We also agree that the courts have long experience of dealing with causation issues to provide fair, common-sense outcomes.

(3) Do any potential problems arise from the need to retain data to deal with insurance claims? If so:
(a) To make a claim against an automated vehicle's insurer, should the injured person be required to notify the police or the insurer about the alleged incident within a set period, so that data can be preserved?
(b) How long should that period be?

RoSPA Response

Restricting the claim period would be very unfortunate for a victim who was hospitalised and therefore unable to claim within a set period.

A solution could be to limit the period, except whether the event has been reported to the police and appropriate bodies, in which case the data should be retained pending court decisions.



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Question 18

Is there a need to review the way in which product liability under the Consumer Protection Act 1987 applies to defective software installed into automated vehicles?

RoSPA Response

As the law commission highlight, RoSPA believe that there is some doubt about whether Part 1 of the 1987 Act applies to defective software in the absence of a physical medium, as software may be produced by a different manufacturer to the rest of the vehicle. RoSPA believes that the main vehicle manufacturer should be liable for any defect in a component part, though the manufacturer should be able to bring a further claim against the component manufacturer for negligence.

Question 19

Do any other issues concerned with the law of product or retailer liability need to be addressed to ensure the safe deployment of driving automation?

RoSPA Response

RoSPA is aware that: " litigation over manufacturers' or other suppliers' liability will play a relatively limited role in compensating victims, setting standards or allocating blame for defective automated vehicles. We say this for three reasons:

- (1) The main avenue for providing compensation will be through insurers, under the provisions of Part 1 of AEV Act. Litigation against manufacturers will then be a commercial matter for the insurer;
- (2) The main means of setting standards will be through regulation. If the system passes relevant testing (and there is no impropriety by the manufacturer), it is unlikely that the courts would themselves seek to impose a different, more stringent standard.
- (3) The criminal law makes binary decisions about individuals, it doesn't apportion blame between them.

Beyond this we have no further comments.



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Criminal liability

Question 20

We seek views on whether regulation 107 of the Road Vehicles (Construction and Use) Regulations 1986 should be amended, to exempt vehicles which are controlled by an authorised automated driving system.

RoSPA Response

RoSPA has no comment.

Question 21

Do other offences need amendment because they are incompatible with automated driving?

RoSPA Response

RoSPA has no comment.

Question 22

Do you agree that where a vehicle is:

(1) listed as capable of driving itself under section 1 of the Automated and Electric Vehicles Act 2018;
and

(2) has its automated driving system correctly engaged;

the law should provide that the human user is not a driver for the purposes of criminal offences arising from the dynamic driving task?

RoSPA Response

RoSPA believe that when a vehicle is driving itself, the automated system is engaged and conducting the entire driving task, the human user is not a driver and therefore should not be liable for any offences which arise out of the dynamic driving task. At this point, complying with traffic law becomes the responsibility of the automated driving system entity rather than the human user sitting in the vehicle.

For systems which are authorised to function without a user-in-charge, all occupants would have the status of passengers - and again, would not be drivers for legal purposes.



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Question 23

Do you agree that, rather than being considered to be a driver, a user-in-charge should be subject to specific criminal offences? (These offences might include, for example, the requirement to take reasonable steps to avoid an accident, where the user-in-charge is subjectively aware of the risk of serious injury (as discussed at paragraphs 3.47 to 3.57)).

RoSPA Response

RoSPA believe that the user-in-charge should be subject to some specific criminal offences, such as not adhering to being fit to drive or not holding the relevant qualifications to take over controls of the vehicle if there is a request to intervene.

RoSPA recognise that there are some situations in which effective intervention could prevent an accident from occurring and agree that if a user-in-charge is aware of a hazard which could cause an accident, they should intervene to try and prevent the accident occurring, although subjective awareness is difficult to judge.

Question 24

Do you agree that:

(1) a registered keeper who receives a notice of intended prosecution should be required to state if the vehicle was driving itself at the time and (if so) to authorise data to be provided to the police?

RoSPA Response

RoSPA agree that a registered keeper should be required to state if the vehicle was driving itself and to authorise data to be provided to the police. The police could then investigate why the offence occurred.

The issue of automated vehicles committing traffic offences might be reduced by liaising with the Highway Authority to provide better traffic signs. Alternatively, a prosecution could be brought against the person responsible for the vehicle for failing to update software or for installing unauthorised software.

(2) where the problem appears to lie with the automated driving system (ADS) the police should refer the matter to the regulatory authority for investigation?

RoSPA Response

RoSPA agree that where the problem appears to lie with the automated driving system (ADS) the police should refer the matter to the regulatory authority for investigation.

(3) where the ADS has acted in a way which would be a criminal offence if done by a human driver, the regulatory authority should be able to apply a range of regulatory sanctions to the entity behind the ADS?



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RoSPA Response

RoSPA agree with The National Transport Commission who argue that breaches of road traffic laws are important indications of a possible broader failure to design safe automated vehicles. Any enforcement therefore needs to be part of a feedback loop, aimed at improving safety. RoSPA agree that the regulatory authority should be able to apply a range of regulatory sanctions to the body behind the automated driving system.

(4) the regulatory sanctions should include improvement notices, fines and suspension or withdrawal of ADS approval?

RoSPA Response

RoSPA agree that the safety assurance system should include a range of compliance and enforcement options including graduated sanctions and penalties. These could include improvement notices, infringement notices, enforceable undertakings, suspension and withdrawal of ADS approval.

Question 25

Do you agree that where a vehicle is listed as only safe to drive itself with a user-in-charge, it should be a criminal offence for the person able to operate the controls (“the user-in-charge”):

- (1) not to hold a driving licence for the vehicle;**
- (2) to be disqualified from driving;**
- (3) to have eyesight which fails to comply with the prescribed requirements for driving;**
- (4) to hold a licence where the application included a declaration regarding a disability which the user knew to be false;**
- (5) to be unfit to drive through drink or drugs; or**
- (6) to have alcohol levels over the prescribed limits?**

RoSPA Response

RoSPA believe that the legislation should cover all the requirements of fitness to drive that would apply to a driver.

Question 26

Where a vehicle is listed as only safe to drive itself with a user-in-charge, should it be a criminal offence to be carried in the vehicle if there is no person able to operate the controls?



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RoSPA Response

RoSPA agree that if a vehicle is listed as only safe to drive itself with a user-in-charge, it would be a criminal offence for the person in the driving seat to be drunk or disqualified. If a passenger is aware that the user-in-charge is not qualified or fit, the passenger may be guilty of an aiding and abetting offence.

Section 12 of the Theft Act 1968 creates an offence of being carried in a car taken without consent, but includes a requirement that the offender must know it is stolen. This is vital, or the measure effectively places a duty on a passenger, who may be unqualified in any way around driving or using to verify that the driver is qualified before travelling.

Question 27

Do you agree that legislation should be amended to clarify that users-in-charge:

- (1) Are "users" for the purposes of insurance and roadworthiness offences; and**
- (2) Are responsible for removing vehicles that are stopped in prohibited places, and would commit a criminal offence if they fail to do so?**

RoSPA Response

RoSPA agree that it would be helpful to clarify that the user-in-charge is a “user” for the purposes of insurance and roadworthiness offences. This means that a person who drives a vehicle for part of the journey, and who assumes the role of a user-in-charge for the rest of the journey would need to carry insurance for the whole journey. It would also be useful for the whole journey to be covered by a single insurer, as this would remove the possibility of disputes about which insurer was liable to cover an accident which occurred during the handover period.

RoSPA believe that where a vehicle has a user-in-charge, the user-in-charge is responsible for removing a vehicle that is illegally parked, either by assuming manual driving or by calling for breakdown assistance and vehicle recovery.

Question 28

We seek views on whether the offences of driving in a prohibited place should be extended to those who set the controls and thus require an automated vehicle to undertake the route.

RoSPA Response

RoSPA also agree that a person should be criminally liable for setting a driving system to require it to drive in a prohibited place.



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Question 29

Do you agree that legislation should be amended to state that the user-in-charge is responsible for:

- (1) duties following an accident;**
- (2) complying with the directions of a police or traffic officer; and**
- (3) ensuring that children wear appropriate restraints?**

RoSPA Response

Where there is a user-in-charge in the vehicle, RoSPA believe that they should be obliged to take charge of the situation following an accident and follow the normal reporting procedure either in person (or by phone or online if the police force allow it) within 24 hours of the collision.

RoSPA also agree that legislation should be amended to provide that duties to comply with police or traffic officers' directions should apply to users-in-charge.

Finally, RoSPA agree that the responsibility to ensure not only that children start the journey in the appropriate seats with the restraints fastened, but that they continue to keep the restraints fastened throughout the journey should be that of the user-in-charge.

Question 30

In the absence of a user-in-charge, we welcome views on how the following duties might be complied with:

- (1) duties following an accident;**
- (2) complying with the directions of a police or traffic officer; and**
- (3) ensuring that children wear appropriate restraints.**

RoSPA Response

RoSPA believe that following an accident, an automated vehicle must stop to allow other road users to record the details of the vehicle. However, it is difficult to know whether all impacts would be picked up by the vehicle sensors. RoSPA have no further suggestions to make for duties following an accident for an automated vehicle without a user-in-charge.

RoSPA have no comment to make on suggestions for allowing an automated vehicle to comply with the directions of a traffic officer.

RoSPA agree with the Law Commission's suggestion that a vehicle could be blocked from starting unless passengers have their seatbelts fastened. Where parents or guardians are in the vehicle with their children, the responsibility could lie with them. However, for unaccompanied children RoSPA do not believe that it would be fair to make parents criminally liable for events that happen when they are not there, and over which they have no control.



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Question 31

We seek views on whether there is a need to reform the law in these areas as part of this review.

RoSPA Response

RoSPA believe that amendments should be made as appropriate for the user-in-charge to assume the responsibility of duties following an accident, complying with directions of a police or traffic officer and ensuring that children wear appropriate restraints while travelling in an automated vehicle.

Question 32

We seek views on whether there should be a new offence of causing death or serious injury by wrongful interference with vehicles, roads or traffic equipment, contrary to section 22A of the Road Traffic Act 1988, where the chain of causation involves an automated vehicle.

RoSPA Response

RoSPA believe that there should be a new offence of causing death or serious injury by wrongful interference with vehicles, roads or traffic equipment, contrary to section 22A of the Road Traffic Act 1988, where the chain of causation involves an automated vehicle, as current legislation leads to a maximum sentence of just 7 years' imprisonment.

Question 33

We seek views on whether the Law Commissions should review the possibility of one or more new corporate offences, where wrongs by a developer of automated driving systems result in death or serious injury.

RoSPA Response

RoSPA believe that corporate offences should be introduced where wrongs by a developer of automated driving systems result in a death or serious injury. This could include claiming to have conducted tests which have not been conducted, suppressing poor test results, installing "defeat device" software, so that an automated driving system performs better in tests than in real life; or disabling safety critical features to increase profits.



Response to Law Commission Consultation Paper, Automated Vehicles

Interfering with automated vehicles

Question 34

We seek views on whether the criminal law is adequate to deter interference with automated vehicles. In particular:

(1) Are any new criminal offences required to cover interference with automated vehicles?

RoSPA Response

Automated vehicles may introduce new vulnerabilities. New forms of crime and mischief may be formed, such as standing in front of automated vehicle to obstruct its movement; spraying paint or mud over its sensors; deliberately obscuring signs or white lines; or hacking into the software to cause it to crash. People may also steal vehicles or take them without consent.

RoSPA believe that the Road Traffic Act 1988 includes many of the behaviours thought to be of concern, such as interfering with road signs.

Under section 137 of the Highways Act 1980, it is an offence wilfully to obstruct free passage along a highway. Convictions are frequently made for acts of protest, and include blocking traffic flow by standing on a crossing. It seems this obstruction offence would cover deliberately blocking the progress of an automated vehicle by standing in front of it. However, it would not necessarily cover stepping out in front of a vehicle, requiring it to stop temporarily. Therefore, changes in the law may be necessary to cover this act.

(2) Even if behaviours are already criminal, are there any advantages to re-enacting the law, so as to clearly label offences of interfering with automated vehicles?

RoSPA Response

Other than the legislative amendment highlighted above, RoSPA do not believe that there is any advantage to re-enacting the law to clearly label offences of interfering with automatic vehicles. This is because existing law includes many of the behaviours thought to be of concern.

Question 35

Under section 25 of the Road Traffic Act 1988, it is an offence to tamper with a vehicle's brakes "or other mechanism" without lawful authority or reasonable cause. Is it necessary to clarify that "other mechanism" includes sensors?

RoSPA Response

RoSPA believe that the term mechanism is broad enough to cover the sensors of an automated vehicle. However, RoSPA is unsure as to whether computer code for example is classed as a mechanism, legal clarification should be sought.



Response to Law Commission Consultation Paper, Automated Vehicles

Question 36

In England and Wales, section 12 of the Theft Act 1968 covers “joyriding” or taking a conveyance without authority, but does not apply to vehicles which cannot carry a person. This contrasts with the law in Scotland, where the offence of taking and driving away without consent applies to any motor vehicle. Should section 12 of the Theft Act 1968 be extended to any motor vehicle, even those without driving seats?

RoSPA Response

Although RoSPA believes that it will be some time before vehicles without driving seats will be on the UK's roads, RoSPA believe that it will be necessary to extend section 12 of the Theft Act 1968 to any motor vehicles, even those without driving seats.

Question 37

In England and Wales, section 22A(1) of the Road Traffic Act 1988 covers a broad range of interference with vehicles or traffic signs in a way which is obviously dangerous. In Scotland, section 100 of the Roads (Scotland) Act 1984 covers depositing anything on a road, or inscribing or affixing something on a traffic sign. However, it does not cover interfering with other vehicles or moving traffic signs, even if this would raise safety concerns. Should section 22A of the Road Traffic Act 1988 be extended to Scotland?

RoSPA Response

Section 100 only applies to some forms of interference with traffic signs. It covers “painting or otherwise inscribing or affixing” a mark, but does not apply to moving a sign, even if this would raise safety concerns. Therefore, RoSPA agree that section 22A of the Road Traffic Act 1988 should be extended to Scotland.



Response to Law Commission Consultation Paper, Automated Vehicles

"Machine Factors" - Adapting road rules for artificial intelligence decision-making

Question 38

We seek views on how regulators can best collaborate with developers to create road rules which are sufficiently determinate to be formulated in digital code.

RoSPA Response

RoSPA have no comments to make.

Question 39

We seek views on whether a highly automated vehicle should be programmed so as to allow it to mount the pavement if necessary:

- (1) to avoid collisions;**
- (2) to allow emergency vehicles to pass;**
- (3) to enable traffic flow;**
- (4) in any other circumstances?**

RoSPA Response

RoSPA believe that a highly automated vehicle should be programmed to allow it to mount the pavement if necessary to avoid collisions and to allow emergency vehicles to pass. In some instances, it may also be necessary for the vehicle to mount the pavement to enable traffic flow.

Any automated vehicle that cannot identify pedestrians on the pavement should not be permitted to travel on the road. In order to function safely, the vehicle must be able to identify that there are pedestrians walking on the pavement in the same way as a driver would, the algorithms need to decide whether it is indeed safe to mount the pavement.

Question 40

We seek views on whether it would be acceptable for a highly automated vehicle to be programmed never to mount the pavement.

RoSPA Response

RoSPA are not yet aware of the potential capabilities and limitations of the technology and are unable to comment further.



Response to Law Commission Consultation Paper, Automated Vehicles

Question 41

We seek views on whether there are any circumstances in which an automated driving system should be permitted to exceed the speed limit within current accepted tolerances.

RoSPA Response

RoSPA do not believe that automated vehicles should be allowed to exceed the speed limit, as this would not be permitted for a human driver.

Question 42

We seek views on whether it would ever be acceptable for a highly automated vehicle to be programmed to “edge through” pedestrians, so that a pedestrian who does not move faces some chance of being injured. If so, what could be done to ensure that this is done only in appropriate circumstances?

RoSPA Response

RoSPA recognise that it could be impossible for an AV to make any progress at all if the vehicle is not able to edge forward, because given this knowledge, every single other road user could dominate them in any conflict. However, RoSPA are concerned that if a vehicle edges forward, it could injure a pedestrian.

Therefore, RoSPA do not believe that an automated vehicle should be permitted to edge through pedestrians. We are also concerned that this would require an automated vehicle to be able to recognise a police officer, highways traffic officer or authorised traffic marshal. These individuals are entitled to stop a vehicle moving, and the automated vehicle must not edge towards them.

Allowing a user-in-charge to edge forward may be permissible at a very low speed. RoSPA believe that human judgement must be used when edging forwards through traffic, rather than an algorithm making the decision.

Question 43

To reduce the risk of bias in the behaviours of automated driving systems, should there be audits of datasets used to train automated driving systems?

RoSPA Response

RoSPA believe that there should be audits to ensure that the training data is cast sufficiently wide to allow all road users in the vehicle's operational design domain to be identified accurately and responded to appropriately.



Response to Law Commission Consultation Paper, Automated Vehicles

Question 44

We seek views on whether there should be a requirement for developers to publish their ethics policies (including any value allocated to human lives)?

RoSPA Response

RoSPA have no comments to make.

Question 45

What other information should be made available?

RoSPA Response

RoSPA has no comments to make on any other information that should be made available.

Question 46

Is there any other issue within our terms of reference which we should be considering in the course of this review?

RoSPA Response

RoSPA are not aware of any other issues that should be considered in the course of this review.



Response to Law Commission Consultation Paper, Automated Vehicles

RoSPA has no comments to make on the consultation process, other than to thank the Law Commission for the opportunity to comment on the proposals. We have no objection to our response being reproduced or attributed.





accidents don't have to happen

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