Response to a Law Commission and Scottish Law Commission joint consultation paper Automated Vehicles: Consultation Paper 3 – A regulatory framework for automated vehicles

INTRODUCTION

This document is in response to the Automated Vehicles: Consultation Paper 3 – A regulatory framework for automated vehicles issued by the Law Commission and Scottish Law Commission in December 2020 (the "Consultation Paper").

Mills & Reeve is a national UK law firm with 134 partners and a total strength of over 1,000 staff operating from six offices including London, Manchester, Birmingham and Cambridge. Mills & Reeve is one of the top performing law firms in the UK when it comes to client satisfaction, according to the latest editions of legal directories Chambers UK and The Legal 500, and has been named for a record seventeenth year running as one of the 100 Best Companies to Work For in The Sunday Times annual survey. Mills & Reeve acts for a range of clients who have an interest in the development of automated vehicles including automotive manufacturers and suppliers to automotive manufacturers, insurers as well as new entrants to the market that propose alternative automated transport solutions. We advise a range of clients on issues relating to automated transport and therefore have a close interest in seeing that a robust legal and regulatory framework is put in place.

We begin with general comments on the approach taken. We have quoted questions from the Consultation Paper followed by more specific comments.

GENERAL COMMENTS

The approach to regulation

The Consultation Paper brings in extensive discussion of the safety assurance systems applicable in highrisk industries and sectors. We welcome this approach. Autonomous vehicles are primarily a technological system, involving an interacting suite of hardware, software, sensors and external infrastructure. Learning from the regimes applicable to high-risk industries and sectors such as rail and aviation, nuclear power and pharmaceuticals is a sensible approach.

We also welcome the proposals in the Consultation Paper to include all kinds of autonomous vehicle within the same regime, allowing flexibility for the development of innovative services while applying the same overall principles to all systems.

However, we note that the discussion still includes close connections with the existing regime where a human driver controls the vehicle. In our view, this introduces an unnecessary element of confusion. In particular, the discussion of criminal offences in Chapter 14 focuses on the criminal offences that are currently committed by human drivers as a relevant starting point for criminal liability in the system applicable to an ADSE. In our view, this is not the best approach. Human drivers may have very different sets of characteristics such as motivating factors, possible impairments (fatigue, alcohol use, distraction etc.), perceptions of being caught

and attitudes to risk, as compared to the characteristics of an ADSE or an employee working for one. A better approach would be to move away from any attempt to "evolve" from the law applicable to human drivers and instead, to approach this as a fresh exercise involving the regulation of a high-risk industry.

We recognise that there may be a concern, at least initially, that ADSEs will occupy the same regulated space as human-driven vehicles. We do not consider this factor alone to be sufficient to drive the entire thinking on future regulation of ADSEs. Instead, we should adopt a best-fit regulatory regime for ADSEs and then adapt it to deal with environments where an ADSE will share space with human drivers.

In our view, a guiding objective should be to develop standards and guidance that supports developers in adhering to best practice, and updating their systems when new information becomes available. Regulation should promote transparency and cooperation between the regulator and a developer, so that any incidents are recorded and reflected on, with changes made to feed that learning into guidance for the industry as a whole. Any feature of law or regulation that is likely to deter disclosure is, in our view, dangerous.

In addition, excessively punitive measures that are developed to satisfy a perception that public opinion demands parity between penalties applicable to human drivers and ADSEs could act as a brake on transparency and, possibly, on innovation itself.

The EU-UK Trade and Cooperation Agreement

Chapter 6 of the Consultation Paper discusses the role of UNECE and EU vehicle standards obligations and the impact that these are likely to have for the UK in developing regulation applicable to autonomous vehicles. Since the Consultation Paper was published, the text of the EU-UK Trade and Cooperation Agreement (the **"TCA"**) has been settled. Assuming that this is fully ratified, we recommend that further consideration be given to what impact it may have on the proposals set out in the Consultation Paper. In particular, the possible impact of Annex TBT-1 on Motor Vehicles and Equipment and Parts Thereof of the TCA should be considered. This sets out objectives including promotion of convergence of regulations based on international standards, and recognition of approvals based on schemes administered by WP.29 (Article 3). It prohibits the parties from introducing or maintaining domestic laws divergent from UN Regulations and Global Technical Regulations without substantial reasons. It also prohibits either party from excluding from its market any products incorporating new technologies that the party has not yet regulated, without demonstrating reasonable grounds for doing so (Article 7).

The international approach set out in the TCA is to be welcomed, as it promotes consistency with UNECE developments ahead of adherence to EU-specific legislation.

CHAPTER 4: SELF-DRIVING AND HUMAN INTERVENTION

CONSULTATION QUESTION 1

We provisionally propose that:

(1) a vehicle should not be classified as self-driving if, with the ADS engaged, the user-in-charge needs to monitor the driving environment, the vehicle or the way it drives;

(2) it is nevertheless compatible with self-driving to require the user-in-charge to respond to a clear and timely transition demand which: (a) cuts out any non-driving related screen use; (b) provides clear visual, audio and haptic signals; and (c) gives sufficient time to gain situational awareness.

(3) to be classified as self-driving, the vehicle must be safe enough even if the human user does not intervene in response to any event except a clear and timely transition demand. Do you agree?

We have concerns about the intermediate category of self-driving with a user-in-charge, particularly in relation to the response to a transition demand, and any voluntary retaking of control by a person in the vehicle. In an ideal world, it may be perfectly possible to expect a person to cease any alternative activity they are engaged in, and prepare to take control of the vehicle in response to a transition demand.

However, in practice it is unreasonable to assume transitions will be routinely successful to a degree sufficient to deem the system "safe", even with clear and timely transition demands. It is easy to imagine less than ideal conditions in which transition demands will not prove routinely safe. The vehicle may attempt a handover because of adverse weather conditions, for example. The person in the driving seat may not have noticed a change in the weather. They will need to regain situational awareness and understand the appropriate response in a challenging situation. This can be expected to take substantially longer than a response to a transition demand on a fine day. Other examples can easily be imagined where, due to environmental or road conditions or the driver, a transition demand is unlikely to result routinely in a safe response. An obstacle may have fallen suddenly onto the carriageway ahead without the person's knowledge. If the journey is taking place at night, the person may not have the levels of alertness that might normally be expected. On a long motorway journey, they may have become mentally unprepared to retake the role of driver. A nervous driver may find themselves feeling anxious in response to a transition demand, and particularly in a situation that is outside the operational envelope of the AV.

When the parameters for a transition demand are established, all of these (and many other) possible adverse factors should be taken into account. Any temptation to assume that a confident and alert driver is sitting in the driver's seat on a fine day and in good driving conditions should be avoided. In fact, the contrary should be assumed. Any system should be capable of returning a safe response from a person who, whilst fit to drive based on current law and regulation, is nevertheless least well equipped to respond to the transition demand. We consider such a high bar to effectively render the model described as unfit for purpose.

In addition, we agree with the provisional view set out in paragraphs 4.77 and 4.78 that the move to selfdriving is a leap. Clarity for the user is essential. It is important not to give a user mixed messages, and potentially impose criminal liability, in a situation where the user does not fully appreciate their responsibilities.

Question 1(3) dealing with failure to respond to a transition demand is a necessary carve-out from the requirement to respond in Question 1(2). The vehicle must be able to manage safely a situation in which the user does not respond to a transition demand.

CONSULTATION QUESTION 2

We welcome views on whether self-driving features should be designed to ensure that they can be used by people with hearing loss.

We consider that self-driving features should be designed to ensure that they can be used by people with hearing loss. Self-driving vehicles present the potential opportunity to offer or extend accessibility by easing driving for anybody suffering a disability and for the older population. As the technology to support people

with hearing loss is readily available, it seems fair and sensible to ensure that such users are included. Section 4.87 of the Consultation Paper mentions the variety of tools that can be deployed in delivering multisensory alerts including visual and haptic sensors. In our view, multiple additional sensors (beyond visual) make this possible.

In addition, there is an obvious benefit to enhancing sensory alerts to engage the attention of any driver. Any disengaged driver may become tired or distracted and less aware of their surroundings. Section 4.63 - 4.64 of the Consultation Paper considers a variety of approaches from different jurisdictions on AVs. There is clear concern around the possibility of failures or delays in responding to a transition demand as individuals become drowsy or engaged in other activities. This is a further reason for visual, audio *and* haptic sensory alerts.

CHAPTER 5: HOW SAFE IS SAFE ENOUGH? CONSULTATION QUESTION 3

We provisionally propose that the decision whether a vehicle is sufficiently safe to "safely drive itself" should be made by the Secretary of State, as informed by advice from a specialist regulator. Do you agree?

We agree that the Secretary of State, as informed by advice from a specialist regulator providing technical advice, should make this decision.

CONSULTATION QUESTION 4

We welcome observations on which of the following standards is most appropriate when assessing the safety of automated vehicles:

- (a) as safe as a competent and careful human driver;
- (b) as safe as a human driver who does not cause a fault accident;
- (c) overall, safer than the average human driver.

We do not consider it to appropriate to judge the safety of AVs or ADSs by reference to the standard of a human driver. As the Consultation Paper points out in paragraphs 5.103 and 5.109, the question is a political one, requiring an assessment of the level of risk that is acceptable to the public. It is more appropriate to assess whether the AV provides a positive risk balance, such that fewer people are injured than would be the case if the vehicle were driven by a human. We consider standard 4(c) to be the most appropriate of the three.

As the Consultation Paper points out, in some situations (based on the current technical ability of ADSs) a human driver may perform much better than an AV, while in others, the AV is likely to outperform. However, simply eliminating the dangers caused by drink or drugs, distraction, tiredness, hurry and overconfidence offers the prospect of substantial safety gains. In time, we would expect the ADS to outperform virtually all human drivers.

To begin with, a standard based on the ALARP (As Low As Reasonably Practical) is a sensible starting point, taking account of the risk to all road users.

As AVs are tested and used, instances where safety falls short of an acceptable standard are likely to be identified. This could arise in an unusual situation that the ADS is unable to manage adequately. In any such

situation, full recording, transparent disclosure and review of applicable guidance would need to be undertaken. This could then lead to an improvement not only in the case of the ADS that has functioned poorly, but also for other vehicles and systems. In our view, this is where the main safety gains from ADS technology arise. Where an accident is caused by a human driver, it is difficult to make changes to the actions of other drivers in order to avoid the same occurrence. Indeed, we see the same mistakes made repeatedly by human drivers in, for example, accident blackspots, even where extra signage to warn of a particular danger is introduced. By contrast, an ADS can be altered to take account of an error made by another, so that the standard is incrementally raised.

The overall statistical safety of AVs should be regularly measured against the safety of existing vehicles in order to assess the technology as a whole.

CONSULTATION QUESTION 5

We welcome observations on how automated vehicles can be made as safe as reasonably practicable.

No response.

CONSULTATION QUESTION 6 We welcome practical suggestions for how AV regulators can fulfil their public sector equality duty.

Testing and safety guidance should include many different scenarios, including those involving individuals having different characteristics. A consultation group, or advisory committee, with representatives from many different communities could assist with identifying scenarios that might not otherwise be considered. For example, wheelchair users might be able to explain problems that they encounter when moving through an environment also occupied by vehicles, in order to highlight situations that need to be catered for and tested.

We note that similar issues are currently under consideration in relation to the development of artificial intelligence technologies. A coordinated approach involving best practice from one context helping to inform the other could be developed, with evolving standards or guidance taking account of problems that arise in practice. Where, for example, racial bias in a facial recognition system is identified, a best-practice approach to eliminating bias should be applied across all relevant fields of application.

CHAPTER 7: ASSESSING SAFETY PRE-DEPLOYMENT

CONSULTATION QUESTION 7

We provisionally propose that:

(1) safety assessment should use a variety of techniques;

(2) manufacturers/developers should submit a safety case to regulators showing why they believe that the automated driving system is safe;

(3) regulators should:(a) provide guidelines for what is in the safety case; (b) audit the safety case; (c) prepare guidance for manufacturers and developers on preferred standards; and (d) carry out at least some independent tests.

Do you agree?

We support the proposal for a safety case system, subject to the comments of developers on how they see this working in practice.

CONSULTATION QUESTION 8

We seek views on whether an approval authority that intends to use a scenario database as part of the testing procedure should consult road user groups on the range of scenarios to be included.

We support the use of road user groups to assist with creating and updating a scenario database. This is likely to provide depth and focus on issues that could otherwise be overlooked. Road users might also be helpful in highlighting future developments, such as the growing use of e-scooters.

The Consultation Paper also notes that public acceptance is fundamental to the successful roll out of AVs. Consulting road user groups, possibly through an advisory committee, could provide more detailed feedback from real world situations than would otherwise be available. It is also likely to support public recognition of proper accountability.

CHAPTER 8: INITIAL APPROVALS AND CATEGORISATION – PROPOSALS

CONSULTATION QUESTION 9

We provisionally propose that:

(1) unauthorised automated driving systems should be prohibited; and

(2) this should be subject to an exemption procedure by which the Secretary of State may authorise unauthorised systems to be used in tests and trials. Do you agree?

Yes. As with the pharmaceutical and medical devices industries, it makes sense to allow the use of unauthorised products only under controlled conditions, such as in order to test their functionality and safety.

CONSULTATION QUESTION 10

We provisionally propose that:

(1) the Government should establish a domestic scheme to approve automated driving systems (ADSs) for use on roads in Great Britain (a "national ADS approval scheme");

(2) manufacturers should have a free choice to apply for approval under either the UNECE system of international type approvals or through the national scheme;

(3) developers should be able to submit an ADS for national approval, even if they are not responsible for manufacturing the whole vehicle.

Do you agree?

Yes.

CONSULTATION QUESTION 11

We provisionally propose that: (1) an ADS approval scheme should be established through regulation under the Road Traffic Act 1988, without further legislative reform; (2) an ADS should be defined as a combination of software, hardware and sensors, which can be installed in a "type" of vehicle.an ADS should be defined as a combination of software, hardware and sensors, which can be installed in a "type" of vehicle;

(3) when an ADS is approved, the approval should be accompanied by specifications for: (a) the type of vehicle in which it can be installed; and (b) how the ADS is installed within the vehicle;

(4) where an ADS is installed in a pre-registered vehicle, an example vehicle should be submitted to the regulator for approval of the installation.

Do you agree?

We support the approach of using regulations to establish a national ADS approval scheme dealing with the matters set out in Question 11. It may become necessary to introduce more specific legislation in due course, although relying initially on the Road Traffic Act 1988 would be acceptable.

The proposed system involves two separated regulatory stages – the ADS approval scheme, followed by the assessment of whether or not it is self-driving. Currently, the expectation of installation of an ADS into particular types of vehicle makes sense. However, as the technology evolves, we anticipate that the separation between an ADS and the vehicle into which the ADS may be installed will become less meaningful. At that stage, it would in our view make sense to consider eliminating this distinction so that regulatory assessment and approval takes place as a single process. With this in mind, it might therefore be a better approach to deal with both stages in a single piece of legislation, particularly as legislation is proposed to address the second of these steps (see Question 14).

CONSULTATION QUESTION 12

We invite observations on the appeal process in regulation 19 of the Road Vehicles (Approval) Regulations 2020, including:

(1) how it works in practice; and

(2) how well it is suited to the proposed national ADS approval scheme.

No response.

CONSULTATION QUESTION 13

We provisionally propose that:

(1) once an ADS has received type approval at either international or domestic level, an Automated Driving System Entity (ADSE) would need to submit the vehicle to the UK safety regulator for categorisation as able to safely drive itself;

(2) the safety regulator should make a recommendation to the Secretary of State for how the vehicle should be classified;

(3) it should be open to the safety regulator to recommend that an ADS-enabled vehicle is classified in one of three ways: as not self-driving but driver assistance; as self-driving only with a user-incharge; or as self-driving without a user-in-charge;

(4) the safety regulator should only recommend classification as self-driving (either with or without a user-in-charge) if it is satisfied that: (a) an ADSE is registered as taking responsibility for the system; (b) the ADSE was closely involved in assessing safety and creating the safety case; and (c)

the ADSE has sufficient funds accessible to the regulator to respond to improvement notices, to pay fines and to organise a recall. Do you agree?

We support this overall approach, and welcome the clarity around the leap to self-driving set out in the Consultation Paper.

However, these proposals are potentially burdensome and could be prohibitive for smaller market participants seeking to become ADSEs. Development of the system should take account of the ability of different sizes of organisations to participate. Smaller innovators can often provide the most creative approaches to technological advancement. We note the discussion of the need to identify a single ADSE, in order to ensure accountability. However, this should not be implemented in a way that, in effect, limits market participation to large organisations. We suggest that permitting collaborators to fill this role jointly should be reconsidered. We support the proposal that insurance cover can be used to back the financial responsibilities, as a way of enabling smaller organisations to engage in the market.

CONSULTATION QUESTION 14 (Paragraph 8.77)

We provisionally propose that a new legislative framework should provide regulation making powers to specify: (a) who should assess whether a vehicle is capable of self-driving; (b) the procedure for doing so; and (c) criteria for doing so. Do you agree?

Yes. However, we suggest that the provisions relating to the ADS approval and the classification a vehicle as self-driving be brought together into one set of legislation. As the system evolves, the proposed separation of these two stages is likely to become less meaningful, and may ultimately need to be removed.

CONSULTATION QUESTION 15 (Paragraph 8.78)

We seek views on whether the new legislation should include provisions for appeals against a categorisation decision. If so, should these be similar to those in regulation 19 of the Road Vehicles (Approval) Regulations 2020?

It would be sensible to include a specific appeals/review process.

CONSULTATION QUESTION 16 (Paragraph 8.83)

We seek views on whether the regulator that classifies vehicles as self-driving should have power to allow their deployment in limited numbers, so as to gather further data on their safety in real world conditions.

We discuss in our general comments the approach of aligning with the regulatory systems that apply to other high-risk industries. The comparison with the pharmaceutical industry is helpful here. Pre-clinical and clinical tests and trials are carried out on a proposed new medicine in order to assess its safety and effectiveness in a controlled way. Close observation and monitoring permits any adverse outcomes to be identified quickly

and addressed. Rigorous consent arrangements ensure that trial subjects are aware of any risks before they sign up. This is certainly not a fool-proof system, but it does offer a structured way to increase the level of risk to members of the public in a controlled way.

Obviously, it is not possible to replicate this system in the context of autonomous vehicle testing, but the tiered approach described in the Consultation Paper mirrors it to some extent. What is perhaps lacking is the ability to obtain the informed consent of those who might be affected by the testing. While users of a vehicle can be informed about the experimental nature of the deployment, other road users who are just as likely to be negatively affected will not have the same opportunity to understand and consent to it. For this reason, a substantial amount of evidence from the track-based testing, virtual testing and road trials with safety drivers should be expected, before vehicles are deployed commercially. This is just as much in the interests of developers as users and the wider public; any adverse events at the initial roll-out stage, and the resulting news coverage, is likely to be very damaging to the prospects for a new autonomous vehicle.

CHAPTER 10: ASSURING SAFETY IN USE CONSULTATION QUESTION 17 (Paragraph 10.82)

We provisionally propose that legislation should establish a scheme to assure the safety of automated driving systems following deployment, giving scheme regulators enhanced responsibilities and powers. Do you agree?

We agree with introducing a scheme of safety assurance following deployment.

This is likely to be particularly important in the early stages of deployment of the technology as it can feed into and support the development of practical and targeted guidance. Identification of accidents and other problem scenarios, if these are accurately and transparently reported, will be invaluable in preventing similar incidents occurring again.

CONSULTATION QUESTION 18 (Paragraph 10.83)

We provisionally propose that the enhanced scheme should give regulators the following responsibilities and powers:

(1) scheme regulators should be responsible for comparing the safety of automated and conventional vehicles using a range of measures;

(2) to do this the regulator should have power to collect information on:

(a) leading measures (instances of bad driving which could have led to harm) and (b) lagging measures (outcomes which led to actual harm);

(3) regulators should have power to require an ADSE: (a) to update software where an update is needed to ensure safety and continued compliance with the law; (b) to keep maps up-to-date, where an AV relies on maps to ensure safety and compliance with the law;

(c) to communicate information about an ADS to users in a clear and effective way, including where necessary through training.

Do you agree?

These seem to be sensible categories, although should be defined taking account of technical input.

CONSULTATION QUESTION 19 (Paragraph 10.84) We welcome views on the following issues:

(1) Should scheme regulators be empowered to approve software updates that apply only within the UK, without requiring the manufacturer to return to the original type approval authority?
(2) Should the scheme should also deal with cybersecurity?

(3) Are other powers needed? (Note that data is discussed in Chapter 17.)

In our view, it is necessary to address cybersecurity as a part of the overall safety and effectiveness of an ADS.

CONSULTATION QUESTION 20 (Paragraph 10.100)

Should the authority administering the scheme to assure safety while automated vehicles are in use be kept separate from type approval authorities (as is already the case)? Alternatively, should both functions be combined in a single body?

We would support the approach of combining these functions in a single body for the following reasons. First, there will be development of expertise within the organisation that is likely to be difficult to replicate across two separate organisations, especially in the early years of deployment. Second, some tasks may be difficult to allocate easily in one or other set of tasks – such as implementation of software updates and changes to reflect changes to road rules. Third, knowledge and experience developed through the post-deployment safety assurance system will need to guide and inform pre-deployment assessment, and in our view, this would be done best by having both roles within the same organisation. Finally, we see setting up two separate organisations with a similar range of expertise would lead to unnecessary duplication and cost.

We recognise the point about of conflicts of interest discussed in paragraph 10.91 of the Consultation Paper, but consider that this would be adequately addressed through input from a consultative or advisory committee.

CONSULTATION QUESTION 21 (Paragraph 10.101)

What formal mechanisms could be used to ensure that the regulator administering the scheme is open to external views (such as duties to consult or an advisory committee)?

We would support the establishment of an advisory committee including views from a range of road users and experts. This group could assist with the development of safety standards, as well as providing oversight for the safety assurance system.

CHAPTER 11: INVESTIGATING TRAFFIC INFRACTIONS AND COLLISIONS

CONSULTATION QUESTION 22 (Paragraph 11.24)

We provisionally propose that a statutory scheme to assure AVs in-use should:

(1) investigate safety-related traffic infractions (such as exceeding the speed limit; running red lights; or careless or dangerous driving);

(2) investigate other traffic infractions, including those subject to penalty charge notices;

(3) if fault lies with the ADSE, apply a flexible range of regulatory sanctions.

Do you agree?

It is particularly important here not to treat an ADS in the same way as a human driver. As has been noted, there is a leap from the concept of vehicles driven by human users, to AVs. Contraventions of traffic rules should be considered as a safety assurance matter. The cause for the event should be investigated and where necessary, changes should be made either to signage and road infrastructure or to the guidance applicable to developers.

We do not see penalty charge notices of the type issued to human drivers as useful in this context. In our view, it would be better to apply regulatory sanctions in the form discussed below. However, this should be conditional on the system of investigation having a view to promoting a safety culture rather than a blame culture, as discussed in paragraphs 11.55-11.68 of the Consultation Paper.

We recommend the inclusion of a due diligence defence as it may not have been possible for a developer to have foreseen the precise circumstances in which the infraction occurred.

CONSULTATION QUESTION 23 (Paragraph 11.53)

We provisionally propose that the regulator which assures the safety of AVs in-use should have powers to impose the following sanctions on ADSEs:

- (1) informal and formal warnings;
- (2) fines;
- (3) redress orders;
- (4) compliance orders;
- (5) suspension of authorisation;
- (6) withdrawal of authorisation; and
- (7) recommendation of attendance at a restorative conference.
- Do you agree?

We support the use of a range of regulatory sanctions of the types outlined. This is broadly consistent with the approach taken in other high-risk industries and is more likely to incentivise appropriate behaviour than attempting to mirror sanctions applied to human drivers. However, again, this should be conditional on the system of investigation having a view to promoting a safety culture rather than a blame culture, as discussed in paragraphs 11.55-11.68 of the Consultation Paper.

CONSULTATION QUESTION 24 (Paragraph 11.54)

We provisionally propose that the legislation should provide the regulator with discretion over:

- (1) the amount of any monetary penalty; and
- (2) the steps which should be taken to prevent re-occurrence of a breach.
- Do you agree?

We agree. However, we suggest that the amount of any monetary penalty should have an upper limit, and should be proportionate to the offence and objectively determined.

CONSULTATION QUESTION 25 (Paragraph 11.69)

We provisionally propose that a specialist incident investigation unit should be established: (1) to analyse data on collisions involving automated vehicles;

(2) to investigate the most serious, complex or high-profile collisions; and(3) to make recommendations to improve safety without allocating blame.Do you agree?

We agree with this approach.

CONSULTATION QUESTION 26 (Paragraph 11.82) We provisionally propose that the UK Government should establish a forum for collaboration on the application of road rules to self-driving vehicles. Do you agree?

We agree.

CONSULTATION QUESTION 27 (Paragraph 11.83)
We welcome views on:
(1) the issues the forum should consider;
(2) the composition of the forum; and
(3) its processes for public engagement.

It may be possible to involve members of the advisory committee that has a role in scenario development and safety assurance, to avoid duplication of organisations and to encourage the application of lessons learned in one context to another.

CHAPTER 12: THE USER-IN-CHARGE

CONSULTATION QUESTION 28 (Paragraph 12.24)

We provisionally propose that that the user-in-charge: (1) should be defined as an individual in position to operate the controls of a vehicle while an ADS is engaged and who is either in the vehicle or in direct sight of the vehicle; and (2) is not a driver while the ADS is engaged, and would not be liable for any criminal offence or civil penalty (such as a parking ticket) which arises out of dynamic driving. Do you agree?

As discussed in our response to Question 1, we have serious concerns about the intermediate category of self-driving with a user-in-charge.

In addition, we regard it as particularly important that it is completely clear to an individual when they are and are not responsible for the driving task. Any ambiguity around this would be both unfair and liable to lead to accidents and injury.

CONSULTATION QUESTION 29 (Paragraph 12.37) We provisionally propose that following the end of the transition demand period: (1) the user-in-charge should re-acquire the legal obligations of a driver, whether or not they have taken control of the vehicle; and

(2) if, following a failure to respond to a transition demand, the vehicle stops in a manner which constitutes a criminal offence, the user-in-charge should be considered a driver and should therefore be liable for that offence. Do you agree?

We disagree.

We consider the concept of handover to a user-in-charge to be problematic, as discussed in our response to Question 1. Chapter 4 of the Consultation Paper recognises that a person who is not actively engaged in the driving task is likely to find it difficult to respond quickly to a handover request and gain an appropriate degree of situational awareness. In our view, criminalising an individual in this situation is inappropriate.

The vehicle should be capable of reaching a minimal risk condition where handover does not complete and the user-in-charge would not be responsible for this procedure.

CONSULTATION QUESTION 30

We seek views on whether a person with a provisional licence should be allowed to act as a user-incharge, if accompanied by an approved driving instructor in a vehicle with dual controls.

No response.

CONSULTATION QUESTION 31 (Paragraph 12.53) We provisionally propose that legislation should create new offences of: (1) using an automated vehicle as an unfit or unqualified user-in-charge; and (2) causing or permitting the use of an automated vehicle by an unfit or unqualified user-in-charge. Do you agree?

We accept that this will be necessary if the user-in-charge role is implemented as envisaged. Absolute clarity as to these responsibilities and potential penalties will be necessary in relation to any particular AV. In the early stages of deployment there is considerable potential for confusion.

CONSULTATION QUESTION 32 (Paragraph 12.59)

We provisionally propose that persons carried without a user-in-charge should be guilty of a criminal offence. Do you agree?

Again, if this approach is followed, absolute clarity as to these responsibilities and potential penalties will be necessary in relation to any particular AV.

CONSULTATION QUESTION 33 (Paragraph 12.60) We seek views on whether the new proposed offence of being carried without a user-in-charge should only apply if the person:

(1) knew that the vehicle did not have a user-in-charge; and

(2) knew or ought to have known that a user-in-charge was required.

We agree.

CONSULTATION QUESTION 34 (Paragraph 12.66)
We provisionally propose that a user-in-charge who takes over control of the vehicle:
(1) should be considered a driver; but
(2) should have a specific defence to a criminal offence if, given the actions of the ADS, a competent and careful driver could not have avoided the offence.
Do you agree? If not, we welcome views on alternative legal tests.

There are serious difficulties with making a user-in-charge criminally liable in these circumstances. In situations where the person in the AV seeks to avoid an anticipated accident by taking evasive action, they could in fact make matters worse. The AV may be preparing to brake, for example, having made an assessment that this will be the best way of minimising harm. However, the occupant of the AV may observe the danger at the last minute having been engaged in other activities, and may conclude that steering away is necessary. This could cause more damage or harm than would otherwise have been the case. The defence outlined in Question 34(2) would not apply. In our view, criminalising such a person would be unjust.

An incident of this kind would need careful analysis, but we feel should not lead to blame for the person involved unless their actions were clearly reckless. Instead, the findings from the incident should feed into future guidance and development standards.

One option might be to require an ADS to provide clear signals (visual and auditory) that it has detected the danger and is taking the best available action to avoid it. This would indicate to the person in the vehicle that they should not attempt to resume control. If this were the case, then it may be appropriate to impose a penalty on a diver who ignores these signals.

CONSULTATION QUESTION 35 (Paragraph 12.94)

We provisionally propose that the user-in-charge should be liable for criminal offences which do not arise from the dynamic driving task, including those related to:

(1) insurance;

(2) maintaining the vehicle in a roadworthy condition (including installing safety critical software updates);

(3) parking;

(4) duties following accidents to provide information and report accidents to the police; and (5) ensuring child passengers wear seatbelts.

Do you agree?

Yes, provided that these obligations are made absolutely clear to the user-in-charge of that particular AV. With a mixed population of vehicles on the roads, the potential for confusion would be great, with AV users unsure as to which obligations apply to them.

It is particularly important that obligations as to installing software updates are understood by users in a timely way, as these will be unfamiliar to users at least in the early phase of deployment.

CONSULTATION QUESTION 36 (Paragraph 12.95)

We provisionally propose that the legislation should include a regulation-making power to clarify those roadworthiness failings which are (and those which are not) the responsibility of the user-in-charge.

Do you agree?

Yes.

CHAPTER 13: REMOTE OPERATION: NO USER-IN-CHARGE VEHICLES

CONSULTATION QUESTION 37 (Paragraph 13.67)

We provisionally propose that: (1) where an individual is exercising latitudinal and longitudinal control (steering and braking) over a vehicle remotely, that should not be regarded as a form of "self-driving"; and (2) where lateral and longitudinal control are exercised by an ADS, all other forms of remote operation should be regulated as "self-driving". Do you agree?

We welcome views on whether the current definition of when a vehicle "drives itself" under the Automated and Electric Vehicles Act 2018 should be amended to deal with some forms of remote operation which may involve a degree of "monitoring".

We agree, and consider that the revised definition of when a vehicle "drives itself" set out in paragraph 13.64 is a good way to address this kind of situation. However, we suggest that there needs to be greater clarity as to the phrase "in sight of the vehicle". Monitoring from a distance of more than a few metres is, we suggest, more akin to the concept of monitoring from a remote operations centre. A person at 100 metres from the vehicle would not be in close operational control with full awareness of the surroundings and potential risks that could be presented by the vehicle's movement.

CONSULTATION QUESTION 38 (Paragraph 13.86) *We provisionally propose that:*

(1) the regulation of self-driving vehicles should distinguish between an Automated Driving System Entity (which vouches for the design of the system) and an operator (responsible for the operation of individual vehicles);

(2) all vehicles authorised for use on roads or other public places with no user-in-charge should either:

(a) be operated by a licensed operator; or

(b) be covered by a contract with a licensed operator for supervision and maintenance services;

(3) it should be a criminal offence to use a NUIC vehicle on a road or other public place unless it is operated by a licensed operator or is covered by a contract with a licensed operator for supervision and maintenance services.

Do you agree?

Yes. We agree with the rationale of increasing competition by permitting separation of these roles. However, we have three concerns.

First, the contract with the licensed operator should not make the use of a NUIC vehicle unaffordable. Such vehicles could offer an important mobility opportunity to disabled users and other disadvantaged groups. We suggest that the obligations to be fulfilled by a licensed operator should be kept to the minimum necessary to assure safe use, and should not be "gold-plated".

Second, it is particularly important that the obligations to enter into and maintain a contract with a licensed operator are clearly communicated to and understood by vehicle users.

Finally, the respective responsibilities of the ADSE and the licensed operator must be clearly defined. It may be possible to allow a degree of flexibility between commercial partners as to which bears certain responsibilities, but we consider it necessary to identify these and set out in each case where they lie. Software updates, for example, will be issued by the ADSE, with responsibility to install them possibly falling to either the ADSE or the licensed operator. It must be clear in any particular instance which entity takes that responsibility so that a failure to fulfil it cannot be blamed by each on the other.

CONSULTATION QUESTION 39 (Paragraph 13.92)

We welcome views on whether NUIC operators should be required to demonstrate professional competence through a safety management system, as set out in a safety case.

We regard this approach as much more appropriate than replicating the transport manager system currently applied to public service vehicle licensing.

CONSULTATION QUESTION 40 (Paragraph 13.108)

We provisionally propose that, irrespective of the nature of the vehicle, a licensed operator should be under a duty to:

- (1) supervise the vehicle;
- (2) maintain the vehicle;
- (3) insure the vehicle;
- (4) install safety-critical updates and maintain cybersecurity; and
- (5) report accidents and untoward events (as defined by the regulator).

Do you agree?

Yes, subject to our comments above about the possibility of a contractual allocation of responsibilities between ADSEs and licensed operators.

We suggest that the duty to report should be constructed in a way that incentivises accurate reporting, rather than penalising it. This ties in with the need to promote a safety culture and enable learning from both accidents and near misses.

CONSULTATION QUESTION 41 (Paragraph 13.109)

We provisionally propose that legislation should include a regulation-making power by which some or all of these duties could be transferred to the registered keeper or owner, if it was shown that it was appropriate to do so.

Do you agree?

Yes possibly, although this is likely to present practical difficulties.

CONSULTATION QUESTION 42 (Paragraph 13.116)

We welcome views on how accessibility standards for Highly Automated Road Passenger Services (HARPS) might be developed.

We provisionally propose that:

(1) an accessibility advisory panel should be formed to include: (a) the Equalities and Human Rights Commission; and (b) representative groups for disabled and older persons;

(2) the Secretary of State should be obliged to consult with the accessibility advisory panel prior to setting any national minimum standards on HARPS;

(3) there should be a duty to periodically re-consult the accessibility advisory panel at set intervals to ensure requirements keep pace with developing evidence of technical feasibility and changing needs.

Do you agree?

We welcome views on what the set interval for periodically re-consulting the accessibility advisory panel should be.

We agree with this overall approach although consider that it should be shaped in consultation with interested individuals and representative groups.

CONSULTATION QUESTION 43 (Paragraph 13.133)

We welcome views on who should administer the operator licensing scheme.

We see the body that administers the safety assurance scheme for AVs as a better fit here than the Traffic Commissioners, both because of the need to understand a new set of interacting technologies, and for the reasons set out in our response to Question 38.

CHAPTER 14: CRIMINAL OFFENCES BY ADSES AND THEIR SENIOR MANAGERS

CONSULTATION QUESTION 44 (Paragraph 14.107) *We provisionally propose that:*

(1) it should be a criminal offence for an ADSE to omit safety-relevant information or include misleading information when putting a vehicle forward for classification as self-driving or responding to information requests from the regulator;

(2) the offence should apply to senior managers (where it was attributable to the manager's consent, connivance or neglect);

(3) the offence should not apply to more junior employees;

(4) the offence should carry a higher sentence if it is associated with a death or serious injury;

(5) the offence should be prosecuted in England and Wales by either the regulator or the Crown Prosecution Service and in Scotland by the Procurator Fiscal.

Do you agree?

The Consultation Paper discusses existing driving-related offences resulting in injury or death. These are closely tied to the behaviour of individual drivers and we agree that it is inappropriate to apply these to ADSEs.

We note instead the concept of introducing new offences to complement the safety assurance scheme. Our general view is that, regardless of use case, all AVs must meet basic safety standards, and should be assessed using a common national safety assurance scheme.

Public safety is at the heart of the development of AVs and we support proportionate measures that support this objective. The right incentives and penalties to support developers to engage fully with the safety assurance scheme and regulator will help to drive safety. However, while we accept that criminal offences may need to be introduced as a part of the overall scheme of safety assurance, we would advise caution in introducing onerous criminal sanctions that could be imposed on individual employees. This could bring with it a danger of encouraging the covering-up of potential problems where an employee is concerned that open discussion could lead to blame for them or their colleagues. Instead, the focus should be on how best to tailor enforcement regimes in order to incentivise transparency and compliance by participating organisations, and to encourage transparency and full cooperation with the regulator.

The Consultation Paper notes that sections 3, 33 and 37 of the Health and Safety at Work etc. Act 1974, and sections 2 and 3 of the Fraud Act 2006, could apply where there is wrongful behaviour by an ADSE. In addition, section 1(1) to (3) of the Corporate Manslaughter and Corporate Homicide Act 2007 and the offences of unlawful act manslaughter, gross negligence manslaughter and culpable homicide potentially apply where death results from wrongdoing. The Consultation Paper notes some difficulties in relation to the existing offences, such as the lack of mechanisms to hold senior management accountable. The proposed Law Commission project on Corporate Criminal Liability would be an appropriate forum to address these broader issues than the current consultation, as it will be able to consider the question broadly, and recommend a consistent approach across all sectors.

As noted in the Consultation Paper, attaching criminal liability to wrongdoing by ADSEs brings with it serious risks, including stifling innovation, unfairly penalising inevitable problems arising from development, treating the AV sector more harshly than other industries and incentivising cover-up rather than transparency. These risks are real, and an overemphasis on criminal liability could endanger the substantial safety gains that are expected from the introduction of AVs.

Subject to our comments below, we support the approach of introducing specific offences that are closely aligned with the safety assurance scheme, and similar to the systems of penalties for failure to comply with safety assurance schemes in other potentially high-risk industries. Making the most egregious behaviour the subject of criminal penalties could be used to give teeth to the safety assurance system. If it transpires that prosecutions are infrequently brought, this can be seen as a success in that culpable behaviour is being effectively dissuaded.

The approach of penalising lack of transparency rather than negligence is a sensible one in the context of a fast-moving, innovative industry. However, we would recommend an approach that encourages cooperation with the regulator and reserves criminal liability for extreme behaviour only. Honest and diligent efforts to comply with the law should not lead to criminal penalties. A due diligence defence can be a way of achieving this, provided that sufficient information and guidance is available to enable an ADSE to understand the requirements fully. Another approach is the inclusion of a mental element in criminal offences, such as an intent to deceive, as with some of the aviation offences.

We query the argument that offences should be tailored to avoid "radical asymmetry" with the treatment of human drivers. The context is very different: the need to discourage careless and dangerous driving by a human driver is not the same as the need to incentivise responsible and transparent systems development. Any form of negative finding applied to an ADSE will have a series of other adverse effects, such as loss of public reputation and confidence, as well as loss of trust with regulators and commercial partners. Therefore, the consequences of any finding of criminal liability in this context will extend far beyond the sentence itself, and will act as a powerful incentive to comply.

The key driver must always be incentivising appropriate behaviours at all levels within an organisation. We query whether separate offences for different levels of staff such as senior management would achieve this objective. It may have the effect of encouraging distortions in behaviour, such as secrecy within parts of an organisation.

Finally, we recommend that enforcement should rest with the specialist regulator rather than being a matter for general prosecution authorities. A specialist regulator is more likely to be able to assess whether particular behaviour is culpable in the context of developing technology, and this approach is consistent with that taken in relation to the other high-risk industries discussed in the Consultation Paper.

CONSULTATION QUESTION 45 (Paragraph 14.108)

We seek views on the following proposed offences.

Offence A: non-disclosure and misleading information in the safety case When putting forward a vehicle for classification as self-driving, it would be a criminal offence for the ADSE to

(1) fail to provide information to the regulator; or

(2) provide information to the regulator that is false or misleading in a material particular where that information is relevant to the evaluation of the safety of the ADS or the vehicle.

The ADSE would have a defence if it could show that it took reasonable precautions and exercised all due diligence to prevent the wrongdoing.

The penalty would be an unlimited fine.

Offence B: non-disclosure and misleading information in responding to requests

When a regulator requests specific information from an ADSE (whether before or after deployment), it would be a criminal offence for the ADSE to

(1) fail to provide information to the regulator; or

(2) provide information to the regulator that is false or misleading in a material particular where that information is relevant to the evaluation of the safety of the ADS or the vehicle.

The ADSE would have a defence if it could show that it took reasonable precautions and exercised all due diligence to prevent the wrongdoing.

The penalty would be an unlimited fine.

Offence C: offences by senior management Where offence A and/or offence B committed by a body corporate is proved— (3) to have been committed with the consent or connivance of an officer of the body corporate; or (4) to be attributable to neglect on the part of an officer of the body corporate, then that officer is guilty of the offence.

An officer includes any director, manager, secretary or other similar officer or any person who was purporting to act in any such capacity.

We see this as equivalent to offences under the Human Medicines Regulations 2012 and General Product Safety Regulations 2005, which carry a penalty of a fine and/or a maximum two years' imprisonment.

Offence D: aggravated offences in the event of death or serious injury following non-disclosure or provision of misleading information to the AV safety regulator

Where a corporation or person commits Offences A to C, that offence is aggravated where the misrepresentation or non-disclosure:

(5) related to an increased risk of a type of adverse incident; and

(6) an adverse incident of that type occurred; and

(7) the adverse incident caused a death or serious injury.

We see this as equivalent to the offence of causing death by dangerous driving, which carries a penalty of an unlimited fine and/or a maximum of 14 years' imprisonment.

As stated in our response to Question 45, great care is needed in designing any offences to align them with incentivising appropriate behaviour at all levels of ADSE organisations, in particular, transparency and cooperation with regulators. The overall objective of improving safety should be paramount, and the careful development of AVs in a transparent and collaborative manner promises to achieve this.

In relation to suggested Offences A and B, we would point out that the pharmaceutical industry, on which these offences are modelled, provides established and extensive guidance to market participants to enable them to understand their obligations. Clearly, this would not be available in the early stages of development of AVs. Until a substantial body of practice and guidance has been built up, ADSEs would not be able to tell whether the information package that they are presenting in fact meets all of the requirements to satisfy the "relevant to the evaluation of the safety of the ADS or the vehicle" test. It may therefore be appropriate to introduce this kind of test once the industry has developed further. We have concerns that at this stage it could act to deter innovators, especially smaller players, from entering the market. This point is also relevant to the due diligence defence, discussed further below.

The aviation industry provides a useful model. As with the aviation sector, an ADS comprises a sophisticated, mechanically-propelled assembly of components that may, through malfunction, cause personal injury and damage to property. We note that the primary approach taken in the aviation sector relies on notices served by the regulator requiring the provision of information, with enforcement through civil proceedings and potentially substantial financial penalties.

The Civil Aviation Authority's stated policy objective in enforcement is to use enforcement to secure the behaviours that it wants to encourage and monitor (Civil Aviation Authority Regulatory Enforcement Policy). It does this through a spectrum of enforcement beginning with collaboration and facilitation, moving through advisory processes such as guidance and verbal warnings, and then to formal enforcement tools of increasing seriousness.

Two offences relating to the provision of false information are discussed in paragraph 14.69 of the Consultation Paper. We note that the "false representations" offence set out in the Air Navigation Order 2016 Article 256(1)(c) is qualified with a mental element of "having an intent to deceive". This is a more stringent test than is currently envisaged in proposed Offence A.

The second aviation-based offence identified in paragraph 14.69 involves furnishing false information in response to a notice issued by the regulator. We note that this involves the licence holder responding to an information request rather than itself identifying the necessary information.

Neither of these offences corresponds with the proposed failure to provide relevant information offence (Offence A). This, we suggest, sets too exacting a standard for ADSEs to reach, especially in the early stages of this new technology, where full guidance will not be available. Offence B corresponds somewhat to the second aviation offence, although importantly it lacks the "intent to deceive" element.

Offence C ascribes blame to senior employees of an ADSE in situations involving their consent, connivance or neglect. However, we have concerns that this could drive inappropriate behaviour within an organisation. A situation could arise in which decision-making is driven to junior levels, or development is compartmentalised into smaller business units, in order to separate senior managers from any wrongdoing. In addition, we consider that it will be difficult to ascribe blame to particular individuals in a way that is fair and does not single out a person who is, in reality, working in a team context.

We note that the offence on which this is based (Civil Aviation Act 1982 (s. 99(1)) would apply in relation to the aviation offences discussed in paragraph 14.69 of the Consultation Paper. As noted above, these involve either the "intent to deceive" or responding to notices issued by the regulator.

In relation to Offence D, we consider that the issue of causation is problematic. As is discussed in Chapter 16 of the Consultation Paper, causation is difficult in the context of this evolving and interconnected technology. The three-step test for aggravation is uncertain and potentially exposes employees working within an ADSE to very substantial penalties, without a sufficient degree of clarity and certainty.

In addition, the proposed maximum term of imprisonment for Offence D is out of line with the penalties applicable to offences in relation to other high-risk industries. We consider that a maximum penalty in line with that in the aviation sector legislation and the Human Medicines Regulations 2012 (two years' imprisonment) is sufficient in the context of a person fulfilling their occupational role. The comparison with the maximum penalties that can be imposed upon human drivers is not appropriate, because individuals working within an ADSE are unlikely to be solely responsible for an incident in the way that a driver often is, and the attribution of blame to an individual is not appropriate in the same way. For an ADSE, the reputational impact of a conviction where a serious incident has occurred is likely to act as a strong deterrent without the need for long sentences, and will drive organisational compliance in the same way that it does in the aviation or pharmaceutical industry.

The proposed inclusion of the due diligence defence is helpful. However, at this early stage of development, it will be difficult for an ADSE to understand exactly what is required to fulfil this standard. Those innovators who are early to market should not be made an example of by criminal enforcement when the standard expected of them is not fully understood. Regularly updated guidance issued by a safety regulator, under

statutory authority, would be a sensible way to inform ADSEs what standard is expected of them. Until this is developed, an ADSE could not easily make use of the defence. We note also that the Human Medicines Regulations 2012, on which this defence is based, require a court or jury to accept the due diligence unless the prosecution can demonstrate beyond reasonable doubt that they should not. This provision should be included along with any due diligence defence.

Overall, the proposed offences as currently drafted need improvement in a number of respects. Important elements such as the intent to deceive, or the provision of information in response to specific notices, should not be omitted. Where imprisonment is included as a potential penalty, it should only be included for the most serious kinds of behaviour involving a punishable mental element. A maximum two-year term would be a sufficient deterrent, and including a potential 14-year term is obviously excessive in this context. Finally, the proposals introduce the possibility of committing an offence through a failure to set out information in a way that later turns out to have been misleading. In our view, this is an impossibly high hurdle to surpass, especially in the absence of full and up-to-date guidance. This should not lead to criminal liability without some additional mental element such as an intent to deceive. What is important, especially at this early stage of development, is to tailor enforcement to promote transparency, responsiveness to information requests, and cooperation between the regulator and an ADSE.

CONSULTATION QUESTION 46 (Paragraph 14.109)

We welcome views on whether an ADSE should be under a duty to present information in a clear and accessible form, in which safety-critical information is indexed and signposted.

As discussed under Question 45, there is a problem here in the provision of adequate guidance for ADSEs. It is clearly desirable to incentivise the presentation of information in a clear and accessible form. However, at the current stage of development, it will be very difficult for developers to know exactly how the information should be presented to enable the safety regulator to understand it appropriately, and to signpost the elements that, perhaps only later, prove to be most relevant.

A situation could arise, for example, in which a minor part of the overall operation of the system turns out, in practice, to introduce a dangerous state in particular circumstances (the presence of an unexpected road user, or very unusual weather conditions). This could lead to an accident. It would be unfair to expect developers to be able to foresee this as being potentially significant when presenting their information for approval, and they could later be criticised for not highlighting relevant information.

It would be better, in our view, to focus on transparency and cooperation with the safety regulator, and the development of guidance in how best to organise and present supporting information and data. The duty of presentation of information might be introduced at a later stage, when standards for presentation and organisation of information has become more standardised and detailed guidance has been developed.

CHAPTER 15: NEW WRONGFUL INTERFERENCE OFFENCES

CONSULTATION QUESTION 47 (Paragraph 15.10)

We provisionally propose that legislative amendment should clarify that the tampering offence in section 25 of the Road Traffic Act 1988 applies to anything that is physically part of a vehicle and any software installed within it. Do you agree ?

We agree with this proposal and support the inclusion of software.

CONSULTATION QUESTION 48 (Paragraph 15.11) We welcome views on whether the tampering offence should apply to external infrastructure required for the operation of the AV.

We support the proposal that the tampering offence should apply to external infrastructure.

The tampering offence refers to interference with "the brake or other part of its mechanism". However, as the Consultation Paper suggests, an AV's ability to operate safely depends on external infrastructure such as networks and beacons. We agree that the offence should be amended to apply to external infrastructure required for an AV's operation.

We do have a concern, however, that the penalties for tampering may be inadequate to deal with a more serious degree of tampering with infrastructure. This could affect the operation of several vehicles at once, with consequently serious effects, and would therefore merit a more serious penalty. We suggest that consideration be given to creating a new offence that reflects this more serious and dangerous type of activity.

CONSULTATION QUESTION 49 (Paragraph 15.53)

We provisionally propose that there should be an aggravated offence of wrongfully interfering with an AV, the road, or traffic equipment contrary to section 22A of the Road Traffic Act 1988, where the interference results in an AV causing death or serious injury, in: (1) England and Wales; and (2) Scotland. Do you agree?

We agree with this proposal for both England and Wales, and Scotland. We support the need for a clear and consistent offence in both jurisdictions.

CONSULTATION QUESTION 50 (Paragraph 15.55) We provisionally propose that the appropriate mental element for the aggravated offence is intent to interfere with a vehicle, the road or traffic equipment. Do you agree?

We agree with this proposal.

CONSULTATION QUESTION 51 (Paragraph 15.62)

We seek views on whether an approved work defence for repair or maintenance operations authorised by a vehicle manufacturer or Automated Driving System Entity is desirable.

We agree with the inclusion of the approved work defence. We consider it to be important that repair and maintenance operations that have been authorised by a manufacturer or ADSE are not at risk of being criminalised.

In the light of the concerns set out in Consultation Paper paragraph 15.61, we suggest that a clarification of section 22A of the Road Traffic Act 1988 be considered, to make clear that "lawful authority" and "reasonable cause" are separate restrictions on the scope of the offence.

CHAPTER 16: CIVIL LIABILITY

CONSULTATION QUESTION 52 (Paragraph 16.24) We provisionally propose that the way the Automated and Electric Vehicles Act 2018 deals with contributory negligence and causation is: (1) adequate at this stage; and (2) should be reviewed by the UK Government in the light of practical experience. Do you agree?

The way the Automated and Electric Vehicles Act 2018 deals with contributory negligence is unnecessarily complex and will need clarification either now or in the future. The Consultation Paper proposes leaving this until more experience has been gathered through the use of AVs.

The courts are familiar with applying the principles of contributory negligence in existing cases and will presumably be able to extend these to a scenario involving an AV. The complex formulation of this test flows from the way the Automated and Electric Vehicles Act 2018 imposes liability on the insurer. As a result, we agree that the law in this area is adequate at this stage, but the wording of section 3 should be reviewed after a set period of time, for example two years.

On causation, we agree that it would be difficult at this stage to set out how this will work in detail.

For both contributory negligence and causation, we propose that guidance be developed as soon as realworld situations begin to arise and are dealt with by the enforcement authorities or the courts. Non-statutory guidance, falling within the statutory remit of the safety regulator, could be issued and updated on a regular basis in response to experience and developing technology. It would be sensible to provide for this in primary legislation.

CONSULTATION QUESTION 53 (Paragraph 16.32)

We provisionally propose that measures should be put in place to compensate the victims of accidents caused by uninsured AVs. Do you agree?

We agree that measures to compensate victims of accidents caused by uninsured AVs are necessary. However, an alternative approach should be considered, whereby an uninsured AV cannot operate at all.

CONSULTATION QUESTION 54 (Paragraph 16.47)

We provisionally propose that:

(1) product liability law should be reviewed to take account of the challenges of emerging technologies;

(2) any review should cover product liability as a whole, rather than be confined to automated vehicles; it should not, therefore, form part of this project on automated vehicles. Do you agree?

We agree that any review of product liability law should not be confined to AVs. We note the ongoing EU project to review existing product liability law and bring it into alignment with new technologies. It is uncertain at this stage what approach the UK will take to developing the law in this area. However, in our view, it would not be appropriate to review the application of the Consumer Protection Act 1987 specifically in the context of AVs. The issues raised in relation to software updates, the definition of defect and proof of a defect having occurred, and establishment of causation merit substantial consideration for innovative technologies more broadly.

Under the current system, we would expect the manufacturer to have responsibility for software forming part of the overall "product". Although this means they would be liable under the CPA 1987 for any defects arising from software provided by third parties, we would expect them to manage this liability contractually between them. Manufacturers could seek an indemnity from software providers if the software provided renders the product defective under the CPA 1987. The parties would normally only accept liability that they were able to insure.

CHAPTER 17: ACCESS TO DATA

CONSULTATION QUESTION 55 (Paragraph 17.65)

We provisionally propose that:

(1) for a vehicle to be classified as self-driving, it needs to record the location as well as the time at which the ADS is activated and deactivated;

(2) the Government should work within the UNECE to ensure data storage systems for automated driving record these data; and

(3) any national system to approve an ADS should require these data to be collected, subject to safeguards.

Do you agree?

Questions 55-58 address issues of data privacy. Since the Consultation Paper was published, there have been several important changes to data protection laws. The EU-UK transition period has ended, and UK law has been amended to reflect this. The "UK GDPR" now applies within the UK in place of the GDPR, with amendments made by Statutory Instrument to apply this law appropriately. The EU-UK Trade and Cooperation Agreement provides a period of up to six months for continuing flow of personal data between the EU and the UK (Article FINPROV.10A: Interim provision for transmission of personal data to the United Kingdom). A draft adequacy decision has been published by the European Commission recognising the adequacy of UK data protection laws. In addition, a negotiating mandate on the draft ePrivacy Regulation has been approved by the EU Council for negotiation with the European Parliament, with an expectation that this legislation is now close to being finalised (relevant to paragraphs 17.53-17.61). The Council draft includes references to connected and automated vehicles, and the need to permit limited use of data in order to enable these technologies to be used. (We note the comment that the ePrivacy Directive no longer applies in the UK after the end of the transition period. However, the 2003 ePrivacy Regulations do remain part of UK law, at least for the time being, and these may be interpreted in the light of the Directive and pre-exit day case law).

While these changes may not have an immediate impact on the analysis, there are likely to be changes in the near future to both the EU and UK data protection regimes that should be followed and assessed for any

impact on the proposals as they are developed. The UK now has greater freedom to adapt and evolve its privacy regime (and indeed the UK Government has its expressed enthusiasm for doing so). However, any divergence from the EU model will need to be done carefully so as not to put at risk the EU's view on adequacy.

We agree in principle with the rationale for recoding location and time data for activation and deactivation of the ADS. Rigorous safeguards as to retention of and access to this information will be needed so that only necessary and proportionate uses are allowed. Wider use of this data (for example, for the marketing of invehicle entertainment services) without properly informed consent by individuals concerned would be unacceptable.

CONSULTATION QUESTION 56 (Paragraph 17.71)

We provisionally propose that legislation should impose a duty on those controlling AV data to disclose data to insurers, where the data is necessary to decide claims fairly and accurately. Do you agree?

Yes. However, the test of necessity should be clearly and rigorously defined.

CONSULTATION QUESTION 57 (Paragraph 17.81) We provisionally propose that: (1) initially, DSSAD data from self-driving vehicles should be stored for three years; and (2) the issue should be reviewed in the light of experience. Do you agree?

In principle, yes, subject to any technical difficulties.

CONSULTATION QUESTION 58 (Paragraph 17.95)

We provisionally propose that:

(1) when an ADSE applies for categorisation of its vehicle types as self-driving, it should present the regulator with details on how data will be recorded, stored, accessed and protected;
(2) the regulator should only categorise a system as self-driving if it is satisfied that the ADSE has systems to abide by its obligations under the GDPR.
Do you agree?

Yes, although (2) should refer to a data protection impact assessment having been carried out, and it should reference applicable data protection and privacy law rather than the GDPR. This is likely to include the UK GDPR, the Data Protection Act 2018 and the 2003 ePrivacy Regulations, as they may be amended and updated.