

**Response to Law Commissions' third consultation on Automated Vehicles
(Law Commission Consultation Paper 252; Scottish Law Commission Discussion
Paper 171)**

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What is your name?

Jeff Hawke

What is the name of your organisation?

Wayve

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

Response on behalf of organisation

CHAPTER 4: SELF-DRIVING AND HUMAN INTERVENTION

Consultation Question 1 (Paragraph 4.114)

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?

[Respondents chose from the following options: yes; no; other.]

Yes

Consultation Question 2 (Paragraph 4.115)

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

We assume this question is primarily aimed at L3 systems where users-in-charge may be licensed to drive but hearing impaired. In the context of L4+ services we anticipate using different modalities for any user controls, but we expect no user handover whatsoever. We expect that accessibility will form part of our technology development in the years following initial revenue streams from autonomous transport services.

CHAPTER 5: HOW SAFE IS SAFE ENOUGH?

Consultation Question 3 (Paragraph 5.118)

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?

[Respondents chose from the following options: yes; no; other.]

Yes

Consultation Question 4 (Paragraph 5.119)

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.

[Respondents chose from the following options: as safe as a competent and careful human driver; as safe as a human driver who does not cause a fault accident; overall, safer than the average human driver; none of the above.]

None of the above

We favour a standard based on the following two principles: "as safe as reasonably practicable", and "does not cause an at-fault accident". We believe it more important that we demonstrate our ADS is doing the right thing, not the "average human" response. We anticipate arguing this via a body of evidence in our safety case.

Consultation Question 5 (Paragraph 5.120)

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

Ultimately we see this decision resting with the regulator in cooperation with AV developers. We encourage direct engagement between the regulator and AV developers, as third parties which do not build AV technology are unlikely to offer the technical depth required to understand AV systems. An assessment of this could consider the cost of redundancy,

development feasibility, and likelihood (unrealistic but theoretically possible scenarios). We anticipate that deployment will be phased and iterative, where early deployment evidence informs future deployment: simpler operations can inform more complex operations subsequently.

Consultation Question 6 (Paragraph 5.121)

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

We view equality duty this as taking two forms: 1) unfair risk allocation, 2) equitable access to the benefits of AVS. The former is concerning the attribution of risk to different road users or 3rd parties. The latter is concerning equitable access to transport services.

We do not see this equality duty applying uniformly to every transport service, rather applying to individuals' ability to access transport suiting their needs. It is quite likely that AV technology will change the nature of transportation significantly in the coming decades, and services may be very tailored to particular needs which will not suit all users.

Finally, we also encourage regulators to take a pragmatic view of this equality duty. Getting any AV technology to market is an immense challenge, and this will require focussing on early feasible revenue streams which allow companies such as ourselves to become sustainable. We want to make our technology benefit society as a whole, but in order to do so we first need to provide this benefit to technically easier or more profitable segments of society.

CHAPTER 7: ASSESSING SAFETY PRE-DEPLOYMENT

Consultation Question 7 (Paragraph 7.99)

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?

[Respondents chose from the following options: yes; no; other.]

Yes

We agree in principle, pending details on preferred standards and scope of independent tests.

Consultation Question 8 (Paragraph 7.100)

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 agree on the basis of greater public acceptance, provided that AV developers are the key stakeholder in the scenario database.

CHAPTER 8: INITIAL APPROVALS AND CATEGORISATION – PROPOSALS

Consultation Question 9 (Paragraph 8.17)

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?

[Respondents chose from the following options: yes; no; other.]

Yes

We assume this will facilitate continuity of existing and new development and testing.

Consultation Question 10 (Paragraph 8.25)

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?

[Respondents chose from the following options: yes; no; other.]

Yes

We favour having national approval in addition to international. We are unsure how international regulation will evolve, and we believe this would inhibit early AV deployments if it were the only route to regulated operation. We anticipate harmonisation between national and international regulation in time.

Consultation Question 11 (Paragraph 8.43)

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;
- (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?

[Respondents chose from the following options: yes; no; other.]

Yes

We favour ADS operation to be regulated according to vehicle type or class, close to what is the current structure of vehicle type approval. We favour harmonisation between national and international structure over time.

Consultation Question 12 (Paragraph 8.44)

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.

We have no direct experience with this process but we believe this sounds reasonable.

Consultation Question 13 (Paragraph 8.71)

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-in-charge; 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?

[Respondents chose from the following options: yes; no; other.]

Yes

We would like to understand 4c in greater detail, and how it would apply to an interface agreement between stakeholders (OEM, AV developer, operator, etc.) with responsibilities and expectations for each. It is possible that fines or recalls may be shared between different members of a potential group, or an entity with some responsibility for an AV deployment who is not the ADSE.

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?

[Respondents chose from the following options: yes; no; other.]

Yes

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?

We do not have direct experience with this regulation today, but we believe this is reasonable. We would like to ensure there is a right to appeal for all future AV regulation.

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 agree. This matches our expectations in how we would phase deployment (e.g., 'canary' deployments). We would like this to be subject to appeal, e.g., if this were used to prevent deployments for political purposes. We also would like this to be limitations on deployment

numbers per use case (e.g., last mile delivery, different passenger modes), rather than per ADSE or for the industry as a whole.

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?

[Respondents chose from the following options: yes; no; other.]

Yes

We agree, where the AV developer will contribute to what the regulator considers to ensure it is practicable and effectively assesses AV systems.

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?

[Respondents chose from the following options: yes; no; other.]

Yes

We broadly agree with this suite of tools being available to regulators for autonomous driving. These need to be developed in conjunction with AV developers, which are the only entities likely to have sufficient data and analysis for these powers today. We struggle to see

how 3rd parties will be able to assess AVs without the deep understanding of AVs and the scale of data to support decisions. This suggests to us that ADSEs will need to collaborate closely with regulators and to some extent each other.

On 1. We see risk in comparing autonomous vehicles to conventional (human) driven vehicles. Top level population statistics have some merit, but we caution against granular comparisons. We do not see merit in deeper comparisons between human-driven and autonomous vehicles for regulatory purposes, though these have merit in supporting public acceptance.

On 2. As an AV Developer we would like to work with regulators to define and monitor leading indicators of safety in particular.

On 3. We agree, and would extend this further to include regulatory mechanisms to share known failures within the industry, to ensure every failure is comprehensively reviewed by the industry as a whole, rather than just the company experiencing the failure.

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.)

We are supportive of cybersecurity being addressed in this scheme where it relates to the vehicle platform only. We do not believe this should apply to the systems which coordinate a fleet of autonomous vehicles for a given transport application, where the implications are primarily commercial rather than ones of safety. We include cybersecurity in our support for sharing failures and best practices within the industry (CQ18).

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?

[Respondents chose from the following options: single body; separate bodies; other.]

Single body

We favour a single body in the first instance to enable learning faster about this new technology, and having a single source of accountability and expertise for initial approval and ongoing use. Over time we are supportive of separation of responsibilities for benefits for robust governance, once the technology is mature and has multiple national deployments. However we are not at this point today.

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 have no opinion on formal mechanisms and cannot meaningfully comment.

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?

[Respondents chose from the following options: yes; no; other.]

Yes

We support this as a mechanism to create a transparent no-blame culture for safety in use.

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?

[Respondents chose from the following options: informal and formal warnings; fines; redress orders; compliance orders; suspension of authorisation; withdrawal of authorisation; recommendation of attendance at a restorative conference.]

Informal and formal warnings, Fines, Redress orders, Compliance orders, Suspension of authorisation, Withdrawal of authorisation, Recommendation of attendance at a restorative conference

We agree that each of these could have a place in a regulator's toolkit, where measures are gradual and proportional. We suggest the approach taken by this regulator should encourage mutual learning in the industry during early AV deployments.

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?

[Respondents chose from the following options: yes; no; other.]

Other

We agree that each of these could have a place in a regulator's toolkit, where measures are gradual and proportional. We suggest the approach taken by this regulator should encourage mutual learning in the industry during early AV deployments.

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?

[Respondents chose from the following options: yes; no; other.]

Yes

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?

[Respondents chose from the following options: yes; no; other.]

Yes

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.

We value a wide range of views (cities, interest groups, operators, etc.), however we strongly recommend that technical views from the AV developers and technology companies are prioritised. This is essential to ensure that the views of the forum are grounded in technical feasibility and reality of the technology. This can frequently be lost in abstract discussion of potential AV usage.

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?

[Respondents chose from the following options: yes; no; other.]

Yes

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?

[Respondents chose from the following options: yes; no; other.]

Yes

We assume the concept of a User In Charge is not applicable to L4+ systems. However, there are certain circumstances in L4+ settings where a user may take charge of an autonomous vehicle (e.g., vehicle recovery). In this setting we do not expect the transition demand to come from the vehicle. In this instance we expect the legal obligations of a driver to apply to this person who has undertaken control of their own volition. We understand that this is likely to be the case for NUIC deployments, but we would like to clarify this.

Consultation Question 30 (Paragraph 12.45)

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

We support parity with existing driver licensing regulation.

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?

[Respondents chose from the following options: yes; no; other.]

Yes

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?

[Respondents chose from the following options: yes; no; other.]

Yes

We assume this will not apply to L4+ systems with a fleet operator. We also assume this will not apply to human driven operation of L4 systems for wider operational purposes, e.g., maintenance, vehicle testing, fleet rebalancing or relocation. We would like further clarification of the responsibility of the passenger as it relates to NUIC autonomous vehicle deployments. Regardless, we favour ensuring that there is a clear understanding or consent before a person is considered a user-in-charge.

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 have no opinion, as we are focussed on L4+ systems where we assume the concept of a user in charge does not apply.

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.

[Respondents chose from the following options: yes; no; other.]

Other

We have no opinion. We are focussed on L4+ systems where we assume the concept of a user in charge does not apply.

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?

[Respondents chose from the following options: yes, the user-in-charge should be liable for all offences not arising from the dynamic driving task; the user-in-charge should be liable for some but not all of the offences listed; no, the user-in-charge should not be liable for any offences; other.]

Other

We have no opinion. We are focussed on L4+ systems where we assume the concept of a user in charge does not apply.

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?

[Respondents chose from the following options: yes; no; other.]

Yes

We have no opinion, though this seems sensible. We are focussed on L4+ systems where we assume the concept of a user in charge does not apply.

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?

[Respondents chose from the following options: yes; no; other.]

Yes

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 envisage all dynamic driving decisions (not including route planning) being made by the ADS, where remote operation/assistance/monitoring does not ever directly control the vehicle. It may provide remote routing of the vehicle, as well as remote motion planning for vehicle assistance. We are unsure if changes are required to facilitate this.

Consultation Question 38 (Paragraph 13.86)

We provisionally propose that:

- (4) 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);
- (5) 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;
- (6) 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?

[Respondents chose from the following options: yes; no; other.]

Yes

We agree. We anticipate that regulation will need to take into account different contributors to an autonomous service, where the responsibilities are not uniformly decomposed between those contributors. For example, some roles and responsibilities may need to be held by the ADSE or vehicle manufacturer, even where there is a licensed operator. A model that holds for one autonomous deployment may also not suit others.

Regulation should allow for definition of discrete responsibilities. Depending on the deployment use case, and maturity of the ADS product, different parties will agree allocation of that responsibility through clear interface agreements. Regulation should not pre-define the allocation of responsibilities ahead of a fuller understanding of parties' technical capabilities.

Consultation Question 39 (Paragraph 13.92)

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

We agree. We suggest that regulation should consider which specific responsibilities are transferred from the ADSE to a licensed operator (e.g., vehicle operation, maintenance, monitoring). We anticipate that the scope of the safety management systems required for any transferred responsibilities will be outlined in our safety case as an ADSE.

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?

[Respondents chose from the following options: yes, a licensed operator should be subject to all the listed duties; a licensed operator should be subject to some but not all of the listed duties; no, a licensed operator should not be subject to any of the listed duties; other.]

A licensed operator should be subject to some but not all of the listed duties

We suggest that regulation should consider each of these independently, where different deployments may require different interface agreements. We don't necessarily see all of these responsibilities being assumed by the same party.

We suggest clarification of the definition of "supervise" in the context of an operator: passive monitoring (e.g., observation of fleet movement and sensor integrity levels), compared to active supervision with provision to control AV behaviour at a fleet level (e.g., routing vehicles around an area in which we had an accident).

The latter is much closer to the purview of the ADSE.

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?

[Respondents chose from the following options: yes; no; other.]

Yes

We agree in principle, subject to the delegation of responsibilities and defined interfaces referred to in previous questions. We are unsure what form this secondary market would take, given we expect commercial incentives to favour centralised licensed fleets.

Consultation Question 42 (Paragraph 13.116)

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

We are unsure, as it is unclear today what the first autonomous passenger services will be given the technology is still emerging. Based on our understanding today, we suggest these are considered in the context of different deployments and modes of transport, where accessibility standards consider the transport service as a whole rather than individual deployments.

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?

[Respondents chose from the following options: yes; no; other.]

Yes

We are supportive of these proposals and we intend to build our technology to make autonomous transport available widely across society. However, we reiterate the need to ensure that autonomous technology is able to get to market in any form in the first instance. It is still an emerging technology and will require early sustainable revenue to achieve

adoption. We would be disappointed if AV technology was unable to get to market on the basis of broader accessibility.

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

We do not have a view on a reasonable re-consulting period for accessibility, though we assume a period of one to two years is reasonable.

Consultation Question 43 (Paragraph 13.133)

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

We favour an operator licensing scheme being administered by the ADSE licensing organisation in the first instance, with review at a later date. This is primarily for the requirement of deep technical capability. We are unsure if traffic commissioners are the right body to do this today, due to the need to assure technical and operation safety, rather than transport operation. Our understanding is that this would be a new competency for these bodies.

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?

[Respondents chose from the following options: yes; no; other.]

Yes

We agree with each proposal. We would welcome clarity on the definition of senior and junior staff, particularly as it related to technology companies where some of the most senior people in the company are technical leads with no direct managerial responsibility, but significant cross-functional influence. We would also welcome guidance on how this legislation would take into account coercion, coverups, and protection of whistle blowing.

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.

We agree with the proposals.

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.

We agree. It is in our interest as an ADSE to facilitate clear and unambiguous review of our safety case to a regulator. It is also in our interest to provide clear and accessible information to users and operators of our technology. We consider these to be different parties to which we have a duty to present information clearly and accessibly.

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?

[Respondents chose from the following options: yes; no; other.]

Yes

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 agree. We welcome this as there are both safety, commercial, and transport network implications for infrastructure tampering (e.g., GNSS).

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?

[Respondents chose from the following options: yes, in both England and Wales and Scotland; in neither jurisdiction.]

Yes, in both England and Wales and Scotland

We agree, and favour unified regulation across the UK.

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?

[Respondents chose from the following options: yes; no; other.]

Yes

We agree in principle, where the ADS software and hardware are included as part of this.

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.

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?

[Respondents chose from the following options: yes; no; other.]

Other

We do not have an opinion here and defer to wider legal expertise.

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?

[Respondents chose from the following options: yes; no; other.]

Other

We agree in principle, though we would like greater clarity around how this would be administered for non-UIC deployments (L4+) as we expect that licensed AV operators will need to have insurance in place. We expect that this is perhaps a more pressing question for L3 vehicles where there is an uninsured user-in-charge.

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?

[Respondents chose from the following options: yes; no; other.]

Other

We do not have an opinion here and defer to wider legal expertise.

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?

[Respondents chose from the following options: yes; no; other.]

Yes

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?

[Respondents chose from the following options: yes; no; other.]

Yes

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?

[Respondents chose from the following options: yes; no; other.]

Other

We are unsure how this applies to L4+ systems and would like more clarity. From our understanding of proposed EDRs and DSSADs, it is unclear if this is sufficient for non-UIC L4+ deployments. Our interpretation is that neither records sensor data, which we see as essential for a 'black box' functionality. We advise against duplicate logging (i.e., single source of truth rather than decomposed functionality), as this makes it much more difficult to trace system activity and does not help achieve the underlying audit goal. We also question whether all DSSAD data should be stored for 3 years universally, or if this should rather be governed by the operating scheme. We are unsure if this is the right period of time for higher fidelity data to be preserved for analysis (where longer may be required), or if this is set for purely civil liability reasons.

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 that the ADSE has systems to abide by its obligations under the GDPR.

Do you agree?

[Respondents chose from the following options: yes; no; other.]

Yes

We anticipate that location data associated with recording images in public spaces will be challenging, where we will only be able to make reasonable steps to ensure we are able to meet rights to erasure.