

## AUTOMATED VEHICLES

### A response to the Law Commission's 3rd Review from Cycling UK

#### PART A: INTRODUCTION

1. Cycling UK was founded in 1878 and has over 70,000 members. Cycling UK's central mission is to make cycling a safe, accessible, enjoyable and 'normal' activity for people of all ages and abilities. It was previously known as the Cyclists' Touring Club, or CTC, the national cycling charity. Our interests cover cycling both as a form of day-to-day transport and as a leisure activity, which can deliver health, economic, environmental, safety and quality of life benefits both for individuals and society. We represent the interests of current and would-be cyclists on public policy matters.
2. We welcome the opportunity to respond to the Law Commission's 3<sup>rd</sup> review. We are pleased to note that several points from our response to the 1<sup>st</sup> review have evidently been taken on board. For instance, we are pleased that the 5 levels of automation proposed by the Society of Automotive Engineers (SAE) no longer appears – like many stakeholders, we felt that SAE level 3 (where drivers were allowed to let the vehicle drive itself but were required to monitor it constantly, and be ready to resume control at any time) was really dangerous and should not be permitted for public use.
3. The stages of evolution are now therefore as follows:
  - Advanced Driving Systems – which can (for instance) include parking assist, or Automated Lane Keeping Systems (ALKS) for use on congested motorways etc at speeds up to 37mph, but which require driver supervision, and which are therefore not categorised in law as the vehicle “driving itself”;
  - ‘Highly automated vehicles’, which can ‘drive themselves’ without supervision, but not necessarily throughout a journey. Instead, they would require a ‘user in charge’ (UIC) to be in the vehicle. The UIC must be able and fit to drive, and ready to resume control in response to a request from the vehicle if it reaches the limits of its ‘operational design domain’ (ODD). This could, for instance, be when approaching a motorway exit (a geographic limit to the ODD) or if visibility became poor due to fog or snow (a situational limit). Such vehicles should nonetheless also be capable of stopping safely, or at least reaching a ‘minimal risk condition’, if the UIC fails to take over.
  - ‘Fully automated vehicles’, which can drive themselves for whole journeys and which would therefore only carry passengers, and which could also travel without occupants (e.g. they could drive themselves to pick up passengers). We are pleased to note that the Law Commission has acknowledged that such vehicles would, however, need to be able to call on the assistance of an off-site supervisor, to take over control in the event of technological failure or other abnormal situations.
4. From Cycling UK's perspective, as a charity seeking to increase cycling and improve cycle safety for health, environmental and other reasons, automated vehicles (AVs) could be a huge blessing or a terrible curse, depending on how the technology and the accompanying legislation evolves:
  - *Viewed positively*: if people could summon a fully automated vehicle when they needed one, this could reduce demand for private car ownership. Given that the average car spends 23 hours a day stationary, this could free up vast amounts of parking space. Finally, space for cycling provision could be freed up thanks to AVs' ability to steer very precisely – following one another as if they were on rails.
  - *Viewed negatively*: Fully automated vehicles could massively increase car ownership if every child and adult were able to own one. Moreover, fears that pedestrians and cyclists could hinder the progress of AVs could result in new laws to ‘keep them out of

the way', reducing the freedom and flexibility of cycle and pedestrian movement, particularly on quieter and narrower streets and lanes. There is also the more immediate concern, borne out by early trials, that drivers of semi-automated and highly automated vehicles could become increasingly inattentive, relying on technology that is actually very unreliable.

5. The following key points from our 1<sup>st</sup> review response are still relevant to this 3<sup>rd</sup> review:
- The advent of AV technology should be seen as an opportunity to achieve a quantum improvement in road safety. At present, the risks of death or injury on our roads is intolerably poor, especially for children and other non-drivers. To achieve only an incremental improvement (e.g. to accept AVs as soon as they are marginally safer than human drivers) would be a terrible missed opportunity to benefit from a hugely significant and disruptive technological development (*see our response to question Q4*).
  - Hence the evolution and progressive roll-out of automated vehicle technologies should be regulated in a way that maximises safety for all types of road user, in accordance with the 'Safe Systems' and 'Vision Zero' principles of road danger reduction.
  - The rules governing the interaction of NMUs and AVs should help improve the safety and convenience of walking and cycling – rather than suppressing them – in order to maximise their role in reducing congestion, physical inactivity, energy demand and the other adverse environmental and safety impacts of the over-use of motor vehicles. Unfortunately, it will initially be easier for AVs to avoid collisions with other motor vehicles than with pedestrians, cyclists and other NMUs. Moreover, cyclists currently communicate with human drivers using eye contact and hand signals. Therefore, before AVs are permitted to share space with pedestrians and cyclists, they should demonstrate a high level of reliability not only in detecting the presence of cyclists and other NMUs, but also in predicting their movements (e.g. understanding cyclists' hand signals).
  - Therefore, whilst we are keen to see AV technology progress to full automation (where the benefits can be maximised and the disbenefits minimised), we would strongly resist calls to permit widespread AV use as soon as they are achieving a net reduction in road casualties (*again, see our response to Q4*). Decisions on when and where to permit their use must also reflect their safety impacts on NMUs, including children as well as many older and/or disabled people. The Commission rightly notes that this is, among other things, an equalities issue (*see our response to Q6*).
  - A balance therefore needs to be struck between supporting the progress of AV technology, whilst managing the early stages of the transition with great care. We suggest the path towards full automation should progress in the following stages:
    - The first stage, in which advanced driver systems (ADS) are permitted (but where the driver retains full legal responsibility for 'driving' the vehicle), is already underway.
    - At first, the use of 'highly automated' vehicles (i.e. those which can drive themselves but not necessary for a full journey, and which therefore require the presence of a 'user in charge' who is fit and able to drive, and ready to resume the task of 'driving' the vehicle) should be confined to closed circuits and other limited pilot uses. These should be carefully monitored. The first use of these vehicles by the general public should then be confined to motorways and perhaps trunk roads with high-quality separated cycle tracks - in other words, to roads that are almost entirely devoid of pedestrians or cyclists.
    - This stage of the progression will need to last several years, allowing AV technology to evolve, while the ownership of AVs (including lorries) becomes widespread (albeit with their use largely restricted to motorways and trunk roads). This will also allow the collection of a lot of safety data, and the elimination of potential faults.
    - The next stage – where AVs are allowed to use roads and streets shared with pedestrians, cyclists and other NMUs – should only commence once fully automated vehicles have demonstrated a very high level of reliability, not just in

avoiding collisions with other motor vehicles, but also in avoiding unexpected hazards on motorways (e.g. people walking or standing on them following breakdowns, at roadworks etc), as well as being demonstrably better than human drivers at interacting safely with pedestrians and cyclists.

- The transition to full automation should then be made as quickly and completely as possible. By then, it should largely be possible to convert the vehicle fleet from ‘highly’ to ‘fully’ automated vehicles simply by installing software upgrades, rather than requiring new vehicle purchases. This approach will minimise the dangerous ‘messy middle’ period in which streets will be shared by AVs, human-driven vehicles and NMUs.
- The advent of highly and fully automated technologies should be seen as an opportunity to establish a regulatory structure, covering both criminal and civil law, aiming at least to match the very high levels of safety that have now been achieved on our railways. This structure has to include: (a) an effective ‘no blame’ investigatory process for learning from any failings of automated and semi-automated vehicle technologies (comparable to that provided by the Rail, Maritime and Air Investigatory Branches); (b) the ability to issue product suspensions and/or recalls pending the outcome of safety-related investigations; and (c) very strong deterrent sanctions for both companies and individuals found guilty of wilfully abusing these technologies or the associated testing regimes. The AV technology authorisation body proposed in the consultation document could also fulfil some of the above functions – e.g. it could effectively be the Road Accident Investigation Branch now being proposed by the RAC Foundation and other road safety groups. However we believe it should not fulfil all of them – e.g. there should be clear separation between the bodies responsible for ‘no blame’ investigations and issuing sanctions (see *our responses to Q20 and Q25*).
- These technologies should also be seen as an opportunity to introduce new road rules or to ensure that existing rules are systematically respected, thereby reducing road danger for pedestrians, cyclists and other NMUs. The Highway Code should be amended to ensure a more equitable balance of responsibility between those road user-types which impose the greatest danger and those who are most endangered by others – with AVs being programmed to respect this (see *our response to Q26*).
- The UK’s laws on civil compensation should be amended to create an assumption that a pedestrian, cyclist or other NMU, who suffers injury or other damages in collision with a motor vehicle, is entitled to claim damages from the ‘driver’ (which in practice means their insurance scheme or, in the case of an AV, the vehicle’s insurer), unless the victim is shown to have been at least partly at fault. This ‘presumed liability’ principle, which is normal in virtually every other European country, is necessary to prevent AVs from worsening the existing imbalance in UK civil law. At present, the onus is on injured pedestrians and cyclists – who may lack legal representation and who may also have no memory of the collision as a result of their injuries – to demonstrate that the driver was at fault. Moreover they routinely have to rebut unfounded claims of ‘contributory negligence’, e.g. that their injuries might have been reduced had they been wearing hi-viz clothing or a cycle helmet. Without these rules, injured victims could face additional hurdles due to the lack of clarity about whether their claim should be against the vehicle or the driver, and the possibility that ‘advanced driving systems entities’ (ADSE’s, i.e. the manufacturers of vehicles and/or their automated driving systems, who are likely to be large multi-national corporations) may prove very determined not to admit to flaws in technologies that are worth billions of pounds in annual revenues (see *our response to Q52*).
- Withholding evidence from an investigation needs to carry very serious penalties (see *our responses to Q45 and Q56*).

## PART B: ANSWERS TO SPECIFIC QUESTIONS

In this part, we have paraphrased some of the consultation questions, for brevity. References to paragraph numbers are to the summary of the consultation document.

### The definition of self-driving

#### ***Q1. Do you agree with the proposed definition of ‘self-driving’?***

We generally agree with the proposed definition. However we think clause 3 of the definition should go further. To be classed as ‘self-driving’, it is not sufficient that a 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.” It must also be capable of reaching a ‘minimal risk condition’ even if the user in charge (UIC) fails to respond to a clear and timely transition demand.

During such a transition, legal liability for the consequences of any safety failure must lie partially with the Automated Driving System Entity (ADSE), if the vehicle fails to achieve a minimal risk condition. We agree though that some legal liability must lie with the UIC if they fail to respond, unless some form of ‘force majeure’ had prevented them from doing so (see also our response to Q29).

#### ***Q2. Should self-driving features be designed to ensure that they can be used by people with hearing loss?***

Yes. However consideration might be given to alternative systems for hearing-impaired users which placed greater reliance on visual or haptic cues.

#### ***Q3: Should the decision on whether a vehicle is sufficiently safe to “safely drive itself” be made by the Secretary of State, as informed by advice from a specialist regulator?***

Yes, provided that the regulator provides their advice in accordance with the safety standard we propose in response to Q4.

#### ***Q4: 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?***

To start with, we wish to clarify that we would absolutely reject (c) as being insufficient. The idea that AVs amount to a sufficient safety improvement as soon as they are “overall, safer than an average human driver” falls foul of two key principles:

- The advent of AVs should be seized as an opportunity to achieve a major step-change in road safety standards, bringing them much closer to the standards we expect for our railways. To achieve only a marginal advance from would be a gross failure to take advantage of such a fundamental moment of societal and technological change.
- Being safer “overall” is still likely to mean being more dangerous to pedestrians, cyclists and other non-motorised users (NMUs). This is because AVs are likely to be far better at detecting the presence of other motor vehicles than NMUs, as well as being better at predicting their movements. Worsening NMU safety for the sake of a net gain in road safety would contravene the 3<sup>rd</sup> of the Government’s 10 Principles for the Future of Mobility (as set out in its [Future of Mobility: Urban Strategy](#), and reiterated in its [draft Rural Strategy](#)). This requires that “Walking, cycling and active travel must remain the best options for short urban journeys.”

As regards the other two options, we do not believe (a) is helpful or clear. It is presumably intended as a reference to the concept of a 'competent and careful driver', as used in the definitions of 'careless' and 'dangerous' driving. However Cycling UK has documented vast inconsistencies in how prosecutors, judges and jurors apply this term – see for instance Cycling UK's [analysis of cases involving drivers who simply fail to see cyclists](#).

Strictly speaking, if 'careless' driving is driving which falls 'below' the standard of a 'competent and careful driver' (while 'dangerous driving' falls 'far below' that standard), then logically a 'competent and careful driver' must be regarded as a legal abstraction, namely a driver who never drives 'carelessly' (let alone 'dangerously').

We therefore propose that the test for assessing the safety of AVs should require them never to fall below the standard expected in law of a 'competent and careful driver'. Hence they should never drive 'carelessly', let alone 'dangerously'.

Nonetheless, Cycling UK remains concerned at the subjectivity, and variations in interpretation, of the terms 'below', 'far below' and 'a competent and careful driver'. Therefore, during the passage of the Police, Crime, Sentencing and Courts Bill, Cycling UK and its allies will be proposing amendments to the definitions of 'careless' and 'dangerous' driving, as follows:

- A person's driving is 'dangerous' if it falls so far below the standard expected of a competent and careful driver, that it would cause a driving instructor to fail the person automatically if they drove in that way during a driving test.
- A person's driving is 'careless' if it falls below the standard expected of a competent and careful driver, such that it would cause a driving instructor to deduct points if the person drove in that way during a driving test, but not so far below as to result in automatic failure.

This would bring objectivity, clarity and consistency to the terms 'dangerous' and 'careless', while avoiding the subjectivity and variability of 'below', 'far below' and 'a competent and careful driver'.

It follows the test we propose for AVs is that they should never drive in a way that would result in a points deduction (let alone an automatic failure) if a human driver drove in that way during a driving test.

We advocate this high threshold to ensure that the advent of AVs results in a step-change improvement in road safety, and not merely an incremental advance. Our current standards of road safety are intolerably poor compared with other transport networks (rail, maritime and aviation), and it is the most vulnerable groups (e.g. children, pedestrians, cyclists etc) who suffer most from these failures.

#### ***Q5: How can automated vehicles be made as safe as reasonably practicable?***

In the light of our response to Q4, we suggest that modelling should be undertaken, of the kind described in paragraphs 2.47 to 2.49, but aimed at assessing whether the AV's driving would incur a points deduction if a human driver drove in that way during a driving test.

#### ***Q6: How can AV regulators fulfil their public sector equality duty?***

We believe AV regulators need to ensure that AVs are delivering at least as good an improvement in safety for non-motorised road users as for motorised road users. This reflects the fact that children, as well as many older and disabled people, are unable to drive and are therefore disproportionately likely to be injured as non-motorised road users.

#### ***Q7: Do you agree with the consultation proposals on safety assessments and safety cases?***

**Q8: Should an approval authority which intend to use a scenario database as part of its testing procedure consult road user groups on the range of scenarios to be included?**

We do not have views on these questions.

**Q9: Do you agree that:**

**(1) Unauthorised automated driving systems should be prohibited; and**

**(2) There should be an exemption procedure by which the Secretary of State could authorise unauthorised systems to be used in tests and trials?**

Yes, we agree.

**Q10: Do you agree with the proposal that the Government should establish a domestic scheme for approving automated driving systems (ADSs), in addition to the UNECE's international approval scheme, and that developers should be able to seek approval via the domestic scheme even if they are not responsible for manufacturing the whole vehicle.**

We do not object to the establishment of a domestic scheme for national approval where (as explained in paragraph 3.18) the vehicle is to be deployed in limited local contexts. However this approval should not then provide a route to classification by the UK's safety assurance agency as a self-driving vehicle. That step should only be taken following UNECE type approval.

**Q11: Do you agree with the proposal to establish an ADS approval scheme through regulation under the Road Traffic Act 1988?**

**Q12: Do you have any observations on the appeal process in the Road Vehicles (Approval) Regulations 2020?**

We have no comment on the proposals in these questions.

**Q13: Do you agree with the consultation proposals governing how the UK safety regulator would categorise vehicles as being able to safely drive themselves?**

Yes, we agree.

**Q14: Do you agree that a new legislative framework should provide regulation-making powers covering (a) who should assess whether a vehicle is capable of self-driving; (b) the procedure for doing so; and (c) criteria for doing so?**

Yes, we agree.

**Q15: Do you have views on whether the new legislation should include provisions for appeals against a categorisation decision – and if so, should it be similar to those in regulation 19 of the Road Vehicles (Approval) Regulations 2020.**

We agree with making provision for appeals against categorisation decisions. However we are not familiar with the regulation cited and are therefore unable to comment on this point.

**Q16: Should the regulator that classifies vehicles as self-driving have power to allow their deployment in limited numbers, so as to gather further data on their safety in real-world conditions?**

Yes. The regulator should also have the power to impose conditions on what data should be collected, for how long, the form in which it should be made available, and to whom.

## Assuring safety in use

**Q17: Should legislation establish a scheme to assure the safety of automated driving systems following deployment, giving scheme regulators enhanced responsibilities and powers?**

Yes, we agree.

**Q18: Do you agree that this enhanced scheme should give regulators the following responsibilities and powers:**

**(1) It should have a responsibility to compare the safety of automated and conventional vehicles using a range of measures;**

**(2) To do this, it should have a power to collect information on ‘leading’ measures (i.e. information arising from driving faults that could potentially have caused harm) and ‘lagging’ measures (i.e. information from incidents which caused actual harm);**

**(3) It should have powers to require an ADSE (a) to update software and to ensure safety and legal compliance; (b) to keep maps up-to-date where an AV relies on these to ensure safety and legal compliance; and (c) to communicate information about an ADS to users clearly and effectively, including through training where necessary.**

We agree with these powers. It is particularly important that regulators are required to consider ‘leading’ as well as ‘lagging’ indicators of potential safety failings, and that they are therefore able to collect information relating to these. The success of rail safety (as compared with road safety) has been achieved by investigating ‘near-miss’ incidents very thoroughly, recognising that they can indicate a need to eliminate the causes of potentially serious incidents.

**Q19: Do you have any views on whether regulators should be empowered to approve UK-specific software updates without requiring the manufacturer to return to the original type approval authority; on whether the scheme should address cybersecurity; and whether any other powers are needed?**

We have no views on this question.

**Q20: Should the authority administering the scheme to assure that AVs are safe when in use be separate from, or the same as, the type approval authority?**

We believe that the authority overseeing the safety of AVs when in use should be the Road Collision Investigation Branch, as proposed in paragraphs 4.44 to 4.47 and Q25. It should be separate from the authority responsible for type-approval of vehicles, in order to avoid conflicts of interest (the investigation of a collision or near-miss may indicate a failure by the type-approval body to identify failings).

**Q21: What formal mechanisms could be used to ensure that the regulator administering the scheme is open to external views?**

We support the proposal that the above regulator should be informed by input from an advisory committee of external experts e.g. from academia.

**Q22: Do you agree with the consultation proposals for investigating safety-related and other traffic infractions, and for imposing regulatory sanctions if the fault lies with the ADSE?**

We agree with this proposal, but we also believe it should go further. We proposed in response to Q4 and Q5 that the test for assessing the safety of AVs should be that they should never drive in a way that would result in a points deduction (let alone an automatic failure) during a

driving test. Adopting this approach would require investigations to cover ‘leading’ as well as ‘lagging’ measures (as proposed in Q18(2)), thereby helping to eliminate the potential causes of collisions before they manifest themselves as actual collisions. This in turn would help ensure that the advent of AVs contributes to a quantum improvement in road safety, and not merely an incremental advance (see our responses to Q4).

**Q23 and Q24: Do you agree with the proposed list of sanctions that should be available to this regulator?**

Yes, we agree.

**Q25: Do you agree that a specialist collision investigation unit should be established:**

- (1) To analyse data on collisions involving AVs;**
- (2) To investigate the most serious, complex or high-profile collisions; and**
- (3) To make recommendations to improve safety without allocating blame?**

We strongly support the establishment of a specialist collision investigation unit, and that it should make recommendations to improve safety on a no-blame basis.

However we do not believe it should merely investigate “the most serious, complex or high-profile collisions.” It should investigate all collisions and near-misses – in line with our previous support for the principle of investigating ‘leading’ (as well as ‘lagging’) incidents (see our response to Q18). Crucially, it should start doing this in the very early days of the development of AV technology – i.e. it should be established as soon as possible – before the number of such incidents grows to unmanageable levels. The aim must be to eliminate as many potential flaws in AV technologies as early as possible.

**Q26: Do you agree that the Government should establish a forum to inform it on how road rules should be applied to self-driving vehicles?**

Yes, we agree.

However we do not share the Commission’s view (expressed in paragraph 4.50) that “We do not think it would be possible for government agencies to turn the Highway Code into algorithms that can be programmed into an ADS”. We believe this must be possible. If not, AV technology should not be permitted.

**Q27: Do you have views on (a) the issues this forum should consider; (b) the composition of the forum; and (c) the process for public engagement?**

We believe the forum should consider how best to enshrine the principles of the Highway Code into digital rules that automated driving systems can follow. The composition of the forum would be in some respects similar to the Highway Code Review Stakeholder Focus Group, established by the Department for Transport to inform its current ongoing review of the Highway Code. It comprises representatives of different road user groups (including Cycling UK) and safety organisations, as well as representatives of the Whitehall, Welsh and Scottish Governments, and local authorities. Clearly though, a group to consider applying the Highway Code to AVs would need expertise in AV programming.



## Responsibilities of the user-in-charge

**Q28: Do you agree with the proposed legal definition of a ‘user-in-charge’ (UIC), that the UIC should not be a ‘driver’ – and should therefore not be liable for any criminal or civil liabilities arising from dynamic driving - while the ADS is engaged?**

Yes, we agree. AVs which rely on a user-in-charge to monitor the driving task – and to be ready to resume control without warning – are dangerous, and should not be permitted for general public use. Legal responsibility for the safety of AVs must therefore rest with the ADSE while the ADS is in operation.

**Q29: Do you agree that the UIC should re-acquire the legal obligations of a driver following the transition period and should therefore become liable if the vehicle then stops in a manner which constitutes a criminal offence?**

We agree with this proposal. However it should not entirely exonerate the ADSE of legal responsibility for ensuring that its AVs are able to reach a ‘minimal risk condition’ in the event that the UIC fails to resume control – see also our response to Q1.

Clearly there will be situations where the safest way an AV can reach a ‘minimal risk condition’ is to stop in a way that may, for instance, cause an obstruction of the highway. If that occurs, there should be no legal responsibility on the ADSE, and the UIC / driver alone should be liable. Conversely, if the AV fails to achieve a minimal risk condition in as safe a way as possible in the circumstances, the ADSE should potentially be liable for this, even after the transition period has ended. In other words, there must be some scope for both the ADSE and UIC to be liable for safety failings in a situation where the UIC has failed to resume control following a handover period.

**Q30: Should provisional licence holders be allowed to act as users-in-charge if accompanied by an approved driving instructor in a vehicle with dual controls?**

Yes, we agree.

**Q31: Should there be legislation to create new offences of**  
**(1) using an AV as an unfit or unqualified user-in-charge; and**  
**(2) causing or permitting the use of an AV by an unfit or unqualified user-in-charge?**

Yes. This is particularly important for work-related driving. Using an automated vehicle such as a bus, coach or lorry (i.e. one for which the licencing requirements for human drivers are higher than for conventional cars), or causing or permitting another person to do so, should be a very serious offence indeed.

**Q32: Do you agree that persons carried in an AV without a UIC should be guilty of a criminal offence?**

**Q33: Do you agree that this offence should only apply if the person:**  
**(1) Knew that the vehicle did not have a UIC; and**  
**(2) Knew or ought to have known that a UIC was required?**

We agree with the proposal in Q32, subject to the criteria in Q33.

**Q34: Do you agree that a UIC 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?**

We agree. Where an ADS commits a fault which gives rise to criminal liability, a UIC who resumes control (and therefore becomes the driver) should not then be held to be liable unless their actions compound the ADS's failings, where a competent and careful driver could have avoided doing so.

**Q35: Do you agree that the UIC should be liable for criminal offences which do not arise from the dynamic driving task, including those relating to (1) insurance; (2) maintaining the vehicle in a roadworthy condition (including installing safety critical software updates); (3) parking; (4) duties to stop and report accidents to the police; and (5) ensuring child passengers wear seatbelts?**

We agree, but with one clarification and one addition.

It should be clarified that parking offences include parking in places and/or at times where this is prohibited.

It should additionally be an offence for UICs to open the doors of their vehicles unsafely, or to cause or permit their passengers to do so, as is currently the case for drivers.

**Q36: Do you agree that the legislation should include a regulation-making power to clarify those roadworthiness failings which are (and this which are not) the responsibility of the UIC?**

Yes, we agree.

## **Remote operation: no user-in-charge vehicles**

**Q37: Do you agree that:**

**(1) Where an individual who is controlling the vehicle's steering and braking, this should not be regarded as "self-driving"; but**

**(2) Other forms of remote control should be regulated as 'self-driving' if the ADS is controlling the vehicle's steering and braking?**

We agree with point (1). However we are wary of categorising all other remote operations as self-driving if this implicitly transfers all legal liability from the operator to the ADSE. If the remote operator acts negligently, this should still give rise to criminal and civil liabilities.

**Q38: Do you agree 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 UIC 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 no-UIC vehicle on a road or other public places unless it is operated by a licensed operator or is covered by a contract with a licensed operator for supervision and maintenance services?**

No. We do not believe the remote operation of no-UIC vehicles should be performed by companies who are separate from ADSEs but who are competing to provide this service. This seems merely to add legal complexity to an already complex area.

For instance, when there is a sudden downfall of snow, and large numbers of AVs come to a stop, it would not be helpful to have several competing operators trying to outdo one another for rescuing their clients from this situation. It should be borne in mind that there will be sudden unexpected peaks in demand for remote control operations at times of adverse weather, in the same way that adverse weather brings about a sudden need for highway maintenance work. It makes no sense for several commercial providers all to have to redeploy staff, or recruit contractors, at such times.

We believe the best solution would be to have a single publicly-run body to operate non-UIC vehicles, similarly to how Network Rail is responsible for managing the rail network, including its maintenance and the provision of signalling services for individual train operators.

Another option is that control of non-UIC AVs could be handed to Highways England (and Ministers in the devolved nations) for the motorways and trunk roads, and to local highway authorities for other roads, and for handling off-road situations.

Failing that, ADSEs should themselves be responsible for providing this control function. At least the user would then know who was liable for any failings. Separating the ADSE from the operator merely makes this harder, while providing no apparent benefit.

***Q39: Should no-UIC operators be required to demonstrate professional competence through a safety management system, as set out in a safety case?***

We have no views on this question.

***Q40: Should licensed operators be under a duty to supervise, maintain and insure the vehicle, to install safety-critical software updates, maintain cybersecurity and report accidents and untoward events (as defined by the regulator)?***

Whilst we do not believe operators should be licensed private companies, we agree that operators (whatever kind of organisation they are) should be under the duties outlined in this question.

***Q41: Should legislation include a regulation -making power allowing some or all of these duties to be transferred to the registered keeper or owner if it was shown that it was appropriate to do so?***

No, we are unconvinced of the benefits of this proposal. We are not adamantly opposed to it, however we cannot envisage the circumstances in which it would be appropriate to do this.

***Q42: Do you have any views on how Highly Automated Road Passenger Services (HARPS) might be developed, including the accessibility of HARPS to disabled and older people?***

We support the principle of developing accessibility standards for HARPS. However we have no views on how this should be done.

***Q43: Do you have views on who should administer the HARPS operator licencing scheme?***

Our provisional view is that this should be a role for the Traffic Commissioners. We have long believed the TCs resources should be strengthened, enabling them to fulfil their safety-critical role.

## **Criminal offences by ADSEs and their senior managers**

**Q44: Do you agree with the proposed offence, and the applicability of the offence, where an ADSE omits safety-relevant information, or includes misleading information, when putting forward a vehicle for classification as self-driving or responding to information requests from the regulator?**

Yes, we agree.

**Q45: Do you have views on the following proposed offences (as defined in the proposals):**

**Offence A: Non-disclosure and misleading information in the safety case;**

**Offence B: Non-disclosure and misleading information in responding to information requests;**

**Offence C: Offences by senior management;**

**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?**

Yes, we agree with the offences as defined. However we would add that:

- Offence B should also cover information requests from insurers as well as regulators – see also our response to Q56; and
- Offence D should cover offences involving non-disclosure or provision of misleading information in the aftermath of a death or serious injury, as well as in cases where offence has led to death or serious injury which might otherwise have been averted.

**Q46: Should an ADSE be under a duty to present information in a clear and accessible form, with safety-critical information indexed and signposted?**

Yes, we agree.

## **New wrongful interference offences**

**Q47: Do you agree that a legislative amendment should be made to clarify that the offence of tampering with motor vehicles (s25 Road Traffic Act 1988) should cover anything that is physically part of a vehicle and any software installed in it?**

**Q48: Should the tampering offence also apply to external infrastructure required for the operation of the AV?**

**Q49: Should these tampering offences be aggravated where they result in death or serious injury?**

We agree that it should be an offence to interfere or tamper with any part of a vehicle, any software installed in it and any external infrastructure required for AVs to operate. However, the maximum penalty for a s25 offence is currently level 3 on the standard scale (i.e. a £1,000 fine). There may need to be a range of offences with different maximum penalties, depending on the seriousness of the actual or potential consequences. In particular, interfering with the operating systems which AVs rely on should potentially carry very serious consequences, as this could in effect be tantamount to terrorism.

**Q50: Should the appropriate mental element of this aggravated offence be intent to interfere with a vehicle, the road or traffic equipment?**

Not entirely. We agree that there should be a mental element (and hence that this should not be a 'strict liability' offence). However we suggest there are real risks to requiring prosecutors to prove intent beyond reasonable doubt, just as there were with proving 'intent' beyond

reasonable doubt with the former offence of ‘reckless’ driving. We suggest that a better approach may be to include an element of intent in the definition of the offence, but to add that intent can be inferred from the defendant’s actions unless they are able to provide a satisfactory alternative explanation for them (in other words, to create a reverse burden of proof in cases where the defendant’s actions appear to have been intentional).

***Q51: Should there be a defence to this offence for approved work to repair or maintain operations, where this has been authorised by the vehicle manufacturer or ADSE?***

Yes, we agree, providing the work was not done negligently.

## **Civil liability**

***Q52: Do you agree that the Automated Electric Vehicles Act 2018:***

***(1) Deals adequately at this stage with contributory negligence and causation; but***

***(2) should be reviewed by the UK Government in the light of practical experience?***

No, we do not agree with point (1). The law on contributory negligence in the UK is already prejudicial against non-motorised road users when compared with most other European countries. The advent of AVs could make the situation considerably worse, and the AEV Act does nothing to avert this risk.

Every other European country apart from the UK, Ireland, Cyprus, Malta and Rumania has some form of ‘presumed liability’ law, where it is assumed that drivers involved in injury collisions with pedestrians and cyclists are at least partially liable (in civil law) for the resulting injury damages, unless the driver can demonstrate fault on the part of the injured party.

By contrast, UK law places the burden of proof on the injured party to prove negligence in order to obtain compensation. In practice, the fact that the standard of proof required is the ‘balance of probabilities’ means that pedestrians’ and cyclists’ injury claims usually succeed eventually. However in very serious cases, this can take many years, and cost the injured party (or their family, who may have been bereaved or left as carers for a permanently disabled person) with huge cost risks and an enormous amount of stress.

This stress is exacerbated when the driver’s insurance company makes a contributory negligence claim. Drivers’ insurance companies routinely make such claims when cyclists are injured, e.g. for failure to wear a helmet or hi-vis clothing, without providing evidence that this would have made any difference to the likelihood of their injuries occurring, let alone to their seriousness. Where cyclists defend such claims, they never succeed. Yet we suspect that they routinely lead to reduced out-of-court compensation settlements, with high street solicitors advising their clients that they risk losing their claim entirely if they contest the claim of contributory negligence.

In effect, motorists’ insurers are playing on the ‘inequality of arms’ between drivers (who are backed by an insurance company) and cyclists or pedestrians (who often have no such backing, and who may have the additional disadvantage of lacking a clear memory of the incident which caused their injuries, e.g. where they have suffered amnesia).

Cycling UK’s response to the Commission’s first consultation called for the introduction of ‘presumed liability’ rules, to avert these risks. Otherwise, the advent of AVs could worsen the current situation. A pedestrian or cyclist injured in collision with an AV would face additional difficulties of finding out whether the vehicle was driving itself or being driven by a human driver (particularly if a hand-over was or had recently been in progress), while the ADSE might be very determined not to reveal information that might expose flaws in their system. Hence the ‘inequality of arms’ could get a lot more serious, unless presumed liability laws are put in place.

The Government is committed to review the case for presumed liability laws (see action 21 of the Department for Transport's [Response to the Cycling and Walking Safety Review](#)). We urge that this should consider the how this question is impacted by the advent of AVs.

**Q53: Do you agree that measures should be put in place to compensate the victims of accidents caused by uninsured AVs.**

Yes, we agree.

**Q54: Do you agree that:**

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

**(2) that this should not be limited to new AV technology, and should therefore be beyond the scope of this project?**

We have no views on this question.

## **Access to data**

**Q55: Do you agree that:**

**(1) For a vehicle to be classed as self-driving, it should 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 are established; and**

**(3) any national system of ADS approval should require the collection of these data, subject to safeguards?**

Yes, we agree.

**Q56: Should legislation impose a duty on those controlling AV data to disclose data to insurers, where this is necessary to decide claims fairly and accurately?**

Yes, we agree. Moreover, there should be serious penalties for failing to disclose data, or for disclosing false or misleading data – see also our response to Q45.

**Q57: Do you agree that:**

**(1) Data from self-driving vehicles held by data storage systems for automated driving (DSSAD) should be held initially for 3 years; and**

**(2) this should be reviewed in the light of experience?**

Yes, we agree.

**Q58: Do you agree that: (1) applications from ADSEs for AVs to be categorised as self-driving should be accompanied by information on how data will be recorded, stored, accessed and protected; and (2) the regulator should only categorise a system as self-driving if it is satisfied that the ACSE has GDPR-compliant data systems?**

Yes, we agree.

Cycling UK  
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