

Scottish Law Commission Automated Vehicles: Summary of consultation paper 3 – A regulatory framework for automated vehicles

Cycling Scotland submission March 2021

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 need 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
 - 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?

With regards to the points above, the user-in-charge should be deemed an active user and should be held accountable, in the same way a driver would in a conventional vehicle. Automated vehicles must have as a minimum a user-in-charge at all times, and the user-in-charge should remain the driver for the purposes of civil and criminal law at all times.

We have a number of concerns about points outlined in this section of the consultation document. In paragraph 2.4, it states that the user-in-charge would not be held legally responsible for a collision and could not be prosecuted; yet in section 1.6, it states that the user-in-charge can be called upon to take over driving in certain circumstances. This creates potential contradictions and needs to be addressed. If a user-in-charge is expected to take over driving, they should be legally held accountable for any incidents or collisions, in the same way a driver of a conventional vehicle would be.

Paragraph 2.17 states that Automatic Lane Keeping Systems (ALKS) may not be able to recognise low energy impacts and may rely on the person in the driving seat to notice and respond to a situation. This is very concerning and problematic for the safety of vulnerable road users like pedestrians and people cycling, as the automated system may fail to recognise them and not take action to avoid a collision as a result. Given the earlier potential contradiction demonstrated in the legal status of the user-in-charge and what they are expected (or not) to do, this demonstrates that automated vehicles and accompanying technology cannot be operated safely around vulnerable road users.

Question 4 – We welcome observations on which 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

If a user-in-charge is to be deemed and held accountable as a driver of a conventional vehicle would be, they should be held to at least the same standard as a human driver.

Option C should be the minimum required. If automated vehicles are not safer, then what is their purpose.

Question 5 – We welcome observations on how automated vehicles can be made as safe as reasonably practicable.

As a minimum, automated vehicles should always have a user-in-charge, who has the same legal status as a normal driver. We would expect such vehicles to have as a minimum the ability to detect and identify vulnerable road users, including people cycling clearly and safely.

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

We note and welcome recognition in the consultation document that the distribution of risk from such vehicles may not be experienced equally. In this regard, there should be a focus on the groups – like vulnerable road users – who are more likely to be disproportionately negatively impacted by automated vehicles, with activity focused on reducing the risk for these groups.

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.

Vulnerable road user groups, including people cycling, should have a voice here and be included by default as one of the groups to be consulted.

Question 18 – We 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 the power to collect information on:
 - a) leading measures (instances of bad driving which could have led to harm)
 - b) lagging measures (outcomes which led to actual harm)
- 3) regulators should have the power to require an ASDE:
 - 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?

We welcome the proposals to gather and monitor data from automated vehicles. It is vital there is a proper system in place to monitor and record any incidents/accidents involving such vehicles. This should be centrally regulated and controlled to ensure all relevant actors comply.

With regards to safety data, where there has been a collision between an automated vehicle and other road user that has resulted in a casualty, the data should include information on the type of road user involved, such as vulnerable road users, where the collision took place, and the severity of injury obtained, to enable comparison with such outcomes from

conventional vehicles. This should help aid understanding of whether automated vehicles pose more of a risk to certain groups of road users. Collecting accident rate data should enhance the evidence base, when captured alongside data from driver-operated vehicles.

Question 22 – 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 and dangerous driving)
- 2) investigate other traffic infractions, including those subject to penalty charge notices
- 3) if fault lies with the ASDE, apply a flexible range of regulatory sanctions

Do you agree?

We note in paragraph (summary) 11.2 that contraventions such as box junction and bus lane incidents are deemed as 'less safety critical'. We question this and are concerned as these areas, particularly bus lanes, respectively pose a safety risk and are more likely to be used by people cycling. In this regard, such contraventions should be treated with the same severity as other incidents and punished accordingly. It is important that there is a national scheme in place to ensure consistency across the country in reporting and recording such incidents, and for issuing punishments.

Question 26 – We provisionally propose that the UK Government should establish a forum for collaboration on the application of road rules of self-driving vehicles?

Do you agree?

Paragraph 4.51 (summary) demonstrates that the safety of people cycling and/or walking on the road has not been adequately resolved, with regards to automated vehicles. The proposal to discuss whether it is ever acceptable for an automated vehicle to cross a double white line to pass a person cycling at 11 miles per hour highlights this. Driver impatience with a self-driving vehicle obeying the rules of the road is not a reason to weaken rules of the road, it is a reason to ensure there is always a user-in-charge at all times.

Question 27 - We welcome views on:

- 1) the issues the forum should consider
- 2) the composition of the forum
- 3) its processes for public engagement

The Forum should as a primary focus deal with the issue of safety concerns to vulnerable road users from automated vehicles, which to date have not been sufficiently addressed, and remain a big concern. The Forum should also contain representatives from organisations which represent vulnerable road users, to ensure they have a seat at the table and are properly represented.

Question 28 – We provisionally propose that the user-in-charge:

- 1) should be defined as an individual in a 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
- 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?

No, the user-in-charge should always be regarded as the driver of the vehicle for the duration of the journey, regardless of when and for how long ADS is engaged and should be legally treated as such. Not being liable for criminal offences or civil penalties may reduce the seriousness of the offence in the eyes of the user-in-charge and does little to mitigate similar dangerous behaviour from reoccurring. As they are operating a vehicle, a user-in-charge needs to be treated the same as a driver. The user-in-charge should remain the driver for the purposes of civil and criminal law at all times.

Question 29 – We provisionally propose that following the end of the transition demand period:

- 1) the user-in-charge should reacquire the legal obligations of a driver, whether or not they have taken control of the vehicle
- 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?

This is welcome as the user-in-charge should be treated the same and subject to the same legal obligations as a driver of a conventional vehicle. However, this should be the case from the outset and for the duration of use of an automated vehicle, and not just after a transition demand period (i.e., after an incident or to avert an incident).

Question 31 – We provisionally propose that legislation should create new offence of:

- 1) using an automated vehicle as an unfit or unqualified user-in-charge
- 2) causing or permitting the use of an automated vehicle by an unfit or unqualified user-in-charge

Do you agree?

Yes, it is important that a user-in-charge has as a minimum a full driving licence, as would be expected of a driver of a conventional vehicle. This should also apply to point 2 above, where it is an offence to enable someone who is not suitably qualified to use and operate an automated vehicle.

Question 32 – We provisionally propose that persons carried without a user-in-charge should be guilty of a criminal offence. Do you agree?

Yes, the person carried should be guilty of a criminal offence. If such vehicles were introduced, we would expect it to be communicated that it is illegal to use an automated vehicle without a user-in-charge in the vehicle, and so it is reasonable to expect that they should be aware of this, and so would be guilty of a criminal offence for not adhering to this law.

Question 33 – 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
- 2) knew or ought to have known that a user-in-charge was required

The offence should apply in both circumstances. As stated previously, it is reasonable to expect individuals to be aware of the rules and regulations governing the use of automated vehicles and/or to make themselves fully aware before they use the vehicle(s) in question.

Question 35 – We provisionally propose that the user-in-charge should be liable for criminal offences which do not arise from the dynamic flowing driving task, including those related to:

- 1) insurance
- 2) maintaining the vehicle in roadworthy condition (including installing safety critical software updates)
- 3) parking
- 4) duties following accidents to provide information and report accidents to the police
- 5) ensuring child passengers wear seatbelts

Do you agree?

A user-in-charge should have the same responsibilities as drivers of conventional vehicles do at present, and so should be liable for failing to meet the requirements outlined above.

It should be a criminal offence for the user-in-charge to fail to behave responsibly and take steps to prevent the risk of serious injury occurring. The legislation should ensure that there are adequate criminal penalties in place for users-in-charge who do not act in a reasonable manner when using such vehicles, and where they do not follow the manufacturer's instructions with regards to operating the vehicle(s).

Question 36 – We provisionally propose 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?

As with drivers and registered keepers of conventional vehicles, a user-in-charge should be responsible in all instances for ensuring the roadworthiness of a vehicle and should be held responsible for all failings in this regard. Where the user-in-charge is not the registered keeper of the vehicle, the registered keeper should also be responsible.

Where a vehicle is not roadworthy, it is the responsibility of the user-in-charge to not use the vehicle and, where they are not the registered keeper, report this to the registered keeper to ensure the appropriate steps are taken to return it a roadworthy condition at the first possible opportunity.

Question 37 – We provisionally propose that:

- 1) where an individual is exercising lateral and longitudinal control (steering and braking) over a vehicle remotely, that should be regarded as a form of “self-driving”
- 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”.

Remote monitoring and/or operation of vehicles should not be permitted in any circumstances. This poses a significant safety risk for vulnerable road users. As a minimum, a user-in-charge must be in the vehicle at all times when it is in operation.

Question 38 – 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
 - 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?

No, as previously outlined, there should as a minimum be a user-in-charge at all times, so points 2 and 3 are irrelevant in this regard.

Question 39 – 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.

As previously outlined, we believe there should be as a minimum a user-in-charge at all times, so do not believe that no user-in-charge (NUCI) vehicles should be considered as an option in any circumstance.

Question 40 – 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
- 5) report accidents and untoward events (as defined by the regulator)

Do you agree?

We reiterate that all automated vehicles should always have as a minimum a user-in-charge. It should be the registered keeper's responsibility to ensure that the vehicle complies with all regulations as required, including but not limited to those outlined in the question above.

The proposed approach in the question aligns with the process followed by the registered keeper of standard (non-autonomous) vehicles and helps to keep the mindset that automated vehicles are still vehicles and should continue to be treated as such.

Question 41 – 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?

As outlined in our response to question 40, the registered keeper should have the responsibility to ensure that the vehicle complies with all regulations required.

Question 42 – 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
 - b) representative groups for disabled and older people
- 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 reconsult with accessibility 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 reconsulting the accessibility advisory panel should be.

When discussing equality and accessibility, it is also important to consider other road users, like people cycling, and the impact the proposed measures could have on them in terms of safe access to and use of shared road space. The introduction of such vehicles could have unintended negative consequences for a range of road users. There are safety concerns, with road space becoming more congested, whereby it can become increasingly challenging for vulnerable road users like people cycling to safely use road space. Further, such vehicles can also have the consequence of increasing dependence on motorised transport when active travel or public transport could be a better option and as a result could also discourage investment into improving accessibility of these modes, if more people use and become dependent on automated vehicles as their default option for everyday journeys.

Question 43 – We welcome views on who should administer the operator licensing scheme.

Any operator licensing scheme should be controlled and operated by the government to ensure consistency and fairness.

Question 44 – 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 is 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 Crown Prosecution Service and in Scotland by the Procurator Fiscal

Do you agree?

There should be a requirement in law to ensure all reporting and recording of information about the vehicle(s) in question is recorded in a timely and accurate manner. This offence should apply to everyone, regardless of their level, and be prosecuted in line with the seriousness of the offence and resulting outcomes.

Question 46 – We welcome view 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 believe this should be a duty and basic requirement of any information recording system. Ensuring information is recorded in a clear and accessible format makes identifying trends and areas of concern easier, enabling further action, where required, to be taken (more) quickly. Safety-critical information should always be presented first and foremost with primary importance.

Question 47 – 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?

Yes, the offence of tampering should apply to any and all physical and software elements of a vehicle. This is particularly important for brakes and sensors on automated vehicles, as they are heavily reliant on sensors/sensor technology to detect other vehicles and road users and are essential to ensure their safe operation on the road.

Question 48 – We welcome views on whether the tampering offence should apply to external infrastructure required for the operation of the AV.

The offence should apply to any and all equipment and infrastructure required for an automated vehicle to operate safely.

Question 55 – 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
- 3) any national system to approve an ADS should require these data to be collected, subject to safeguards

Do you agree?

Paragraphs 10.10 – 10.12 on police investigation demonstrates that safety concerns of people cycling, and other vulnerable road users have not been considered with regards to automated vehicles.

As demonstrated, automated vehicles can capture a lot of data; however, it is unclear if such data will be able to be used to improve the safety of people cycling. For example, if an automated vehicle knocks a person cycling off their bike, or carries out a dangerous close pass, there is no evidence that the police will be able to recover data from the vehicle (or other witness vehicles). This is a problem with current automated vehicle technology and must be addressed within any safety assurance scheme.

A system of recording is required to ensure that data capture and recording processes are operational at all times when an automated vehicle is being used. We would like to see dash cams included as standard in all automated vehicles, which would allow footage to be captured, as well as providing information on locale, time and whether and/or when ADS was engaged.

Question 58 – We provisionally propose that:

- 1) where 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?

All automated vehicle systems should be required to have a robust data processing procedure in place, including details of how data will be recorded, stored, accessed, and protected. Although GDPR considerations are important, the primary consideration of any data system is how it can be used to protect human life and improve safety. Collecting accident rate data should enhance the evidence base, when captured alongside data from driver-operated vehicles.