

Response to the Law Commissions' Consultation Paper *Automated Vehicle – A regulatory framework for automated vehicles*

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The UKRI Trustworthy Autonomous Systems (TAS) Hub assembles a team from the Universities of Southampton, Nottingham, and King's College London. The role of the TAS Hub is to coordinate and work with six research nodes to establish a collaborative platform for the UK to deliver world-leading best practices for the design, regulation and operation of 'socially beneficial' autonomous systems. The team share the vision that to realise the industrial and societal benefits of autonomous systems, they must be trustworthy by design, judged both through objective processes of systematic assurance and certification, and via the more subjective lens of users, industry, and the public. All six of the authors of this response are involved in the TAS Hub. Professor Ramchurn is the Director of the Hub; Professor McAuley is the Deputy Director of the TAS Hub; Professors Burnett and Hyde are Co-Investigators, Dr Chen is a Researcher; and Mr Hawkey is a member of the Doctoral Training Network.

The UKRI-funded Horizon Digital Economy Research Institute centred at the University of Nottingham brings together an interdisciplinary team with expertise from a wide variety of backgrounds including computer science, engineering, mathematics, psychology, sociology, business, social science and the arts. The team is addressing the research challenge of how to promote deep personalization, whilst providing control and privacy to citizens, even as we develop new blended experiences that converge traditional and digital artefacts, services and media. Professor McAuley is a Co-Director of Horizon and Dr Chen is a Researcher.

We welcome the Law Commissions' consultation paper *Automated Vehicle – A regulatory framework for automated vehicles* which outlines a future regulatory framework for AVs. In response to the consultation questions below, we aim to provide response based on our research to assist the development of the regulatory regime for AVs.

We give answers to the questions as below:

1.	Agreed
2.	In order to ensure that the benefits of autonomous vehicles are available to all and that duties under the Equality Act are satisfied, self-driving features should be designed to be used by people with hearing loss. It is worth noting that people with hearing impairment form one of the largest disability groups in the UK (almost a million people are severely or profoundly deaf). Providing important information in multiple modalities (i.e. redundancy in design) will not only be important for these individuals, but it is well established as a critical strategy for ALL users. In this respect, haptic and tactile cues are particularly important in the vehicle context.
3.	Agreed

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4.	(a). An automated vehicle should reach the standard a human driver as set out in <i>Nettleship v Weston</i> . This will ensure that other road users and pedestrians do not have differential expectations of the standard of safety expected from automated and human driven cars.
5.	No response
6.	As part of the approval process the regulator should conduct an equality impact assessment and provide opportunities for comments (in so far as this is permitted by commercial confidentiality concerns)
7.	No response
8.	Yes
9.	Yes
10.	Yes
11.	Agreed
12.	If the appeal process under regulation 19 is to be used it must be ensured that the panel are sufficiently expert in automated driving systems to deal with the appeal.
13.	Agreed
14.	Agreed
15.	Yes
16.	Yes
17.	No response
18.	Agreed
19.	The powers should apply to cybersecurity. At the moment AVs fall within the definition of Intelligent Transport Systems (ITS) under the ITS Directive but the associated cybersecurity issues are not subject to the Network and Information Systems (NIS) Regulations 2018, as the scope of an essential service in the road transport sector under the Regulations covers only road authorities (see Paragraph 7 Schedule 2). Given the seriousness of the ramifications of a cyberattack targeting AVs, it should be reviewed whether there is a need to expand the scope to also cover the key service providers in the AV sector.
20.	In order to ensure expertise it may be best to combine the functions in a single body.
21.	There should be a duty to consult with interested parties; there should be a clear mechanism that ensures that consultation is possible, subject to concerns about commercial confidentiality.
22.	Agreed. Investigations should not necessarily be limited to situations that lead to adverse consequences. Near miss investigations should be routinised.
23.	Agreed
24.	Agreed. Consideration should be given to whether monetary penalties should be linked to turnover, similarly to the GDPR.
25.	Agreed. This will allow expertise to be develop
26.	Agreed
27.	No response
28.	Agreed
29.	Agreed
30.	No. In such circumstances the driving instructor should be the user in charge, but following the end of the transition demand period the learner driver should acquire the legal obligations of the driver.

31.	Agreed. We would suggest that unfitness and lack of qualification be separate offences and that different pathways of unfitness (e.g. unfitness through drink; unfitness through drugs) be defined.
32.	Agreed
33.	No response
34.	Agreed
35.	Agreed, subject to such software updates not significantly changing the underlying personal data collection and processing that in essence the users has consented to at purchase.
36.	Agreed
37.	The definition should be amended to cover remote operation. This definition needs to be very clear to explain what 'remote' means, and what 'operation' means in this context. There are many open-ended research questions here about the roles and relationships here between the remote operator, the human occupant/s and the vehicle AI/HMI systems. Of course, remote operation introduces whole new categories of cyberattack, and specifically denial of service which can prevent a remote operator taking over in a timely manner, which may mean that it would be unfair to impose liability on the remote operator (or their insurer) for damage resulting from such attacks. Such implications may need to be considered if the definition is to be amended.
38.	Agreed
39.	Yes
40.	Agreed
41.	Agreed
42.	Agreed and the accessibility advisory panel should meet at least once per year
43.	No response
44.	Agreed
45.	No response
46.	An ADSE should have an obligation of transparency similar to the obligations in the Consumer Rights Act 2015 section 68 ⁷
47.	Agreed
48.	Damage to external infrastructure can be covered by the offences of criminal damage
49.	Agreed
50.	Agreed
51.	A person carrying out approved work will not have the intent to "interfere" with a vehicle. If greater clarity is required a defence should be included.
52.	Agreed
53.	Yes. The Motor Insurance Bureau Schemes that ensure compensation for victims of accidents caused by uninsured or untraced vehicles should be extended to cover AVs, or a scheme that provides equivalent cover should be put in place.
54.	Yes. A review of the current product liability law should be undertaken to ensure that the regime is suited to accommodate emerging technologies such as AVs. However, such a review should not be confined to an exclusive examination of AVs; instead, it should aim to review the existing product liability law as a whole. Such a review should aim to examine areas of noted contention such as the definitions of defectiveness and product, to address the lacuna within the act which has yet to be fully addressed by the judiciary in the existing body of case law.

⁷ See Kathy Conklin, Richard Hyde and Fabio Parente, 'Assessing plain and intelligible language in the Consumer Rights Act: a role for reading scores?' (2019) 39(3) *Legal Studies* 378.

	<p>Whilst considerations of software in relation to the existing product liability regime are encouraged, as they are of great importance for both AVs and other emerging IOT technologies, it is important to note other aspects of the regime should also be examined. Elements such as section 3 of the Consumer Protection Act 1987's definition of defectiveness, which was intended when drafted to be enhanced and further defined through judicial dicta. However, some three decades later, Section 3's definition remains to be ill-defined and continues to present challenges for claimants, defendants and the judiciary.</p> <p>Furthermore, challenges in proving causation under section 2 of the Consumer Protection Act 1987, especially those that may arise in cases involving AVs may also need to be examined. One type of issue that may present an insurmountable challenge for claimants (individual consumers or insurers) under section 2 when attempting to prove causation may arise in cases involving transitional level AVs (SAE level 1/2/3/4) are issues of causal uncertainty. Such issues are likely to arise due to the division of labour being shared between both the human driver and the AV's systems, especially where a harm is caused by an AV which is conducting parts of the driving process 'autonomously'. The presence of causal uncertainty paired with the inherent complexity of AVs may result in a scenario in which claimants may effectively be unable to prove causation. A scenario which may then have a knock-on effect on the development and adoption of AVs by consumers and insurers.</p>
55.	No response.
56.	SAE level 2 and above AVs collect driver data but not identity. However, this could be inferred. Those who have access to this data could use it to infer usage patterns, in order to, for example, detect who's driving and learn their daily routines. Therefore, disclosing data to insurers is to be done by consent (and we submit that it should be) it should be done with the users' consent rather than the owners, as there may be many users but only one owner (and only one policy holder, who will presumably receive disclosure as required by GDPR article 13) of the vehicle. Data should be disclosed in machine readable form and should include metadata.
57.	Whilst three years makes sense because of the limitation periods applicable to personal injury cases, it may mean that data will not be available in cases where (i) Claimants are below age 18 and therefore the limitation period does not begin to run until the Claimants 18 th birthday; (ii) where the Claimant is under a disability for all or part of the three-year period (as noted under para 17.74). This could lead to some disadvantage for young people.
58.	Agreed. In relation to (b) the ADSE should disclose any relevant Data Protection Impact Assessment as part of the approval process.