

Chartered Institution of Highways & Transportation submission to the Law Commission's Automated Vehicles Consultation Paper 3 (March 2021).

Chartered Institution of Highways and Transportation (CIHT) email: technical@ciht.org.uk

CIHT is a charity, learned society and membership body with over 14,000 members spread across 12 UK regions and four international groups. We represent and qualify professionals who plan, design, build, manage and operate transport and infrastructure networks. Our vision is for world-class transportation infrastructure and services. Our values are to be Professional, Inclusive, Collaborative and Progressive.

Q1 - 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?

CIHT agrees.

Q2 - We welcome views on whether self-driving features should be designed to ensure that they can be used by people with hearing loss.

CIHT believes that self-driving cars should be designed to ensure that people with hearing loss can use the cars. CIHT believes that anyone who can use a normal car today should be able to use self-driving cars.

Q4 - 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.**

CIHT prefer Option C, that automated vehicles are as minimum safer than human drivers. CIHT would recommend that objective criteria e.g. vehicles miles driven (in real world and through simulated testing) would be beneficial in addition to a measure of how a self driving test would pass a human driving test.

Q5 - We welcome observations on how automated vehicles can be made as safe as reasonably practicable.

We believe that a lot of testing will be necessary, and we stress the need for driverless vehicles to be tested in all possible contexts and conditions that are representative of society.

Q6 - We welcome practical suggestions for how AV regulators can fulfil their public sector equality duty.

In fulfilling their Public Sector Equality Duty, an AV Regulator must make sure that the implementation of Automated Vehicles will not be of detriment to specific groups of society as compared to others.

Q7 - 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?

CIHT broadly agrees with the approach but would like to stress the importance that the efficacy of this approach has. We have seen examples of manufacturers taking advantage of flawed regulatory systems such as the Volkswagen emissions and the Boeing 737 Max aircraft scandals.

CIHT prefers a regulatory approach as opposed to a standards approach, as standards can be used and interpreted in a variety of ways, whereas regulation aims to ensure compliance with specific requirements.

Q8 - 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.

CIHT agrees that a wide range of user groups should be consulted. Scenarios should include all possible contexts and conditions and be representative of all of society.

Q 55 and 56 -

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?

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?

CIHT agrees with both proposals. It is important that there is a strict method for what and how data is collected and how that is regulated.