



Institute  
and Faculty  
of Actuaries

# **Automated Vehicles: A joint preliminary consultation paper**

IFoA response to Law Commission

11 February 2019

## **About the Institute and Faculty of Actuaries**

The Institute and Faculty of Actuaries (IFoA) is a royal chartered, not-for-profit, professional body. We represent and regulate over 32,000 actuaries worldwide, and oversee their education at all stages of qualification and development throughout their careers.

We strive to act in the public interest by speaking out on issues where actuaries have the expertise to provide analysis and insight on public policy issues. To fulfil the requirements of our Charter, the IFoA maintains a Public Affairs function, which represents the views of the profession to Government, policymakers, regulators and other stakeholders, in order to shape public policy.

Actuarial science is founded on mathematical and statistical techniques used in insurance, pension fund management and investment. Actuaries provide commercial, financial and prudential advice on the management of assets and liabilities, particularly over the long term, and this long term view is reflected in our approach to analysing policy developments. A rigorous examination system, programme of continuous professional development and a professional code of conduct supports high standards and reflects the significant role of the profession in society.

Please note that the answers presented below have been copied from the original consultation document. Missing questions or chapters indicate where the IFoA did not provide a response.

## **CHAPTER 5: REGULATING SAFETY ON THE ROADS**

### **Consultation Question 13 (Paragraphs 5.54 - 5.55)**

#### **Is there a need to provide drivers with additional training on advanced driver assistance systems?**

We consider there is a need to provide drivers with additional training on advanced driver assistance systems. We appreciate that devising quality training and implementing this at scale will be a practical challenge. Nevertheless, as all vehicles can cause injury and death we believe that it would be unthinkable that there was no additional training for a new type of vehicle that is unfamiliar to the general public.

The additional training needs to be both for those driving vehicles with ADA and other road users who need to understand the change in the types of vehicle they will encounter on the road. We are moving into a period of increased heterogeneity on our roads which will increase risk and/or change the nature of the risk. All road users need to be aware of the changes that are being introduced and for this reason it may be appropriate to have some aspects of ADA systems covered in the theory part of the driving test as well as changes made to the Highway Code. If vehicles with ADA could be clearly defined, a compulsory test could be set for anyone who wished to gain a licence to drive such a vehicle.

The responsibility for providing the training lies with all participants in the mobility ecosystem, for example:

- Vehicle manufacturers
- Government agencies
- Motor dealers
- Insurers

There will need to be coordination of the training provided to ensure that the required training needs are met by the most appropriate bodies. For example, motor dealers have a role to play in making the purchaser aware of the training that is available from other organisations. At a minimum the person selling the vehicle should be able to explain how the key features of the vehicle work and ideally demonstrate this in a test drive. Consideration should be given to how the equivalent basic training will be received when there is a mature second hand market for vehicles with ADA. Insurers have a responsibility to help people understand how their insurance product works and the cover it provides.

#### **If so, can this be met on a voluntary basis, through incentives offered by insurers?**

We consider that some basic training should be compulsory. The compulsory basic training need not be onerous but can focus on making sure that the owner of the vehicle understands the features of the vehicle, what their responsibilities are in the situations they are likely to encounter and how the car might behave in these situations.

Additional training may be appropriate for those returning back to driving after a significant period, to feel confident they can start driving again due to ADA. Returning drivers may overestimate the capabilities of assisted technology and place themselves and others in dangerous situations without any sort of formal training.

Consideration needs to be given who is best placed to prepare the training material and deliver the basic training.

In respect of company cars with advanced driver assistance, the employer is responsible for ensuring that the vehicle is roadworthy (see 6.8). We would therefore suggest that there is a case for requiring the employer to provide for the compulsory training. Training beyond the basic level can be voluntary. It would be desirable for insurers and others to offer incentives to consumers to take up such training. Some insurers currently provide a discount to drivers who pass the IAM Roadsmart (formerly Institute of Advanced Motorists) test. They might provide a similar discount if IAM Roadsmart developed a test for autonomous vehicles.

Given the relatively small cost of insurance relative to the cost of the vehicle, though, it might be most appropriate/practical that the motor manufacturer provides the incentive. It could be very commercially damaging to the motor manufacturer that a newspaper reports someone misusing or misunderstanding how their vehicle works and causing an accident. Arguably, commercially there is a greater incentive to the motor manufacturer to provide the training for 'free' than the incentive for the insurer to discount the premium.

## **CHAPTER 6: CIVIL LIABILITY**

### **Consultation Question 17 (Paragraphs 6.13 - 6.59)**

**We seek views on whether there is a need for further guidance or clarification on Part 1 of Automated and Electric Vehicles Act 2018 in the following areas:**

#### **(1) Are sections 3(1) and 6(3) on contributory negligence sufficiently clear?**

We tend to agree with 6.37 that the wording of 3(1) of the Act could be confusing by treating the liability of a person and an automated vehicle as being the same.

The IFoA has previously noted one potential case of contributory negligence in which establishing liability could be difficult - the case of hacking of an automated vehicle. We agree that an insurer should not be able to exclude liability in such a case, since a hacked vehicle would essentially be out of the driver's control through no fault of their own (similar to a stolen vehicle). However, the liability could be unclear if the owner was negligent in maintaining the security systems within the automated vehicle technology and this gave an opening for the car to be hacked.

#### **(2) Do you agree that the issue of causation can be left to the courts, or is there a need for guidance on the meaning of causation in section 2?**

We envisage that it may be difficult to establish whether an accident was the direct result of altering or failing to update software, particularly if different parties have different levels of access to relevant data. For example, if such data was owned by manufacturers there would be a risk that they could try to avoid liability in order to protect their reputations. This could

lead to higher premiums for vehicle owners if their motor insurers are not always able to recover product liability claims costs from the manufacturer. On the other hand, if data was owned by the vehicle's insurer this could impede competition. We therefore believe that, within the constraints of data protection legislation, there should be open access for insurers and manufacturers to data on both driver behaviour and the functioning of vehicle technology.

**(3) Do any potential problems arise from the need to retain data to deal with insurance claims? If so:**

**(a) To make a claim against an automated vehicle's insurer, should the injured person be required to notify the police or the insurer about the alleged incident within a set period, so that data can be preserved?**

We would highlight that there may be problems to be thought through around what happens if a particular manufacturer ceases trading but their vehicles remain on the road. The recourse of the insurer to recover against that manufacturer will be curtailed, and may depend upon exactly what insurance policies the manufacturer has itself historically purchased.

### **Civil liability of manufacturers and retailers: Implications**

#### **Consultation Question 18 (Paragraphs 6.61 - 6.116)**

**Is there a need to review the way in which product liability under the Consumer Protection Act 1987 applies to defective software installed into automated vehicles?**

We would not support a change to the legal operation of product liability to give different treatment for autonomous vehicles, since this creates unnecessary complexity. However, it is important to clarify how this would work in practice.

The IFoA believes it is vital that the proposals do not leave any gap in cover so that an innocent third party is not compensated. If a person driving a company car is hit by a driver in a semiautonomous vehicle using some of the autonomous features, then they should be able to claim against the driver's insurance policy. If that policy included product liability cover, the injured party would be fully compensated including damage to their company car. It would then be for the insurer to decide if the manufacturer was at fault, and if so to seek the recovery from the manufacturer. A potential concern would be if a gap emerged, where the manufacturer's liability could not meet the threshold test of 'negligent' and hence the insurer for the driver refused to pay out the repair costs for the third party company car.

In general we would not support a change in the rules unless a case can be made that automated vehicles are fundamentally different from other products and require different treatment. However, as we have argued, the risk of creating a compensation gap could justify extending the Consumer Protection Act to cover damage to company-owned vehicles.

### **CHAPTER 9: "MACHINE FACTORS" – ADAPTING ROAD RULES FOR ARTIFICIAL INTELLIGENCE DECISION-MAKING - Rules and standards**

#### **Consultation Question 38 (Paragraphs 9.6 - 9.27)**

**We seek views on how regulators can best collaborate with developers to create road rules which are sufficiently determinate to be formulated in digital code.**

We would encourage that the regulators and developers continue to carry out extensive scenario testing to assist in the development of a Digital Highway Code. The risks involved in artificial intelligence decision-making, and the controls required to manage these risks, will need to be fully understood as we progress to semi-autonomous and fully autonomous vehicles.