

**RAC Response to the DfT consultation on Advanced driver assistance systems and automated vehicle technologies: supporting their use in the UK**

GENERAL

**Question 1A:** *Do you agree with the proposal to review the regulatory framework to enable the use of advanced driver assistance systems and advanced vehicle technologies as they come to market in the UK? (yes/no – why?)*

Yes. It is essential that the regulatory environment is reviewed so that progression on the technologies which will help enable autonomous vehicles can go ahead in an efficient manner and in a way which will benefit motorists.

We would argue that the proposals of this review should look at issues which are of concern to the motorist. Ultimately, it is the motorist who is likely to benefit from driverless vehicles, however there remains scepticism and even a lack of awareness over the programme itself.

In a survey of 2,194 people conducted by the RAC in July 2016, a significant minority of motorists (43%) said they were unaware of the current trials taking place. There were also a number of concerns relating to aspects of driverless vehicles. When asked about their biggest concerns regarding driverless vehicles 46% identified the reliability of the software controlling the vehicle whilst 10% said they were most concerned about cyber attacks on software. A further 27% said their biggest concern was the loss of personal control of their vehicle, whilst 9% were worried about who would be liable in the event of a collision. Additionally 27% told us that the Government should be focusing on defining where liability falls in the event of a collision, whilst 44% identified that the Government needs to focus on improving the current infrastructure to make our roads support driverless vehicle functionality.

Ultimately, motorists believe that engaging them in the development of driver vehicle technology along the route to fully autonomous vehicles will help promote the anticipated benefits. Within the same survey, 43% of people said the Government could better communicate this by creating a public testing facility, which would permit members of the public to see and experience driverless vehicles first hand.

**Question 1B:** *Do you agree that we should follow a rolling programme of regulatory reviews?*

Yes. Whilst we understand that technology can develop at a rapid pace, and therefore it is sensible to have a rolling programme of reviews, it is important that the first review is as comprehensive as possible to ensure clarity to those who are responsible for developing the technology.

**Question 1C:** *In the first wave of regulatory change, with the exception of insurance, should we only consider those advanced driver assistance systems or automated vehicle technologies that are likely to come to the UK market in the next 2-4 years?*

The RAC believes this is probably sensible. Movements towards fully autonomous vehicles are likely to be evolutionary, rather than revolutionary, and with still a degree of cynicism from the public, it is important that the Government has a thorough and informed understanding of what elements are successful and what need further attention. It is also the case that technological developments can change so what might be suitable for the next 2-4 years may not be suitable beyond then.

**Question 1D:** *Are you aware of any upcoming advanced driver assistance systems or automated vehicle technologies which this document does not cover? (yes/no – which systems?)*

No.

## INSURANCE

**Question 2A:** *Do you agree with the proposition to amend road vehicle compulsory insurance primary legislation in Part 6 of the Road Traffic Act 1988 to include product liability for automated vehicles? (Y/N) Why? (free text)*

Yes. Given the complexities of having separate strands of cover, amending Part 6 to extend compulsory insurance requirements for automated vehicles to require the owner to ensure that there is an insurance policy in place that covers the manufacturers' and any other entities' product liability sounds sensible. As identified, this would be within a framework that the motorist is familiar with.

It is of course imperative that, in the event of technological failure, it is easy for consumers to be able to quickly establish where liability rests and to be able to make a claim as appropriate.

**Question 2B:** *What, if any, other changes to the insurance framework should be considered to support use of automated vehicle technologies, and why? (free text);*

The RAC believes that whilst the Government is taking steps to prepare the sector for fully autonomous vehicles, consideration still needs to be given to clarify liability for different levels of automation.

**Question 2C:** *If you are an insurer or vehicle manufacturer or other organisation directly affected by these changes, what costs do you estimate your organisation will incur as a direct result of these changes? (free text)*

The RAC is unable to estimate this as our products are underwritten by insurance companies.

**Question 2D:** *Do you anticipate the cost of insurance products for automated vehicles to be higher than for conventional vehicles? (Y/N); By how much and why? (free text)*

It is difficult to estimate this at present. Whilst the safety benefits of autonomous vehicles should theoretically mean that driver error is eliminated or significantly reduced and consequently should lead to reduced premiums for motorists, the complex nature of the

cover could negate this. For example, at present motorists have the options of third party or comprehensive; however should they be required to have further cover in the event of software malfunction, this may result in extra costs.

Furthermore it will take a reasonable period of time to understand the extent to which fully autonomous vehicles reduce the accident rate and the consequent impact on claims costs. For example we have extensive driver assistance aids in vehicles today but, with the exception of automatic emergency braking, there is no evidence of material reductions in insurance premium as there is insufficient data to assess the impact on accidents.

The RAC also believes there may be an opportunity for insurers to look at pooling claims data, which would help assess the impacts of these claims. We believe that this could be industry led.

**Question 2E:** *Do you anticipate that the introduction of automated vehicles will increase insurance premiums for conventional vehicles? (Y/N) Why? (free text)*

Changes to premiums will depend on the safety performance of autonomous vehicles. In principle, conventional vehicles should be involved in fewer accidents with fully autonomous vehicles than with conventional vehicles because driver error will be confined to the conventional vehicle and there should be fewer accidents where the liability for the collision is unclear. Naturally insurance companies will increase premiums where they perceive a higher risk of paying out. Once data becomes available on the ability of autonomous vehicles to reduce collisions, it is likely that insurance premiums will change. We may end up with five typical types of insurance product – one for conventional vehicles, one for conventional vehicles with telematics, one for semi-autonomous vehicles, one for semi-autonomous vehicles with telematics and one for fully autonomous vehicles.

Over time, we would expect overall prices to come down if the number of road traffic accidents reduce.

**Question 2F:** *What do you estimate will be the costs to insurers, vehicle manufacturers, or other parties of providing product liability cover for automated vehicles, and why? (free text)*

As with our response to question 2E, this depends on the ability of autonomous vehicles to reduce collisions.

**Question 2G:** *Do you anticipate that this cost will be passed on to the consumer? (Y/N) Why, and by how much? (free text)*

Unsure. Any reductions in the costs to insure autonomous vehicles should be passed on to the consumer however this will very much depend on the insurance company.

**Question 2H:** *Do you agree that where a driver attempts to circumvent the automated vehicle technology, or fails to maintain the automated vehicle technology, the insurer should be able to exclude liability to the driver but not to any third parties who are injured as a result? (Y/N) Why? (free text)*

The general principle of insurance is that all aspects of the risk must be fully declared (for example in the same way that any modifications to a car today need to be fully explained and accepted by the insurer) therefore customers would need declare any changes they make to the way in which the technology operates.

Additionally there is a general requirement to keep vehicles adequately maintained today which should continue; however insurers and vehicle manufacturers will need to make this clearer than is the case today.

**Question 2I:** *Do you agree that in the event of 3rd party hacking of an automated vehicle, an insurer should not be able to exclude liability, as set out in the Consultation Document? (Y/N) Why? (free text)*

Yes. This would provide incentives to the manufacturers and insurance companies to make the security of automated vehicles as tight as possible. As previously mentioned, 10% of motorists identified cyber-attacks on the software as a concern, whilst 46% said that the reliability of the software was a concern. The Government should consider similar proposals on the malfunctioning of software.

**Question 2J:** *Do you agree that the product liability and insurance requirements for automated vehicles should*

- *follow the normal rules on product liability with different rules depending on whether the injured party was an individual or a company? (Y/N)*

The RAC believes that presently, the law on product liability is reasonably clear. The Government may wish to explore whether or not it is seeking to shift the burden of proof from the consumer to the technology provider.

The RAC believes that in order to avoid a lot of early litigation manufacturers should be very clear about the capability and limitations of their products and importantly, the residual obligations upon “drivers”. There could be scope for arguments about the limitations of technology and what, if anything, drivers should be doing. The RAC can foresee an argument that when describing something as “driverless”, in the absence of specific instructions the emphasis should be on the technology provider to assume liability.

- *be limited by the ‘state of the art’ defence? (Y/N) Why? (free text)*

Unsure. The RAC believes that insurers would more than likely make it a pre-condition that data be provided in the event of an accident. To this effect, insurers are probably unlikely to pay out should any party refrain from sharing data. However, specific rules about who has to disclose what and when might be helpful to avoid lengthy disclosure exchanges.

**Question 2K:** *Alternatively, should we extend insurance/liability rules specifically for automated vehicles? (Y/N) Why? (free text)*

The RAC believes the greatest challenge lies in the migration towards fully autonomous vehicles and therefore what will be needed more generally to cover any element of automation.

**Question 2M:** *Do you agree that an alternative first party model option would not be proportionate while automated vehicles represent a small proportion of the fleet? (Y/N); please explain your answer (free text)*

It would for insurers to be able to assess the risks involved. The challenge is the migration towards fully automated – therefore the RAC believes that we will need to introduce more generally to cover any element of automation

**Question 2N:** *What do you anticipate the cost of implementing a first party insurance model would be? (free text/upload)*

The RAC is unable to estimate this as our products are underwritten by insurance companies.

**Question 2O:** *Do you have data to support your answers on insurance for automated vehicles?*

The RAC is unable to estimate this as our products are underwritten by insurance companies.

## HIGHWAY CODE

**Question 3A:** *What are your views on amending the text of the Highway Code in a way that would clarify rule:*

☐ 150, related to use of driver assistance systems and distraction?

The RAC supports changes to this which will take into consideration the evolution of driver assistance technologies as they become available. Given the changes which are foreseen, it is important that relevant sections of the Highway Code are regularly reviewed.

The RAC was surprised that this consultation document did not consider possible future changes to both driving lessons and the practical driving test. The RAC regards the DVSA as a key stakeholder in this matter as the challenges faced by drivers during their driving careers will evolve and change as connected and autonomous vehicle technology evolves.

- 160, relating to driving with both hands on the wheel?

The RAC supports the changes proposed to facilitate introduction of further technology. As stated, it is important the Highway Code is clarified so that drivers understand that whilst they may take their hands off the wheel, they may still need to be in a position to take back full control of the vehicle whenever necessary.

## PLATOONING

**Question 3B:** *Do you agree with the proposition to allow platooning by relaxing Highway Code rule 126 (which recommends a 2 second gap between vehicles)?*

Whilst we can certainly see the aerodynamic and economic benefits of platooning, the RAC believes that that the technology needs to be fully-tested before such changes should be made to the Highway Code. Platooning trials need to cover extreme road and weather conditions.

**Question 3C:** *What, if any, other restrictions should be considered regarding use of platooning technologies, and why?*

The RAC has some concerns over the length of platoons. Some stretches of motorway will be more suited to platoons than others. For example, motorways in densely populated areas such as the M25 have shorter distances between junctions, which may make it harder for motorists to move into the correct lane when seeking to leave the motorway should there be a long platoon of HGVs. We urge policy makers to re-evaluate carefully the viability of platooning once evidence from trials is available.

**Question 3D:** *Do you agree with the proposition that specific and implied driver distraction restrictions are not relaxed at this time?*

The RAC agrees with this position. At a time when the DfT is working to reduce accidents arising from driver distraction, such as the use of handheld mobile phones, it would not make sense to relax restrictions.

## REMOTE CONTROLLING

**Question 3E:** *Do you agree with the proposed approach to enable remote control parking by clarifying:*

☐ Regulation 104 (the driver should be in a position to be able to control the vehicle)?

☐ Yes X

☐ No

☐ Regulation 107 (switching off the engine when the vehicle is not attended)?

☐ Yes

☐ No X

☐ Regulation 110 (not using hand-held mobile phones while driving)?

☐ Yes X

☐ No

Why?

Regarding regulation 107, we believe it is essential that this regulation makes clear that when an engine is running, the driver must be in a position to observe the vehicle, or not be more than 2 metres away. We also believe this is appropriate to regulation 104. This is important for both security purposes as well as safety. Being close to the vehicle when controlling it will add an extra dimension to the safety aspect of remote control.

## MOTORWAY ASSIST

**Question 3F:** *What are your views on amending Regulation 109 to allow drivers to view TV/display screens displaying information that is not related to the driving task, while driving?*

Generally speaking the RAC doesn't think drivers should be able to view screens displaying information not related to the driving task, while driving. However, when a vehicle is driving in full autonomous mode, there is no driver and so rules applicable to passengers would apply. Therefore we feel the definition of the role of a driver whilst the car is in autonomous mode is essential.

## BENEFITS OF ADAS

**Question 3G:** *Do you have any data or evidence of the safety benefits of these advanced driver assistance systems?*

The RAC has no data on this. We would recommend the Government liaises directly with manufacturers and trade associations

**Question 3H:** *Are there any other, non-safety, impacts (including costs) of ADAS, which we have not covered in this consultation document?*

We have already drawn attention to the impact of ADAS to the process of learning to drive and on the practical driving test.

**Question 3I:** *Please supply any data to support your answers.*

We have included this in our responses above where we have relevant data available