Introduction

DLG provides a wide range of general insurance products to consumers through a number of well known brands including Direct Line, Churchill and Privilege. It also provides insurance services for third party brands through its Brand Partners division. In the commercial sector, its NIG and Direct Line for Business operations provide insurance products for businesses.

In addition to insurance, DLG continues to provide support and reassurance to millions of UK motorists through its Green Flag breakdown recovery service.

DLG would be happy to elaborate further on any of the points made in this response and would welcome the opportunity to discuss further with the select committee.

Impacts and Benefits

Question 1  What are the potential applications for autonomous vehicles?

1.1 DLG believes that autonomous vehicles could be deployed in a number of ways to provide benefits to society. Other industries and firms (such as transport operators) would be best placed to specify these in detail but they should improve mobility services, reduce congestion, pollution and provide social and economic benefits. The insurance industry will act as an enabler to the development of these new innovations.

Question 2 What are the potential user benefits and disadvantages from the deployment of autonomous vehicles

2.1 DLG considers the development of automated technologies to be positive, with the aim of dramatically reducing the number of accidents on UK roads. In addition to this, automation will provide much wider societal benefits, not least for cohorts of individuals where mobility is currently restrictive.

2.2 From an insurance perspective, whilst it is impossible to judge with any real certainty, DLG anticipates that in the medium to longer term, vehicles with AVT will have fewer accidents than conventional vehicles, which would lead to lower insurance costs. In the intervening period, it is worth noting that there is a distinction between ADAS systems that perform assisted driving functions (such as lane keeping assistance) and safety features (such as AEB) that should be permanently operable (although it is worth noting that these can be switched off by the driver, in some instances.) DLG would anticipate that the latter should reduce the number of accidents, but we will only learn the impacts of the assisted driving functions over a longer time horizon.

2.3 As well as the number of accidents, the cost of insurance products will also be determined by the cost of the claims. With the development of vehicle
technology, the cost of repairing and replacing parts increases, due to the placement of the hardware (e.g. sensors fitted to the windscreen). On balance, DLG believes that the reduction in the number of accidents will outweigh these increased costs.

2.4 There is a clear distinction between ADAS systems, that are intended to ‘assist’ the driver of the vehicle, and full AVT, which will ‘take over’ control of the vehicle from the driver. To an uninformed consumer, this distinction will become less and less clear, with the boundary between the two becoming increasingly blurred as the sophistication of the ADAS systems moves from pre crash assistance (such as AEB) to taking over some of the driving activity (such as lane keeping assistance).

2.5 It is crucial, therefore, that consideration is given to consumer education about the capabilities and limitations of the various ADAS systems. Vehicle manufacturers have a very important role to play in this, to ensure that over reliance is not placed on these assistance systems. This ranges from how the vehicles are marketed and sold, through to monitoring use of the systems.

Question 3 How much is known about the potential impact of deploying autonomous vehicles in different sectors?

3.1 The insurance impacts have been detailed in answer 2 above. DLG has no comment on the impact on other sectors.

Question 4 How much is known about public attitudes to autonomous vehicles?

4.1 There have been a number of pieces of research conducted that DLG is aware of, but would add caution to any of these findings, not least because autonomous vehicles are not yet available for use on the roads. As with all new technologies, attitudes will vary and alter over time as these technologies become more common place. DLG also believes that the pace of development will be important to developing consumer confidence; regulations need to ensure that these technologies are developed in a robust and controlled fashion. Failure to do this could lead to high profile ‘disaster events’ that could disproportionately impact consumer confidence.

4.2 From an insurance perspective, DLG believes that simplicity for the consumer will be key to encouraging adoption. To this end, DLG recommended in it’s response to the CCAV consultation “Pathway to Driverless Cars” that insurance cover for the autonomy should be considered an extension to motor insurance provision, rather than any requirement for some form of additional products liability cover. In addition, this should provide the same level of cover for injured third parties, no matter whether the car was in manual or autonomous mode. This is because one of the fundamental principles of Road Traffic Act 1988 (RTA) is that in the event of an accident innocent third parties are compensated speedily, fairly, and, in respect of
personal injury, without limits. Product liability law has a number of limitations and defences and so does not provide such wide protection.

4.3 DLG firmly believes that the principles of the RTA should equally apply to accidents caused by failure of vehicles in autonomous mode, rather than driver error, in the future; it would be perverse if innocent third parties had different legal rights, depending on whether the driver of the vehicle, or the vehicle itself, was actually in control at the time of the accident.

4.4 It is also worth noting that when the vehicle is in fully autonomous mode (meaning the ‘driver’ can completely disengage from the driving task) that the ‘driver’ can then be considered to be a passenger in the event of an accident and be entitled to compensation for any loss or injury. To facilitate this, minimum data standards and access are needed, as detailed in answer 12.

Question 5  What is the scale of the market opportunity for autonomous vehicles?

5.1 As mentioned above, DLG firmly believes that autonomous vehicles will deliver many long term societal and economic benefits. There will be many factors that will influence the scale and speed of development and adoption, a key one being the realisation of those benefits. The government will also play an important role, ranging from creating a supportive legal and regulatory framework to potentially more direct intervention such as scrappage schemes for older, less safe, vehicles.

Creating an enabling environment

Research and Development

Question 6  Is the scale of current and planned demonstration facilities for autonomous vehicles sufficiently broad and ambitious?

6.1 No comment.

Question 7  Is the Government doing enough to fund research and development on autonomous vehicles, and to stimulate others to do so? Should it be doing more to coordinate UK actions?

7.1 Through Innovate UK, the Government is encouraging and supporting innovate trials and R&D, allowing for the new technologies to be developed and tested in controlled, but real life, environments. At this stage of their development, this is crucial to ensure that the technologies are developed to cope with real life scenarios; this is not something that can be created ‘off road’, for example on a test track.

7.2 The challenge will be as the technologies develop over time in the real world, how they will be sufficiently tested before type approval is permitted for each new model. The technologies will be replacing the driver’s tasks and it will be
impossible to create, and test, each possible scenario that the vehicle may face. The type approval process is going to need to adapt for this change.

**Question 8**  How effective are Innovate UK and the CCAV in this area?

8.1 As above.

**Question 9**  Is the environment for small and medium-sized enterprises (SMEs) working in this sector sufficiently enabling?

9.1 No comment.

*Real world operation*

**Question 10**  Will successful deployment of autonomous vehicles require changes to digital or physical infrastructure?

10.1 It is highly likely that changes to both digital and physical infrastructure will be made alongside the deployment of autonomous vehicles. Some of these changes may be required to facilitate and expedite the deployment, such as Vehicle to Everything (V2X) connectivity. Other changes may be made possible due to the positive impacts of autonomous vehicles, such as road layouts, lane widths, etc.

10.2 Innovate UK and CCAV should be ensuring that these impacts are being considered and investigated as part of the programme of tests and initiatives they are supporting.

**Question 11**  How might a move from current levels of highly automated vehicles to their extensive deployment best be managed? What do you see as the key milestones?

11.1 Whilst the development of technologies to enable more automated driving appear to be moving at pace, it is difficult, if not impossible, to accurately predict exactly how quickly certain technologies will be developed and brought to market. This is partly due to the very different approaches taken by firms developing the technology, with some taking an evolutionary approach and others looking to move straight to fully driverless cars. One of the key needs will be to understand the impacts that each of these technologies has, particularly on safety and crash rates.

11.2 Regulation needs to be an enabler rather than a barrier to this development, but at the same time needs to ensure it is conducted in a robust and controlled fashion. CCAV’s proposals to amend regulation on a step by step basis means that the regulatory landscape can adapt and develop alongside the technological landscape, helping to make this balance achievable.
It is important that manufacturers of vehicles with AVT are held accountable when they fail, not least to ensure that they develop the technologies safely, with robust testing, before releasing them into the market. It is also important that manufacturers have a financial interest, as well as a moral one, to conduct product recalls where a potential system failure is identified.

**Question 12** Does the Government have an effective approach on data and cybersecurity in this sector?

There must be an agreed standard for the data recording, storage and access in all vehicles with AVT. These data standards are imperative for insurers to be able to insure vehicles with AVT. Any compensation for the ‘driver’ of the vehicle will be dependent on the ability to establish that the car was in autonomous mode at the time of the accident. At a high level DLG believes that there are two broad requirements:

1) A minimum standard for the type of data that the on board Event Data Recorders should hold and for how long.

2) Unbiased and easily obtainable access to that data in the event of an accident in a readable format.

Furthermore, insurers will need to be able to identify, at a vehicle level, those that have AVT capability in advance, to ensure that sufficient cover is provided by the motor insurance policy. Without the ability to do this, consumers will not have confidence that they have the cover they need, and will be required by law to hold, under the terms of the Road Traffic Act.

**Question 13** Are further revisions needed to insurance, regulation and legislation in the UK to create an enabling environment for autonomous vehicles?

DLG agrees with CCAV’s proposal to extend the requirements of the RTA to make liability insurance compulsory for failure of the AVT systems, but thinks this should be considered an extension to the motor liability cover, rather than an additional requirement for product liability cover.

There are distinct differences between motor liability law and product liability law and to ensure that innocent victims of accidents are compensated equally, depending on whether a human or the AVT was in control of the vehicle, no such distinctions should be made (for the purposes of compensation).

With motor insurers ‘standing’ in place of the at fault AVT system in the first instance, it is critical that there will be statutory rights of recovery from vehicle manufacturers so that they can be held accountable for the failure of their products. Where it can be shown that the vehicle was in autonomous mode at the time of an accident, a presumption of liability should sit with the manufacturer on a ‘rebuttal presumption’ basis.
From a liability perspective, it is also crucial to be able to quickly establish whether it was the driver or the AVT that was at fault at the time of an accident. This is to ensure that the driver can be treated as an innocent victim, and adequately compensated where a failure of the AVT was the cause of the accident.

**Question 14** What, if any, ethical issues need to be addressed in the substitution of human judgement in the control of vehicles by algorithms and Artificial Intelligence?

14.1 No comment.

**Wider governance**

**Question 15** What does the proposed Modern Transport Bill need to deliver?

15.1 Under the current legal framework, recovery of costs paid out by the motor insurer to a consumer is likely to be very complex for a number of reasons. First, as cars age, it could be very difficult to ascertain who the ‘at fault’ third party is for any product failure; it wouldn’t necessarily be the manufacturer, particularly if the car has been serviced, repaired, altered or calibrated by one, or more, other firms (such as a motor trader). Furthermore, establishing precedent through case law could be challenging in an environment where the pace of change is expected to be quick, potentially rendering such precedent obsolete in a short space of time, meaning claims in tort could prove difficult and create uncertainty. The current limitations under the Consumer Protection Act for non-consumers also mean that a claim brought under that statute could be equally difficult. Insurers will require new direct statutory rights of recovery from manufacturers, once they have settled a consumer’s claim. In addition, DLG considers there ought to be a sufficiently long enough stop limitation period, to allow for the reasonable life span of the vehicle with AVT, to protect the used vehicle market.

15.2 There must also be a clearly defined and agreed set of minimum standards for data quality and access, enforceable by statute. Without this, there is a very real risk that when the ‘driver’ is an innocent victim, they may not receive compensation that they should be entitled to because they will not be able to prove, on the balance of probabilities, that the car was in autonomous mode at the material time.

**Question 16** How effective is the UK’s education system in delivering people with the right skills to support the autonomous vehicles sector?

16.1 No comment.
Question 17  Is the Government’s strategy and work in this area sufficiently wide-reaching? Does it take into account the opportunities that autonomous vehicles offer in a wide range of areas, not just on the road?

17.1  No comment.

Question 18  What are the implications of exit from the European Union for research and development and the autonomous vehicle industry in the UK? Are specific actions from the Government needed to support or protect the autonomous vehicles sector in the short term or after the terms of Brexit have been negotiated?

18.1  No comment.

26 October 2016