Ageas (UK) Limited – Written evidence (AUV0042)

About Ageas

Ageas (UK) is a leading provider of award-winning insurance solutions in the United Kingdom and the third largest motor insurer. It distributes Personal and Commercial products underwritten by Ageas Insurance Limited through brokers, intermediaries, affinity partners, the internet and through its own wholly or part-owned companies trading as Ageas Retail. Ageas Retail’s brands include Castle Cover, Kwik Fit Insurance Services and RIAS. Ageas UK also holds a 50.1% share in Tesco Underwriting, providing home and motor insurance to Tesco Bank customers.

Insuring around seven million customers and working with a range of partners, Ageas UK is recognised for delivering consistent and high-quality customer experiences. It employs around 5,000 people with offices based across the UK.

Ageas (UK) is part of a listed international insurance Group. It operates successful insurance businesses in Belgium, the UK, Luxembourg, France, Italy, Portugal, Turkey, China, Malaysia, India, Thailand, Vietnam and the Philippines through a combination of wholly owned subsidiaries and long term partnerships with strong financial institutions and key distributors. Ageas ranks among the market leaders in the countries in which it operates. It represents a staff force of over 40,000 people and reported annual inflows close to EUR 30 billion in 2015 (all figures at 100%).

IMPACTS AND BENEFITS

1. What are the potential applications for autonomous vehicles?

1.1 Autonomous vehicles have a range of potential applications which will be driven in part by the vehicles being developed. There are two key types of vehicles currently being designed:

a) Vehicles that still have manual controls but are capable of driving on motorways and other roads with separate carriageways and grade-separated junctions autonomously with no requirement for input or monitoring by the driver. They will need to be able to take themselves to a place where it is safe for them to stop if the driver is unable or unwilling to take back control when asked to do so.

b) Vehicles that have no manual controls (other than to set a destination and start the journey). These will be capable of driving autonomously at relatively low speeds on defined roads or within a specific (usually urban) geographical area.

1.2 The first of these vehicle types will still fit into the current individual ownership or leasing model, although a number of different variants of vehicle sharing may evolve over time.
1.3 The second type of vehicle however is very likely to be owned and operated by a Mobility-as-a-Service (MaaS) operator (which could be public or private sector) and used to provide ride-hailing or ride-sharing services.

1.4 We expect the capabilities of both types of vehicles and the roads and conditions in which they can operate will increase over a lengthy period of time to the point that we have autonomous vehicles capable of operating almost anywhere. This could lead to a long-term shift away from private ownership to vehicles towards a general MaaS system of transport.

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

2.1 Improved road safety – human error is a factor in between 90% and 95% of road traffic accidents. Reducing these errors is of paramount importance to Ageas as an insurer. The introduction of autonomous vehicles is likely to reduce the number of accidents over time, as the adoption rate and capabilities of these vehicles increases. Human error is only going to be removed altogether once all vehicles on the roads are autonomous, which may take many decades. Vehicles that are capable of both manual and autonomous driving will have enhanced driver assistance systems that will use some of the autonomous driving technology to support the driver and help to reduce accidents during manual driving.

2.2 Reduced congestion – Autonomous vehicles are likely to bring about a reduction in overall numbers on the road if new models of ownership develop. They will also reduce congestion by a more efficient use of road, reducing the number of accidents, and the use of connected communication to moderate traffic flow.

2.3 Reduced vehicle emissions – Increasingly autonomous vehicles will have electric or at least hybrid power leading to lower emissions. Reducing congestion will also cut emissions for conventionally powered vehicles.

2.4 Convenience – A vehicle that will undertake the entire driving task for some or all of the journey will free up the driver (or user) to undertake other tasks that would not currently be possible (or legal) such as using a mobile phone, tablet or laptop for work or leisure or watching a film on a screen in the car. With autonomous ride-hailing services, the ability to summon a vehicle quickly and cheaply is likely to prove more convenient that other options, particularly within urban areas.

2.5 Extending personal mobility – There are currently several sections of the population unable to hold a driving licence, or who have given up driving through infirmity, disability or similar. Autonomous cars without manual controls could restore personal mobility to these people.

2.6 Infrastructure – Autonomous vehicles could detect issues with road surfaces helping road authorities to carry out repairs earlier and reducing costs. Additionally, reducing the number of vehicles on our roads and using spaces such as car packs and on-street parking more effectively could lead to lower infrastructure costs.
2.7 Decreasing cost of mobility – A number of studies have been carried out into the per mile cost of vehicle ownership versus cost of usage of Mobility as a Service provided by fully autonomous vehicles. There are a number of variables (particularly around cost of technology) but these studies have tended to show a significantly lower figure per mile for MaaS, especially in urban areas.

2.8. The main disadvantage will probably be the deterioration of manual driving skills. This is particularly problematic when there is a mixed fleet of vehicles on our roads and more people have to occasionally take over the driving of a manual or semi-autonomous vehicle but do not practice driving regularly. This is more likely to see them involved in an accident.

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

3.1 We anticipate that autonomous vehicles will have a major impact on the insurance industry. In the long term autonomous vehicles could dramatically reduce the number and severity of accidents on our roads. This would reduce costs for insurers and, in turn, reduce the amount consumers would have to pay, leading to a reduced income.

3.2 It is likely that we will have a mixed fleet on our roads for some decades to come. We will see conventional vehicles, vehicles with Advances Driver Assistance Technology (ADAS), vehicles that are capable of autonomous travel in certain circumstances, and vehicles that are wholly autonomous all on our roads at the same time.

3.3 This will have an impact on the frequency, type and liability of claims. It is vital that the insurance industry is involved in development of autonomous vehicles and the legislation and regulation of both their testing and eventual adoption on our roads so that our claims experience is used appropriately.

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

4.1 Research into consumer and public attitudes has been carried out by a number of organisations with distinctly variable results. The public need to be educated on the different types of autonomous vehicles and the benefits of using them. Large scale trials, such as Volvo’s Drive Me London scheme, are likely to prove critical in explaining to the man in the street what autonomous cars are likely be capable of, where they will operate, and what the individual and societal benefits are. We envisage that increasing understanding will lead to more favourable attitudes towards autonomous vehicles and drive up their adoption.

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

5.1 A report produced by KPMG for the SMMT in March 2015 estimated that the connected and autonomous vehicles market could be worth as much as £51 billion to the British economy by 2030 and could create some 30,000 new jobs over the same period. However, there are also likely to be significant changes in many other markets and across society as a whole. Fewer repairs would see less demand for garages, for example, and trades such as
taxi drivers, hauliers, and buses could all be put under pressure. If autonomous vehicles are to receive wide-spread acceptance it is important that these changes are managed appropriately by the Government.

CREATING AN ENABLING ENVIRONMENT

Research and development

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

6.1 We believe that demonstrations of different types of autonomous vehicles and their capabilities will be absolutely critical in the run up to their wide-spread deployment. Demonstrations will inform and educate the public about what they can expect and what the key benefits will be. A number of trials are being undertaken currently and over the next two years, a series of significant, reasonably large-scale, high-profile demonstrations are also going to be needed. Volvo has already made the commitment to its Drive Me London programme but we need to ensure there are others.

6.2 As part of this introduction of autonomous vehicles to the public, it will be critical to remove any ambiguity with clear consumer friendly definitions of what an autonomous vehicle is. We want to see the terms Automated Driving and Automated Vehicle used:

   a) Automated Driving - the vehicle is capable of driving with no input from, or monitoring by, the driver; and
   b) An Automated Vehicle is capable of Automated Driving for either the entire journey or clearly defined segment. It carries out planned and controlled handovers from automated to manual operation and vice versa.

6.3 It may well be the case that different types of Automated Vehicles are available, capable of Automated Driving at different times and in different circumstances. There will almost certainly need to be detailed, technical definitions of these vehicles. We believe a system of testing and certification of Automated Vehicles would be desirable and that it should be possible to store this information in the DVLA vehicle database and on the vehicle’s registration documents. Insurers could then use this both for rating the vehicle at point of quotation/sale and when defining our claims processes where such vehicles are involved in an accident.

6.4 This approach will mean that consumers are fully informed when choosing to buy or lease an Automated Vehicle about when they will be in control of the vehicle and when the vehicle is in control.

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 The UK Government has provided considerable funding in this area (with the promise of more to come) which we support. However, we are currently at the critical point in the development of autonomous technology and if we are to benefit from a £51 billion boost to the economy over the next 15 years we want to see significant investment now, particularly in world-leading testing facilities.

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

8.1 C-CAV has been effective in driving the connected and autonomous vehicles agenda forward, in promoting the interests of UK plc in this area and in the provision of a number of funding opportunities for the sector.

8.2 Innovate UK has managed a number of the funding competitions successfully, but we would suggest the following as areas for improvement:

   a) The Intelligent Mobility Fund needs to be increased in overall size and also should be ‘front loaded’, so that more funding is available now while the opportunities are at the greatest.
   b) The process to bid for funding needs to be greatly simplified. While there has been some improvement in this area it is still taking far too long from submitting a bid to actually launching a programme.
   c) We need to be using our advanced regulatory regime, strong knowledge base and expertise in key areas of the automotive supply chain to actively encourage non-UK vehicle manufacturers to undertake, at the very least, research and development, if not manufacturing in the UK.

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

9.1 As we are not an SME we are not in a position to comment.

Real world operation

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

10.1 Many of the changes to the physical infrastructure that are needed may be fairly mundane, for example more frequent painting of road markings that can be read by autonomous vehicles. These would have the advantage of leading to a higher level of road safety across the board as we know from our work the Road Safety Foundation and other road safety groups that better road markings can make roads safer. Wholesale physical changes should not be needed in the initial stages of deployment but there may come a point at which autonomous-vehicle-only lanes could be considered and other infrastructure such as car parks for autonomous vehicles.

10.2 The digital environment will be critical to a future of autonomous vehicles. Nearly all types of autonomous vehicles will require a high speed internet or cloud connection to
deliver real time high definition 3D mapping, traffic information and other services. This will typically be provided via a 4G LTE mobile network although we would anticipate a migration to 5G as this becomes available. Mobile network coverage can however be patchy on the UK road network and this is an area that is likely to require significant investment to improve matters.

10.3 There is also the question of V2V (vehicle to vehicle) and V2I (vehicle to infrastructure) communication – usually collectively known as V2X (vehicle to everything). While not strictly essential for the operation of autonomous vehicles, these can provide additional information to the vehicle’s systems and are on the point of being mandated in the US. Current V2X technology uses 802.11p DSRC (digital short range protocol) – known as ITS-G5 in Europe – on a dedicated band in the frequency spectrum but the arrival of 5G mobile communications may provide a better and potentially more unified solution.

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 Current vehicles are not yet at the point of being highly automated but many have a range of ADAS (advanced driver assistance systems). These are now becoming more sophisticated, to the point where the vehicle can take care of both longitudinal (accelerating and braking) and lateral (steering) controls for periods of time.

11.2 We are now starting to see this in so-called ‘traffic jam pilot’, ‘highway pilot’ and ‘pilot assist’ systems from a number of manufacturers. However, these systems still require the driver to monitor the vehicle and the road and be ready to take over control of the vehicle at a moment’s notice. We know that humans are not particularly good at this and should not be encouraged to take their hands off the wheel, take their eyes off the road or be lulled into a false understanding of the vehicle’s capabilities.

11.3 Within the next three to five years vehicles will become available that will have systems that meet the necessary technical requirements to be certified as Automated Vehicles that are capable of Automated Driving according to the definitions put forward in Question 6. It is essential that UNECE international vehicle regulations and domestic Construction and Use Regulations are updated to ensure that Automated Driving and Automated Vehicles are permissible on the roads before they are introduced on to them.

11.4 Within a similar timescale we would also expect to see Automated Vehicles capable of Automated Driving for an entire journey within a restricted area being developed. These are likely to be truly driverless ride-hailing or ride-sharing vehicles with no manual controls, other than for selection of destination, a ‘start’ button and possibly an ‘emergency stop’ button. Initially these may only be on one or two designated routes but this would gradually expand to cover wider areas.

11.5 Ultimately Automated Vehicles will be produced that will be capable of Automated Driving in all environments but this is likely to take some years.
12. Does the Government have an effective approach on data and cybersecurity in this sector?

12.1 Cyber-security has become a key priority for motor manufacturers and their suppliers developing autonomous vehicle technology and the Government, via C-CAV and DfT, has taken a keen interest in this area. As insurers, we feel it is vital that connected and autonomous vehicles and networks and other infrastructure giving access to vehicle systems are tested and certified for cyber-security.

12.2 Data protection and privacy are likely to carry significant weight in the mind of the consumer and this would partially be addressed via cyber-security certification.

12.3 There will also be a need to ensure that key data from the vehicles can be shared, particularly with insurers, in the event of a crash involving autonomous vehicles. This will enable the cause and potential liability for the accident to be established. It is important that consumers understand the reasons for this.

12.4 Vehicle connectivity also opens up the possibility of a whole range of other optional services being offered to the consumer that use vehicle data. Consumers opting in to such services will need to be fully informed of how that data is to be used and agree to it.

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

13.1 For the recent C-CAV consultation into ADAS and Automated Driving Technology, Ageas provided both input to the ABI response and a detailed response in its right. There are a number of key changes required which can be summarised as follows:

13.2 Changes to UNECE Vehicle Regulations – Current regulations do not adequately cater for Automated Driving Systems. Although some progress is being made in the development of UNECE Regulation 79 to cater for Automatically Commanded Steering Systems, we do not believe this is to be the most appropriate approach. There needs to be a separate regulation for Automated Driving and Autonomous Vehicles (using the definitions set out in our response to Question 6). This regulation can then provide all the technical requirements that would sit behind those two consumer-friendly definitions.

13.3 Changes to UK Construction and Use Regulations – Generally our Construction and Use Regulations will follow what is agreed within UNECE. Should we find that progress at UNECE in Geneva is unacceptably slow, we might consider developing our own regulation in parallel.

13.4 Amendments to the UK Road Traffic Act and changes to the prevailing insurance liability regime – Our major recommendation in response to the recent C-CAV ADAS and Automated Driving Technology Consultation was that compulsory insurance provisions are amended so that tort of negligence regime is universally replaced by a form of ‘strict liability’. This would mean that:
a) The vehicle insurer would pick up the claim(s) in relation to its vehicle in the first instance.
b) Data would be made available from an Automated Vehicle (and vehicles capable of certain higher level categories of Assisted Driving) under the Data Storage Solution for Automated vehicles (DSSA) provisions proposed within forthcoming changes to UNECE Regulation 79 (or similar) which will indicate whether that vehicle was under manual or automated control.
c) Those involved in accidents are always covered, whether the fault lies with driver, the driving systems, or where no fault or negligence can be determined.
d) An injured but innocent (i.e. not-at-fault) first party could claim against the motor insurance policy on the vehicle in the first instance.
e) The vehicle insurer would retain recovery and/or contribution rights against any third party or manufacturer and/or supplier(s) determined to be ‘at-fault’.
f) An at-fault third party insurer would be able to take over and settle any personal injury claim, once their liability has been established.

13.5 We accept that making such a regime change on a universal basis may be a step too far for the Government to make currently but we believe that, at the very least, Automated Vehicles should have cover that will operate on such a ‘strict liability’ basis. This change would mean that those using Automated Vehicles are covered for any accidents in a way that ensures they receive financial support quickly and simply. It avoids a person in need being stuck between large, multinational insurers, car manufacturers, software designers etc who are in disagreement about who is responsible for a crash.

13.6 Amendments to the Highway Code – Once we have Automated Vehicles deployed on the road then the Highway Code and associated legislation should be amended to permit drivers to undertake other tasks (e.g. using a mobile phone or laptop or reading) while the vehicle is operating in Automated mode.

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 Vehicles should be programmed to avoid getting into situations in which a choice of this nature needs to be made. One simple example of this may be that autonomous vehicles would not drive faster than a speed that enables them to stop for or avoid an obstacle that might present itself in the road – in other words autonomous vehicles should practice ‘defensive driving’.

14.2 If, for some external reason an impact becomes inevitable, then an autonomous vehicle should always strive to minimise that impact via maximum braking and/or evasive steering.

Wider governance

15. What does the proposed Modern Transport Bill need to deliver?
15.1 The Modern Transport Bill must deliver an environment in which autonomous vehicles can be deployed as soon as the technology is ready and sufficiently safe for this to happen. It must remove obstacles as far as possible, relying on the appropriate bodies to fully define Automated Driving and Automated Vehicle, and allowing deployment onto the roads of any vehicle that has been type approved and properly certified as an Automated Vehicle. It should clarify the steps to be taken on motor insurance including the provisions for a form of ‘strict liability’ regime to be introduced. It should also set out what drivers will and will not be permitted to do in both Automated Vehicles and vehicles that fall short of the Automated Vehicle definition but have a variety of Advanced Driver Assistance Systems fitted.

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

16.1 We are not in a position to answer this 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 As a motor insurer we are primarily concerned with autonomous vehicles operating on public roads. Other organisations are better placed to discuss the possibilities of autonomous vehicles in other areas.

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?

18.2 Anecdotally, the prospect of the UK leaving the European Union has had an impact on European funding for collaborative research and development. If this materialises into a long-term problem the UK Government is clearly going to need to make up this growing shortfall in funding for research and development and this will require a different approach from that currently used by Innovate UK. Horizon 2020 allows for funding to be granted up to in effect 125% of cost, in order to allow for incidental expenses to be recovered and something similar could be beneficial in a purely UK-based replacement.

26 October 2016