

## **Written evidence submitted by Logistics UK (SDV0006)**

### **About Logistics UK**

Logistics UK is one of Britain's largest business groups and the only one providing a voice for the entirety of the UK's logistics sector. Our role, on behalf of over 19,000 members, is to enhance the safety, efficiency and sustainability of freight movement throughout the supply chain, across all transport modes. Logistics UK members operate over 200,000 goods vehicles - almost half the UK fleet - and some one million liveried vans. In addition, they consign over 90 per cent of the freight moved by rail and over 70 per cent of sea and air freight.

Logistics UK welcomes the Transport Select Committee's inquiry into self-driving vehicles. Connected and automated technologies, including autonomous vehicles, have the potential to significantly transform the way the logistics industry operates. Through Logistics UK's Innovation Working Group, which is made up of a range of member operators, we have explored the potential benefits of autonomous vehicles and other connected and automated technologies.

### **Overview**

Logistics UK members will be buyers of connected and automated technologies, so our focus is on the development of the right technologies that can support logistics operations become more flexible and resilient, optimising efficiency and helping logistics be recognised for its value, with minimal impact on the natural and built environment.

Logistics UK welcomes the Government's forward thinking around the regulatory environment to support connected and automated technology, which should help support its development and adoption in the UK. The work of Zenzic and the UK testbeds are also helping to support innovation, testing and the development of connected and automated mobility.

### **The potential benefits of autonomous commercial vehicles**

Logistics UK's Innovation Working Group has examined the different connected and automated technologies that could be beneficial to the logistics industry. Vehicle automation was identified by members as of most significant interest due to the benefits that could be delivered by this technology.

Each degree of vehicle autonomy could offer a range of benefits for the logistics industry, which would increase and develop over time. For example:

- Changing driver roles could result in drivers being able to rest while the vehicle is in movement rather than stopping.
- Connected and autonomous vehicles could result in reduced congestion, reduced delays, and increased safety, meaning fewer accidents.
- Operations could become more efficient as there can be smaller delivery windows, due to fewer delays and increased predictability.
- Vehicles could be utilised differently as they could return to base or make long journeys without a driver or the need to stop.

### **Wider benefits to Government and society**

In addition to the benefits for logistics operators, Logistics UK's Innovation Working Group explored the wider benefits that could result from investment in autonomous commercial vehicles and identified the potential for:

- Safer roads resulting in fewer killed and seriously injured, reducing the impact on the NHS.
- Reduced return journeys to accommodate driver rest periods meaning less road damage from commercial vehicles and a reduced need for road infrastructure spending. This could also reduce the need for commercial vehicle parking.
- Less congestion resulting in reduced emissions and improved air quality.

The UK driving connected and automated mobility developments could also result in increased investment and business for UK plc.

### **Use cases for commercial vehicles**

Logistics UK has explored possible use cases for autonomous commercial vehicles with members of our Innovation Working Group. Some that were highlighted as possible areas where they could be utilised most effectively included:

- Vehicles used for trunking or from distribution to distribution centres – the longer journeys could provide optimum efficiency, with driver breaks not needed and other stops being at a minimum. As driver fatigue is one of the primary reasons for accidents, autonomy could have a substantial impact in reducing road incidents, collisions and disruption to the transport network.
- Local and City delivery – benefits could be delivered through reduced driver fatigue and improved efficiency and with more vulnerable road users in these localities, the high level of technological developments used in autonomous vehicles would aid detection and accident prevention for those other road users.
- Postal/parcel delivery – benefits could be delivered through reduced driver fatigue and improved efficiency. The potential to move towards droid and drone deliveries for small parcels and packages could result in delivery efficiency improvements. Additionally, where conventional vehicles move towards autonomous mobility, the use of postal workers as drivers delivering post to delivery areas could be eliminated, allowing them to be redeployed in the function of last meter (letterbox) deliveries.
- Refuse collection – as conventional refuse collection vehicles move towards autonomous mobility, then the use of workers as drivers could be eliminated, allowing them to be redeployed in refuse collection.
- Quarries – with geo-fencing in place, then fully autonomous vehicle movements could eliminate the need for drivers, resulting in 24/7 operations.

While the job of a driver could be removed for some commercial vehicle types and use cases, for others the role of driver may change to being operatives employed in other activities related to the vehicle. This may particularly be the case for members involved in home deliveries, due to the customer service this offers.

### **Barriers to deployment**

The deployment of connected and automated technologies in logistics will be dependent on there being clear business cases that could be agreed at Board

level, to make the case for business investment. Barriers that have been identified by our members are as follows:

- Business case benefits – there must be proven benefits that would deliver clear returns for a business. As connected and automated technologies are still developing, there may not be a strong enough case yet for investment. Or these technologies could develop in ways which do not yield strong returns for businesses if it is not focussed on solving problems by helping them to become more efficient, while reducing costs.
- Cost of new technologies – logistics operates on low margins and this could be a barrier for investment and adoption. Large businesses will be able to invest earlier and this can be of benefit to the wider industry, as technology develops and lowers in cost as it becomes more widespread. Government support could therefore be aimed at helping early adopters to speed-up the mass-market adoption of new technologies.
- Industry expertise – connected and automated technologies are a new area of development for most logistics businesses, so it is still an area that is being learnt about and explored by the industry.
- The overarching strategic and legislative frameworks that would provide the necessary enablers for business to plan and effectively deploy autonomous vehicles onto the public highway.
- Identified future vehicle to infrastructure requirements to enable effective and safe deployment for commercial and other transportation.

### **Government intervention**

Logistics UK has identified the following interventions that Government could provide to help reduce or remove these barriers:

- Innovation funding and leadership – this can help drive technology developments, as well as supporting technology trials, which may not be possible otherwise. It can also help businesses understand the use case benefits of new technologies, encouraging wider adoption across industry.
- Subsidising early adopters and first to market - this can speed-up mass market adoption, delivering a faster return on investment.

- Flexible regulatory environment and consistency across Local Authority areas - this can ensure certainty that new technologies can be trialled and utilised by businesses across the country. Government should also work to remove any regulatory barriers that currently exist to technology trials. Some businesses may be keen to trial a new technology but if it involves a regulatory change first, this is a barrier to that trial taking place.
- Codes of Practice and Guidance – these should be on topics such as data protection. This will help ensure compliance and help address concerns around sensitive issues, such as the use of personal data.
- Land space and planning – challenges around land space and planning can already be a barrier for logistics businesses, particularly in urban areas. This may increase if connected and automated technologies demand land space, so planning regulations must be looked by Government to help overcome this challenge.
- Coordination of information about opportunities – information requests to businesses to participate in trials or to test use-cases could be consolidated, perhaps through the Centre for Connected and Automated Vehicles. This could help ensure any information is focused on business benefits and practical assistance to aid adoption.
- Funding information for businesses – Government should ensure there is clear information and communication to businesses about what funding is currently available to support connected and automated technology developments, where that funding is going and how businesses can engage.
- Development of an overall strategy to support the transition to connected and automated technologies for logistics, building on the recently published Future of Freight plan. This should cover from port/airport to final location, such as shop, home or other location.

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