

Last Mile Call for Evidence – September 2018

Summary of FTA View

- FTA is deeply disappointed that this paper discusses only vans and e-cargo bikes and therefore fundamentally misunderstands the reality of last mile logistics.
- The lorry is the predominant method of last mile logistics – and this should be reflected in all future consideration of the issues involved in our urban transport networks.
- The quantity of goods needing to be delivered are relatively fixed – the key to efficiency is to ensure they are moved in as road-space efficient manner as possible – this means the fewest, largest vehicles possible.
- Given the levels of demand for goods and services in our cities and towns, it is unlikely that e-cargo bikes and micro-vehicles will be able to become more than a nice or specialist addition to what vans and lorries do.
- FTA does not agree that e-cargo bikes and micro vehicles will necessarily reduce congestion, given that it takes ten e-cargo bikes to replace the delivery capacity of a single van.

Background

The Freight Transport Association (FTA) is one of Britain's largest trade associations, and uniquely provides a voice for the entirety of the UK's logistics sector. Its role, on behalf of over 17,000 members, is to enhance the safety, efficiency and sustainability of freight movement across the supply chain, regardless of transport mode. FTA 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.

FTA's mission is to make logistics safer, cleaner and more efficient. We seek to ensure that our members can supply our towns and cities with the goods they require every day, whilst reducing any social impacts – including air pollution. As information about the health impacts of some atmospheric pollutants has grown, the issue of lowering local air quality emissions has risen in its importance. The logistics industry accepts that emissions need to reduce compared to their historic levels.

FTA response

General Observations

Whilst, there are social impacts from vans and lorries, in terms of road safety and emissions, it should be acknowledged that there are also massive social benefits such as: enabling local businesses to function; employment opportunities in the logistics industry; and residents, visitors and the workforce getting the goods and services they desire at a price they can afford. Therefore, it is important that in seeking improvements to road safety and emissions, government recognises that the logistics industry is already one of the most highly regulated sectors and that continuing to heap further restrictions on to operators may result in undesirable outcomes such as business failures and higher costs.

The importance of a clear roadmap from Government for industry

FTA is pleased to see this call for evidence looking forward to 2050 and whilst we recognise that the current landscape is changing rapidly, the freight industry has often been asked to make significant changes to fleet operations, within challenging timescales and frequently at considerable cost. The industry will always find solutions to serve their customers, but it is much better if it is given

sufficient time to arrange those solutions in a manner that does not result in unintended consequences that neutralise or work against desired policy objectives.

It is vital that Government provides a clear roadmap of future changes with realistic adoption timescales so that in the future industry can invest with confidence in new technology for their business operations.

Role of Lorries and Vans in towns and cities

FTA is deeply disappointed that this paper is concerned only about vans and e-cargo bikes and therefore fundamentally misunderstands the reality of last mile deliveries. This failure means the document is vastly less useful than it would otherwise be.

HGVs play a crucial role in the final mile across our urban centres. For example, in London, over 360,000 tonnes of goods are delivered by lorries on average each day. That is 15,000 tonnes picked up or dropped off each hour if averaged over every hour in the year. This is the reality of last mile logistics.

Whilst full van data is lacking, based on analysis of vans registered in London, FTA estimates that freight deliveries by van in the capital may be in the order of 18 million tonnes, compared to the HGV figure of 132 million. Whilst some of the HGV figure maybe be accounted for by deliveries that are urban but not 'final mile' (e.g. to London based warehouses) it illustrates our point that to assume final mile is currently about vans, is massively wrong.

HGVs should not be discouraged from operating in urban areas as the average medium sized truck (i.e. 26 tonnes in weight) would need to be replaced with ten vans to deliver the same payload; adding to costs, emissions and most of all road congestion. Areas wishing to address the environmental impacts of deliveries should look to technological solutions – not some simplistic mantra of 'large is bad'. Large means efficient – the same quantity of goods need to be delivered, the best way to do this is in as few vehicles as possible.

Simply removing large vehicles from our towns and cities will not solve many of the challenges they face; ensuring the correct vehicle is used at the right time and in the right location minimises congestion, emissions, and costs. Sometimes this might be a cargo bike, but more likely a variety of different vehicles will be required to complete many of the unseen activities of freight that our modern way of life demands.

Seeing 'last mile logistics' and vans as synonymous is also mistaken in another way. The majority of vans in use are for the service industries (i.e. tradespeople carrying tools) whilst only one third are for freight purposes.¹ In fact only three per cent of vans are involved in delivery of parcels.

E-cargo bikes and micro-vehicles

It takes ten e-cargo bikes to replace the delivery capacity of a single van, so rather than reduce congestion, it may in many circumstances further compound it.

Given the levels of demand for goods and services in our cities and towns, it is unlikely that e-cargo bikes and micro-vehicles will be able to become more than a nice or specialist addition to what vans and lorries do. Challenges in customer perceptions and expectations, recruitment of sufficient riders and the ability to obtain sufficient robust, cost effective e-cargo bikes will need to be addressed before this nascent sector can make any impact on the current system.

Licensing, Regulation and Standards

Given the important role the light commercial vehicle fleet will play in last mile solutions it is vital that existing legal standards are maintained and enforced. Data from the Driver and Vehicle Standards Agency (DVSA) demonstrates that light commercial vehicles tend to be in a worse state of

¹ https://www.racfoundation.org/wp-content/uploads/2017/11/The_Implications_of_Internet_Shopping_Growth_on_the_Van_Fleet_and_Traffic_Activity_Braithwaite_May_17.pdf

maintenance than the heavy fleet. Enforcement of existing laws regarding roadworthiness, overloading and driver entitlement must be properly funded and effectively deployed.

For businesses to plan effectively there needs to be certainty, or at least guidance, as soon as possible regarding licensing and regulation, and operator, vehicle and maintenance standards. FTA wants to see Government engage at the earliest opportunity with industry, provide longer lead times and a clear roadmap for new policies to help operators plan their fleets.

There must also be consistency between areas in standards and operations – we do not want to see a patchwork of schemes and regulations. Logistics operators by their very nature, operate across wide geographical areas. A lack of consistency will add administrative burdens and hamper productivity.

Simplification of electric vehicle registrations

FTA members have reported this process is paper-based with lead times of up to six weeks. If Government is seeking increased uptake of electric vans by fleet operators, we request they ensure that the DVLA and VCA registration system is simple, straightforward and online.

Space Optimisation

The Last Mile call for evidence document referenced Professor Braithwaite's report for the RAC Foundation² and highlighted low space utilisation of vans. It should be remembered that a significant proportion of van traffic is engaged in servicing activity rather than deliveries and will therefore not be full to capacity with goods as that is not the main purpose of the vehicle.

Many trips will be multi-drop deliveries and therefore it will be impossible for them to be full at all times. In addition, waste vehicles will always start their journeys empty and gas tankers will always end their journey empty. This is not to say that there is no opportunity for greater efficiencies, for example taking back waste packaging in some delivery vans, bearing in mind that waste transfer license regulation can be a deterrent in certain situations.

Recruitment, jobs and training

Recruitment and retention of drivers is already challenging, with 48 being the average age of an HGV driver today.

A career in logistics is not currently attractive to younger people, mainly due to entry costs for new drivers of approximately £3,000 to gain a full category C+E licence (if passed first time). And regulation, such as the five-yearly periodic training cycle of the Driver Certificate of Professional Competence (CPC) has reportedly resulted in some older drivers deciding to leave the industry.

E-cargo bikes may help address this to some extent, but the profile of the industry needs to change from being a 'fill in job' to being one of a professional service. The Government can help by positively promoting the sector, especially as much of the media is negative, whether it be regarding safety or air quality.

The Apprenticeship Levy should be changed to a Training Levy as there are other quality vocational courses that should be funded. Training is not a one size fits all, but apprenticeships cannot be easily adapted, and the approvals process takes too long to adapt to the rapidly changing landscape of logistics.

Air Quality

FTA seeks a balanced approach to delivering air quality improvements. As well as the clear and well-defined regulatory proposals, we need similar action to incentivise and support industry in its efforts to make this transition in the timescales envisaged. More important than the broad macro-economic costs will be the impact on different business sub-sectors.

² [https://www.racfoundation.org/wp-content/uploads/2017/11/The Implications of Internet Shopping Growth on the Van Fleet and Traffic Activity Braithwaite May 17.pdf](https://www.racfoundation.org/wp-content/uploads/2017/11/The_Implications_of_Internet_Shopping_Growth_on_the_Van_Fleet_and_Traffic_Activity_Braithwaite_May_17.pdf)

In the short-term, trucks that use cleaner fuels such as Liquefied Natural Gas (LNG), Compressed Natural Gas (CNG) and renewables such as Biomethane could be a viable bridging technology. A CNG dual fuel vehicle can offer up to a 15 per cent reduction in carbon emissions compared to an equivalent diesel vehicle, and between 35 per cent and 60 per cent savings if running on biomethane. There are also reductions in air quality emissions. For example, trials of dedicated spark ignition HGVs using biomethane report an 80 per cent reduction in nitrogen oxides and a 100 per cent reduction in particulate matter.³

These types of vehicles operate with lower emissions yet still have similar pulling power to conventional diesel vehicles and are therefore suited to carry out trunking work as well as deliver into urban areas. Gas vehicles are also considerably quieter than conventional diesel trucks, which could open up opportunities for retiming deliveries later at night or earlier in the morning.

In the medium term, range-extended electric vehicles (potentially connected) which can operate longer stem mileage with a low emission combustion engine and switch to clean or zero emission alternatives within urban conurbations, could also be another bridging technology. In the longer-term electric and hydrogen may play a larger role, though at present hydrogen is prohibitively expensive.

Responses to specific questions in the Call for Evidence:

E-cargo Bikes	
<p>1. What is the potential scale of the opportunity here? How big a role could e-cargo bikes, micro-vehicles and e-vans play in reducing congestion and pollution in our towns and cities?</p>	<p>FTA does not agree that e-cargo bikes and micro vehicles will necessarily reduce congestion. Indeed, it will require ten e-cargo bikes to replace the delivery capacity of a single van. However, they may have a role to play where vehicular access is challenging such as where streets are extremely narrow or in pedestrianised locations.</p> <p>Cargo bikes are best suited for the transportation of small parcels, documents and light groceries. But as noted in section 3.9, they will have a capacity limit in terms of weight and are not suitable for delivery of some types of specialised loads, which may mean that a van still has to do the same route and in such circumstances the cargo bike is an additional vehicle movement.</p> <p>It should be remembered that the delivery of parcels and groceries is only part of that mix – around ten per cent of van miles and 1.5 per cent of all traffic in London, and slightly less in other cities and urban areas.⁴</p> <p>In many cases the use of e-cargo bikes is not about replacing one type of vehicle with another, it is about fundamentally changing business models which are dependent on safeguarded land for micro-consolidation.</p>
<p>2. What would the environmental, economic and congestion benefits</p>	<p>FTA believes the cost savings suggested in the consultation document are over-stated. Whilst the purchase and running costs of cargo bikes would be</p>

³ Department for Transport Low Emission HGV Task Force recommendations on the use of natural gas and biomethane in HGVs

⁴ https://www.racfoundation.org/wp-content/uploads/2017/11/The_Implications_of_Internet_Shopping_Growth_on_the_Van_Fleet_and_Traffic_Activity_Braithwaite_May_17.pdf - page 35

<p>be? What impact would it have on jobs?</p>	<p>lower than electric or conventional diesel vans, the labour costs would be considerably higher. As stated above, it would take ten e-cargo bikes to replace the payload of a van and therefore ten riders rather than one driver. Recruitment of drivers is already challenging, with the average age of HGV drivers currently at 48.</p> <p>A career in logistics is not currently attractive to younger people, mainly due to entry costs for new drivers of approximately £3,000 to gain a full category C+E licence (if passed first time). And regulation, such as the 5-yearly periodic training cycle of the Driver Certificate of Professional Competence (CPC) has reportedly resulted in some older drivers deciding to leave the industry.</p> <p>E-cargo bikes may help address this to some extent, but the profile of the industry needs to change from being a 'fill in job' to being one of a professional service. The Government can help by positively promoting the sector, especially as much of the media is negative, whether it be regarding safety or air quality.</p>
<p>3. What other barriers need to be considered? Can these be overcome without Government support or intervention?</p>	<p>In many city centre locations there are issues of available space that is suitable for a local or micro-hub from where e-cargo bikes can operate to collect new packages. This needs to be challenged and addressed through local plans underpinned by the Planning Policy Framework and associated guidance.</p> <p>There is also the issue of load and rider security.</p>
<p>4. What can we learn from the experiences of other countries in this area?</p>	<p>We are aware of trials underway in the Republic of Ireland and Germany.</p>
<p>5. What are the opportunities for e-cargo bikes for delivery organisations, manufacturers and retailers; for companies which maintain and service bicycles and for other, e.g. training, organisations?</p>	<p>Given there are high levels of vacancies and challenging recruitment issues for vehicle inspectors and testers of conventional commercial vehicles, there may be challenges with a shortage of maintenance and servicing operators for the e-cargo bike sector.</p> <p>However, as with any growing market, this does offer opportunities for new businesses to provide this service, although there may be a gap in supply and demand, especially for early adopters.</p> <p>A clear signal from Government regarding minimum standards for maintenance, servicing and training of operatives, including vehicle servicing and maintenance apprenticeships would go some way to addressing this issue.</p>
<p>6. Further to Q3 (page 11), what form of financial support, if any, is required to make e-cargo bikes commercially viable, or to increase speed of uptake? Should</p>	<p>Positive incentives to change behaviour and encourage good practice should be used, rather than taxation.</p>

<p>this take the form of e.g. positive incentives or tax relief?</p>	
<p>7. If financial incentives for businesses were introduced to increase the uptake of e-cargo bikes a clear definition of e-cargo bikes would be required, including load capacity and weight (under 250W; see Figure 2 as per EAPC Regulations). How could this operate in practice?</p>	<p>No comment.</p>
<p>8. As e-cargo bikes are bicycles and do not need to be registered by the DVLA we would welcome your views regarding how purchases of e-bikes could be verified in order to qualify for financial support. How could this work in practice?</p>	<p>No comment.</p>
<p>9. What legal changes – regulatory or deregulatory – would support the increased use of e-cargo bikes e.g. licensing, parking and insurance of bikes and riders? Should these be national or local? Would the current electrically assisted pedal cycle regulations be sufficient?</p>	<p>Any regulatory changes should be made at a national level. Good practice would be for rider, bike and cargo to be insured.</p> <p>A clear and consistent regulation regarding parking access should also be agreed nationally, however, we would not want to see cargo-bikes sharing loading and unloading space for HGVs on safety grounds.</p>
<p>10. What emerging technologies can support the deployment of e-cargo bikes e.g. batteries, regenerative energy storage, route mapping, electric trailers?</p>	<p>No comment.</p>
<p>11. If e-cargo bikes are to be widely taken up, what infrastructure changes would be required to change the way goods are currently distributed, which is at present often from large, out-of-town warehouses e.g. changes to roads, parking, loading zones, hubs, cycle lane design?</p>	<p>There are challenges for locating available space in city centres for container staging, and e-cargo bike parking and charging. Ensuring there is land available for micro consolidation is key to reducing stem mileage.</p>
<p>12. E-cargo bikes, electric or solely pedal powered are larger/heavier than everyday bicycles. What level of training should riders have? Should riders be required to have e.g. additional training on efficient cycling and the safe use of bikes?</p>	<p>Riders should at least have completed Bikeability training and have a good working knowledge of the Highway Code.</p>

13. Should common standards be introduced for e-cargo and cargo bike design e.g. the design and standards of panniers and containers, volume limits and the refrigeration standards for carrying perishable goods?	Common minimum standards for build and safety features should be introduced to provide industry with clear specifications to assist with procurement and ensure best practice is instilled in common operations at the earliest stage.
14. Are there any other points you wish to raise?	No.
15. [For e-cargo bike operators] To assist DfT with evidence-gathering, how many e-cargo bikes are there in your fleet, and what are the range of costs for their maintenance and upkeep?	N/A.
Micro Vehicles	
16. Should measures to support micro vehicles and e-bikes over 250W be considered as part of this review?	No comment.
17. Is anything needed from government to encourage the use of pedal cycles and e-bikes to tow cargo trailers, or the use of electrically assisted trailers to enable carriage of higher payloads?	DfT should clarify the classifications about using micro vehicles and trailers on urban roads and pavements. There is also uncertainty about classification regarding the power of the motor used in trailers.
18. [For micro vehicle operators] To assist DfT with evidence-gathering, how many micro vehicles are there in your fleet, and what are the range of costs for their maintenance and upkeep?	N/A.
19. Are there any other points you wish to raise?	No.
Ultra-Low Emission Vans and Trucks	
20. What do you perceive as the key barriers to further uptake of electric vans in your organisation?	<p>The biggest barrier to the take up of electric vans is the initial purchase cost. Even with lower running costs than conventional diesel vans, the payback period is longer, and the residual value is in many cases uncertain.</p> <p>Limited mileage ranges of EVs are also a barrier for many commercial users. However, both range and battery reliability are improving.</p> <p>FTA expects van and light truck electrification to be the next step for fleet modernisation. But until these matters are resolved, there will be some resistance within the sector. In the meantime, hybrid 3.5 tonne electric vans are a potential short-term option. And in the medium-term, pure electric will be feasible for larger vans and small lorries as well. However, a major challenge at present is that these vehicles are not yet on the market.</p>

<p>21. What do you perceive as the biggest infrastructure barriers to further uptake of electric vans?</p>	<p>The biggest infrastructure barrier will be access to appropriate charging provision for different types of businesses.</p> <p>If a fleet of vehicles are returned to a depot after work, there will need to be enough capacity in the electricity supply to support simultaneous charging. If this requires an upgrade to the site's grid capacity, under current arrangements with Distribution Network Operators (DNOs), there is likely to be significant costs to the business to do this. Many businesses are reluctant to bear the full cost of upgrading an asset they do not own.</p> <p>However, not all vehicles return to a depot at night and for small and micro businesses, especially those in the service industries, vans are often taken home. Whilst servicing vans may spend more of the day not driving and be able to utilise public charging if available in the right location, charging in residential areas can be less certain, particularly if the driver's home does not have off road parking or there is high demand from neighbours for public charging units nearby.</p>
<p>22. Do you have any evidence where the cost or process of obtaining or reinforcing a grid connection has been a barrier?</p>	<p>FTA member, UPS has worked with UK Power Networks and a three-tier system of landlords to update one of their depot's grid capacity at considerable expense, and whilst it has achieved their objective of being able to charge all vehicles operating on that site overnight, there are concerns about the financial viability of replicating this elsewhere.</p> <p>Subsequently, UPS has conducted a consortium trial with UK Power Networks and Cross River Partnership to commission a smart-grid and energy storage system in central London. This trial was supported financially by OLEV and made it possible to simultaneously recharge their fleet of 170 6-7.5 tonne electric vehicles overnight, without further external grid reinforcement work.</p>
<p>23. Thinking about the sector that you work in, are there any particular barriers in your sector that prevent increased electric van uptake?</p>	<p>N/A</p>

<p>24. What action or policies would you like to see from government that would help you increase the share of electric vans in your fleet?</p>	<p>Simplification of electric vehicle registrations. FTA members have reported this process is paper-based with lead times of up to six weeks. If Government is seeking increased uptake of electric vans by fleet operators, they must play their part and ensure that the DVLA and VCA registration system is simple, straightforward and online.</p> <p>Given that most of new Electric Vehicles originate overseas, more resources should be allocated to the testing and licensing of these new vehicles.</p> <p>FTA members believe the Category B driving licence derogation could significantly increase up-take of alternatively fuelled commercial vehicles, helping to kick-start that market. However, clarification regarding training issues for drivers is still urgently required.</p>
<p>25. How many vans are there in your fleet? 26. How many of these are electric (either 100% electric or plug-in hybrid)? 27. If you do have electric vans, what are they principally used for? 28. What, if any, plans do you have for introducing more electric vans into your fleets?</p>	<p>N/A</p>

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