

L-category vehicles: ending sales of new non-zero emission models

RoSPA's response to Department for Transport's consultation

September 2022



Introduction

This is the response of The Royal Society for the Prevention of Accidents (RoSPA) to the Department for Transport's consultation on ending the sales of new non-zero emission models of L-category vehicles. It has been produced following consultation with RoSPA's National Road Safety Committee. We have no objection to our response being reproduced or attributed.

The consultation seeks views on when the UK should stop selling new non-zero emission L-category vehicles.

L-category vehicles include the following and their sub-categories:

- L1 light 2-wheel powered vehicles (including mopeds)
- L2 3-wheel mopeds
- L3 2-wheel motorcycles
- L4 2-wheel motorcycles with sidecars
- L5 powered tricycles
- L6 light quadricycles
- L7 heavy quadricycles

The department are proposing dates of: 2035 for all L-category vehicles at the latest and 2030 for L1, L2, L3e-A1, L6 and L7 sub-category vehicles. The consultation paper also discusses which L-category vehicles could be derogated, the methods to enforce requirements and the role, if any, of alternative fuels in achieving this goal.





Do you agree or disagree with our approach to end the sale of all new non-zero emission L-category vehicles by 2035 at the latest? Please explain your answer.

RoSPA response

RoSPA in principle agrees with the approach to end the sale of all new non-zero emission L-category vehicles by 2035 at the latest. As the paper states, transport remains the largest contributor to domestic UK greenhouse gas emissions, with road vehicles responsible for 91% of the UK's transport greenhouse gas emissions. Although L-category vehicles make up just 3.3% of licensed vehicles in the UK and are responsible 0.4% of transport emissions, motorcycles are a sizeable vehicle population, with 1.3 million registered in 2021.

Their lighter weight and reduced size in comparison to other road vehicles means that L-category vehicles have an important part to play in the transport mix. These vehicles can reduce road congestion, noise and air pollution. It is important that these vehicles do not remain fossil-fuelled, as the rest of the transport fleet cleans up to meet targets set by government to phase out non-zero emission sales of new vehicles.

This approach is in line with the government's target to deliver net zero by 2050. Given that the average age since first registration of a motorbike in the UK is 15 years, it seems sensible to end the sale of all new non-zero emission L-category vehicles by 2035. As the paper states, only fully zero-emission technologies will adequately address greenhouse gas emissions, air quality and other tailpipe pollutants from L-category vehicles.

However, there are a number of issues that must be considered as part of this proposal. As these vehicles are smaller and lighter than traditional vehicles, individuals who use them are more vulnerable to harm on the road. Also, L-category vehicles are required to meet different safety standards when compared to traditional vehicles. For example, passive safety features are not a legal requirement for quadricycle zero emission light powered vehicles, meaning they can lack seatbelts and airbags. Consideration needs to be given to how we can ensure that these vehicles are as safe as possible for those driving and riding them.

Do you agree or disagree with our approach to end the sale of new non-zero emission L-category vehicles in the L1, L2, L3e-A1, L6 and L7 subcategories by 2030? Please explain your answer.

RoSPA response

RoSPA largely agrees with this approach. It would not be appropriate to phase out all non-zero emission L-category vehicles at one time, as certain subcategories within the sector will be more difficult to decarbonise than others. As the paper states, for example, 41.65% of new L1 vehicles registered in 2021 were already battery electric, compared with just 2.68% of L3s.

The data on vehicle registrations supports this approach. In the case of L2 vehicles, of which sales are very low, 73.44% of L2s registered in 2021 were zero emission, suggesting that 2030 is a sensible phase out date for new sales of non-zero emission vehicles in this category.





The current price premium associated with L3 electric powered two wheelers and the limited number available on the market are both limiting factors at present in their widespread adoption. Although it may be slightly more difficult to decarbonise larger L3 vehicles, the smallest in this category, L3e-A1 are more likely to be compatible with currently available zero emission vehicles as they are smaller and lower power than other L3 vehicles.

L6 and L7 category vehicles lend themselves more readily to electric technology, as they have more space to hold a larger battery, and do not need to be taken off a kickstand and moved by hand. However, for L7 cargo vehicles, one of the most significant challenges for adoption is the lack of zero emission models available to choose from and purchase in the UK. Therefore, it may be difficult to phase non-zero emission sales out by 2030. In contrast, all L6 vehicles sold in 2021 were zero emission, meaning that it may be possible to phase non-zero emission new vehicles out earlier than 2030.

What are your views on ending the sale of new non-zero emission L1 vehicles before 2030?

RoSPA response

RoSPA agrees with this approach, as the number of zero emission L1 vehicles sold is rising. In 2020, 19.82% of L1 vehicles sold were battery electric, rising to 41% in 2021.

These vehicles are well-suited to electric technology as they are becoming increasingly common for shorter journeys in the last mile delivery sector, and are affordable, already reaching price parity with their petrol technology. The maturity of technology also allows for the swapping of batteries, meaning that riders can undertake longer journeys in the absence of available charging infrastructure, although whether there is enough provision of charging infrastructure must also be considered.

Should there be or should there not be derogations as part of the phase out of new non-zero emission L-category vehicles and if so what?

RoSPA response

RoSPA is not in a position to comment.

What role, if any, do you think alternative fuels have to play in the transition period to zero emission L-category vehicles?

RoSPA response

RoSPA is not in a position to comment.





What are your views on regulating L-category vehicles using a ZEV mandate target for manufacturers and/or introducing CO₂ emissions targets for L-category vehicles, as is currently done for new cars, vans and HGVs?

RoSPA response

RoSPA agrees with using a zero emission vehicle mandate target for manufacturers, but is not in a position to comment on how this would work.

What other support might be needed to encourage the uptake of zero-emission L-category vehicles as part of a transformation of last mile deliveries?

RoSPA response

As zero emission L category vehicles are small, they have the potential to help us use valuable road space more efficiently and enable a shift from the use of traditional transport modes for commuting and leisure journeys, as well as during deliveries in which a these vehicles may replace a van for dropping off parcels to their final destination in urban areas.

RoSPA believes that the MCIA and Zemo Partnership's Joint Action Plan "Realising the Full Potential of Zero Emission Powered Light Vehicles", provides an overview of some of the support that could be offered to encourage uptake.

The first measure that could be taken is the extension of current financial grants. The existing plug-in motorcycle grant scheme could be expanded to include all forms of L-category vehicle. For example, L7 vehicles could be attractive to workers in the last mile delivery market, and by expanding the scheme, these riders would be able to obtain a discount on these vehicles. In addition, the Government should consider how the grant application process can be made as simple as possible. A scrappage scheme for polluting vehicles could also be considered.

The action plan also suggests that a nationwide campaign, raising awareness of powered light vehicles, their benefits, and how consumers can access them could increase the adoption of zero emission models. We would also like to see a government campaign which helps to increase awareness and provide safety information, as

https://www.mcia.co.uk/plv-action-plan

Date accessed: 05/09/2022.

¹ MCIA & Zemo Partnership's Joint Action Plan "Realising the Full Potential of Zero Emission Powered Light Vehicles". A Joint Action Plan for Government and Industry.



well as guidance and protection for employees who use ZELPVs as part of their job, including who is responsible for safety in different situations. Employers would need to highlight the availability and benefits of these vehicles to their employees. An equivalent scheme to Cycle to Work could be set up to help riders to obtain zero emission L-category vehicles.

The licensing acquisition process for these vehicles is also difficult to navigate. RoSPA has particular concerns around the Compulsory Basic Training (CBT) required to ride most L-category vehicles, which does nothing to incentivise riders to progress towards test standard. A rider can simply choose to renew this training every two years. A review of the licence acquisition process, with safety in mind, would be beneficial. A requirement for additional training, particularly for those who are driving or riding, should also be considered as part of this review.

Additional comments

From a safety perspective, there are some issues that will need to be considered as part of these proposals. We would like the safety implications that could arise from increased zero emission L-category vehicles use to be considered. For smaller, two-wheeled vehicles, the level of risk faced by the user would be comparable to that of motorcyclists, who consistently have one of the highest casualty rates on Great Britain's roads. For other road users such as pedestrians, injury risk may be increased if an uptake in zero emission L-category vehicles simply adds more traffic to our roads rather than reducing the use of traditional vehicles. Furthermore, these categories of vehicle should be given their own category when road safety collision data is being collected, allowing for a better analysis of safety.

As the use of zero emission L-category vehicles in the UK increases, we would like to see health and safety at the heart of every stage of their development, from their design and manufacturing to their testing and licensing. Initially, this may involve the commissioning of research into the advantages and disadvantages of increased uptake, investigating areas such as congestion, emissions and injury risk.

From 1 July 2019, regulations were implemented that require all manufacturers to install a system in new types of quiet electric and hybrid electric vehicles. These sound generators produce a specified level of noise when they are reversing or running below 20 km/h (about 12mph). The sound generated is similar to that made by a conventional engine.

The new regulation to make acoustic systems within electric vehicles compulsory allows vulnerable road users, including those who are visually impaired, to hear vehicles more easily. RoSPA seeks clarification on whether similar regulations will be in place for L-category vehicles, and if not, urges that action is taken to protect vulnerable road users.

As the paper states that these vehicles require less maintenance, the impacts on garages who maintain vehicles must also be considered. As the number of non-zero emission vehicles reduces, these garages are likely to be financially impacted. We would expect that the existing MOT and servicing period intervals apply. Even though less maintenance may be required, it is vital that the government and the road safety community continue to





remind motorists of the importance of checking their vehicle regularly for faults, and replacing defective parts immediately. In 2020, 'vehicle defects' were deemed as a contributor factor in 29 fatal and 345 serious injury collisions.

As with all electric vehicles, fire risk as a result of a vehicle being involved in a collision, or as part of recharging, must also be considered. Fundamentally, electric vehicles are seemingly safe, but the main danger occurs when the lithium-ion battery is damaged, which might happen if it is exposed to extreme heat or something penetrates the battery cell wall. Electric vehicle fires are known to reignite hours, days or even weeks after the initial event, and they can do so many times.

RoSPA has no further comments to make on the consultation process, other than to thank the Department for Transport for the opportunity to comment. We have no objection to our response being reproduced or attributed.

