

Response from the Bicycle Association to the consultation:

Proposed changes to legislation for electrically assisted pedal cycles

April 2024

About the Bicycle Association

The Bicycle Association (BA) is the UK cycle industry trade association, with around 150 member companies including manufacturers, distributors, retailers and service providers, and with an associated network of over 1000 retailers.

The BA works to grow the cycle market as a whole and is entirely self-funded.

Full details of our organisation and work can be found [on the BA website](#).

Living Streets

This response has also been endorsed by Living Streets, the charity for everyday walking.

<https://www.livingstreets.org.uk/>



Opening remarks

The Bicycle Association, representing the UK cycle industry, opposes both proposed changes to the current EAPC regulations, for the following key reasons.

1. **It is unnecessary.** The current regulations work well overall, with huge potential for growth as seen in other countries. There's no evidence these changes would significantly boost demand – instead, for real e-bike growth we need safer cycling infrastructure, and purchase incentives to address affordability.
2. **It is risky.** It will take reputable suppliers some time to deliver safe, tested products to the new specification. So in the short-term this change will drive customers to order high fire risk 500W products online, and/or to tamper with existing e-bikes, also with potential fire risk. Longer-term, it risks moped-style regulations on the whole e-bike category, because with no pedalling required e-bikes would be seen as a light mopeds, not as cycles. There are also as yet unquantified risks from more powerful, heavier e-bikes sharing cycle lanes, risking further regulatory backlash.
3. **It is the wrong approach.** The industry welcomes innovation and the potential of new micromobility vehicle categories, but these proposals do not provide a sustainable framework for these new opportunities. We strongly urge that any new vehicle types, for example 500W throttle e-bikes, or e-scooters, be introduced under the comprehensive LZEV framework approach which was previously proposed by the current Government, to provide category-specific regulations appropriate to each new vehicle type, and leave the well proven EAPC regulations broadly unchanged.

Further considerations are set out below in the full responses to the consultation questions.

Full responses to questions:

Question 1 Do you support or oppose the proposed change to how EAPCs are classified so that the maximum continuous rated power of the electric motor must not exceed 500 watts instead of 250 watts as set out in the current regulations?

Oppose

Question 2 Explain your response to question 1. Are there any additional benefits or risks (including in relation to road safety) not referenced in this document?

The EAPC regulations were designed to result in bicycle-like levels of acceleration and maximum assist speed. Thus EAPCs fit unproblematically in cycle lanes with unassisted cyclists and, in shared spaces, with other road users who may be wheeling or walking.

But with more powerful motors as proposed, e-cycles would have greater acceleration and, on hills, speed differentials with unassisted cyclists. These performance differentials would raise collision risks with cyclists, pedestrians and other road and path users, including those visually impaired and disabled.

Raising the power to 500W would also in many cases involve an increase in the weight, both of the vehicle itself (to carry larger batteries) and of cargo it may be carrying. So the consequences of any collision would also be more severe.

None of these risks seem to have been properly evaluated before making these proposals. We would urge proper trialling and research.

Elderly or frail users of e-cycles can sometimes struggle to control the handling even of EAPCs. The greater power of 500W vehicles may increase this risk.

For such users and also newcomers to e-cycling who may benefit from training, we refer to and support the consultation response from the Bikeability Trust. As they outline, any changes to the EAPC category should be matched by relevant guidance, training and resources for users, none of which are mentioned in the consultation documents.

The 250 W power limit of EAPCs indirectly also limits the typical physical motor size – so even if the vehicle is tampered with, the extra performance which can be ‘achieved’ is limited. By raising the

‘starting power’ to 500 W, the extra power/speed which de-restricted vehicles could achieve will be greater, increasing risks to both the rider and other members of the public.

It is also not clear what the response of owners of the UK’s current EAPC fleet (probably between 0.5 and 1 million vehicles), which were designed around 250 W and pedalling, would be to a change to 500 W and no pedalling requirement. It seems very likely that modification or de-restriction of the existing fleet would be widespread to ‘take advantage of’ the new regulations, taking these vehicles into a performance regime for which they are not designed or tested, and legitimising the modification/de-restriction of vehicles (which is highly undesirable for both road safety and electrical safety reasons – tampered-with vehicles are identified by fire and rescue services as high risk).

It is very unlikely that any such modifications could be authorised by the manufacturers, whose safety case was built around the lower limits.

“Conversion kits” which turn conventional bikes into e-bikes are already in something of a legal grey area currently, but additional concerns arise for them if EAPC power limits are to be raised. Even when kits keep to the EAPC power and speed limits, they are being added to cycles which were not designed for electric use. If under the proposed rules the motor has higher power (and likely also a full speed throttle control), the loadings applied to the converted cycle frame, brakes etc. will be even more different to those for which it was designed.

A change to 500W also risks driving users to purchase the very online-sourced, poorly regulated e-bike kits and batteries from overseas which are, evidence increasingly confirms, responsible for very many of the recent tragic battery fire incidents.

It would take considerable time for responsible suppliers to develop and test cycles to the new specification (so that they fully comply with relevant [safety regulations](#)) and in the meantime, 500W e-bike kits of unknown quality or safety, sourced from online marketplaces and sent directly to consumers from overseas, would be the primary source of new-specification e-bikes for consumers.

To avoid this a transition period of several years, to allow suppliers to develop, test and produce safe products to the new specification, is essential if this change is to be made.

500W vehicles would tend to use even larger battery packs than current EAPCs (because of higher power motors, and especially if there is no need to pedal) potentially increasing the severity of fire incidents.

Wider economic impacts are likely too. For example, mountain biking and trail centres make considerable economic contributions to local and regional tourism economies. Most allow only EAPC-specification e-mountain bikes to access their trails – a change to higher power could put this

access at risk, because higher power e-bikes would be more likely to be heavier, and more likely to damage tracks under hard acceleration.

There are also product safety/compliance implications to this proposed change. The current harmonised product safety standard for EAPCs, BS EN 15194, has been developed over decades based on real-world experience of EAPCs.

The requirements (for frame and fork fatigue testing, etc.) in this or a replacement standard **would need to be fully reviewed and re-validated** for a 500W vehicle.

International work is also ongoing on a comprehensive safety standard for cargo cycles, EN 17860. This would also require full review and revalidation for use on new-specification vehicles.

The UK industry and BSI committee does not have the resources to do this effectively (standards development is now an international enterprise, driven largely by countries which retain more manufacturing capability than the UK). Without an available product standard, it would be up to each individual company to develop suitable test loadings and procedures – and it is unlikely that this approach could match the safety levels achieved by e-cycles developed using the current highly-evolved standards. Lack of a product-specific standard also makes product safety enforcement more difficult.

Question 3 Provide any relevant evidence to support your responses to questions 1 and 2.

See above.

Question 4 Do you support or oppose the proposed change to allow EAPCs to have throttle assistance up to 15.5mph (25km/h) without the need for type approval, instead of 3.73mph (6km/h) as currently regulated?

Oppose

We note that "Twist and Go" EAPCs are already permitted to be used legally under the current regulations with a full speed (15.5 mph) throttle, on the condition that type approval is obtained. This is typically done through the Motorcycle Single Vehicle Approval (MSVA) process in the "250W LPM" category. An example of a vendor providing fully legal throttle e-bikes (also known as "Twist and Go" EAPCs) under the current rules is [here](#).

Rather than make changes to the whole EAPC category, there may be scope to raise awareness of this option, for any users who might particularly benefit from full speed throttle use, and perhaps to explore whether the type approval process could be made easier for suppliers (perhaps by setting up a small batch approval process, rather than the single vehicle approach of MSVA).

We also support the call from Wheels for Wellbeing for the current provision which permits “start assist” throttle-only operation up to 6 km/h without the need for type approval to be more widely publicised, including via clear mentions on Government web pages e.g. [here](#), [here](#) and [here](#).

Question 5 Explain your response to question 3. Are there any additional benefits or risks (including in relation to road safety) not referenced in this document?

E-cycles with full speed throttles are likely to present higher risks to other road users and members of the public than e-cycles which require the rider to pedal. It is human nature that an action requiring no effort (activating a throttle) will be used to its maximum. We expect that throttle-controlled e-bike would, as often as acceleration permits, be operated at full speed.

In contrast, current EAPCs do not have very different average speeds than conventional unassisted cycles because pedalling requires effort.

This is also why the health benefits of cycling are maintained or even enhanced when pedalling is required for motor assist to actuate, as with current EAPCs. This forms a significant part of the case for treating EAPCs as pedal cycles. But this argument is not applicable for e-bikes which do not require pedalling.

E-bikes which do not require pedalling are not ‘active travel’.

Without this element of active travel, which is central to the characteristics of a cycle, many members of the public would consider throttle e-bikes as mopeds, and that they should be regulated accordingly.

This would make it difficult to resist calls for mandatory insurance, registration etc. of throttle e-bikes, even if these were not put in place immediately.

If this happens, much of the appeal, which springs from their treatment as cycles, rather than motor vehicles, of EAPCs would be lost. In comparison, the category of motor vehicle electric mopeds/scooters is far less popular.

So while the idea of more power and throttles may seem superficially attractive we believe it cannot be introduced without putting at risk the electric cycle's category status as "not a motor vehicle" which we understand as key to its role and potential as a universal mode of transport.

As there is no need for the pedals to operate efficiently on a throttle e-bike (because the throttle can be used at all times) it is likely that unless further steps were taken to tighten the vehicle category definition, **other types of vehicle could be fitted with 'token' barely-functional pedals so as to enter this category** – for example e-scooters. This is made even more likely by the recent development of 'digital drive' or 'chainless transmission' technology, which transfers power purely electronically from pedals to wheel. As they are connected only by a wire, and not a full mechanical transmission, the pedals can be placed anywhere on the vehicle (or even stowed away when not in use), offering sufficient design freedom that an e-scooter type design would become practical within the proposed EAPC regulations. The careful work being done by DfT and TRL to develop a comprehensive set of regulations for e-scooters could be made largely irrelevant.

It is also very likely that if pedalling is not required on a throttle e-bike, there will soon be calls for the current requirement that an EAPC "be fitted with pedals by which it is capable of being propelled" to be removed. This will further undermine the "bicycle not motorbike" status of the category, and unambiguously enable e-scooters to enter the category. We believe it would be much more appropriate for e-scooters to be regulated separately, with requirements specific to their characteristics, rather than 'bundled' with EAPCs.

It is also not clear what the response of owners of the UK's current EAPC fleet (probably between 0.5 and 1 million vehicles), which were designed around the need for the rider to be pedalling, would be to a change to no pedalling requirement. It seems likely that **modification or de-restriction of the existing fleet would be widespread**, taking these vehicles into a performance regime for which they are not designed or tested, and legitimising the modification/de-restriction of vehicles. It is unlikely that such modifications could be authorised by the manufacturers, whose safety case was built around the need to pedal.

"Conversion kits" which turn conventional bikes into e-bikes are also an area of concern. Even when kits keep to the EAPC power and speed limits, they are being added to cycles which were not designed for electric use. If under the proposed rules the motor can operate purely by throttle, the loadings applied to the converted cycle frame, brakes etc. will be even more different to those for which it was designed.

Currently, police can often immediately and visually distinguish between a legitimate EAPC and an unregistered motorbike. If the rider is not pedalling but the vehicle is clearly being motor-driven at above walking pace, this is a clear visual indicator that it is likely to be an unregistered motorbike rather than a legitimate EAPC (although very limited legitimate exceptions do exist to the need to be pedalling). Moving to a full speed throttle specification would remove the visual indication of

pedalling – **so it would become much harder for police to visually distinguish between legitimate e-bikes vs motor-vehicle-category motorbikes.**

A change to throttle-only operation also risks driving users to purchase the very online-sourced, poorly regulated e-bike kits and batteries from overseas which are, evidence increasingly confirms, responsible for very many of the recent tragic battery fire incidents. It would take considerable time for responsible suppliers to develop and test cycles to the new specification (so that they fully comply with relevant [safety regulations](#)) and in the meantime, throttle-controlled e-bike kits of unknown quality or safety, sourced from online marketplaces and sent directly to consumers from overseas, would be the primary source of new-specification e-bikes for consumers. To avoid this a transition period of several years, to allow suppliers to develop, test and produce safe products to the new specification, is essential if this change is to be made.

Because all of the propulsion energy must come from the batteries, with no necessary contribution from the rider, throttle e-cycles would tend to use even larger battery packs than EAPCs (because of higher power motors, and no need to pedal) **potentially increasing the severity of fire incidents.**

There are also product safety/compliance implications to this proposed change. The current harmonised product safety standard for e-bikes, BS EN 15194, has been developed over decades based on real-world experience of EAPCs. The requirements (for frame and fork fatigue testing, etc.) in this or a replacement standard **would need to be fully reviewed and re-validated** for a throttle vehicle. International work is also ongoing on a comprehensive safety standard for cargo cycles, EN 17860. This would also require full review and revalidation for use on new-specification vehicles. The UK industry and BSI committee does not have the resources to do this effectively (standards development is now an international enterprise, driven largely by countries which retain more manufacturing capability than the UK). Without an available product standard, it would be up to each individual company to develop suitable test loadings – and it is unlikely that this approach could match the safety levels achieved by e-cycles developed using the current highly-evolved standards. Lack of a product-specific standard also makes product safety enforcement more difficult.

By allowing e-bikes to operate without pedalling **the UK risks becoming an outlier in international regulatory terms.** For example, at UNECE proposals are under discussion to update the international definition of a cycle (and related infrastructure definitions), among other things to accommodate e-bikes. The draft definition clearly states that to be considered a cycle, any assistance motor "cannot self-propel the vehicle except in the [6 km/h] start-up assistance mode." If throttle use without pedalling were permitted, the vehicle could no longer be considered a 'cycle'. This conflict in definitions could have implications for cross-border travel and for the longer-term sustainability (as detailed above) of treating throttle e-bikes as 'cycles' (not motor vehicles) rather than as mopeds.

Question 6 Provide any relevant evidence to support your responses to questions 4 and 5.

See above.

UNECE proposals mentioned are outlined [in this document](#) which forms part of [this discussion](#).

Question 7 Do you support or oppose limiting either or both of the proposals to disabled people with impairments that affect their mobility and who would benefit from the proposals? If applicable, provide views on which disabled people the proposals should apply to. Explain your response and provide any relevant evidence.

Oppose.

We refer to and support the consultation response from [Wheels for Wellbeing](#), the charity representing disabled people who cycle.

Question 8 Do you support or oppose limiting either or both of the proposals to e-cargo bikes? If applicable, provide views on how e-cargo bikes could be defined for these purposes. Explain your response and provide any relevant evidence.

Oppose.

We acknowledge that there is a case for reviewing [the regulatory status](#) of heavy cargo cycles, so that the heaviest and largest vehicles are subject to technical and usage requirements which go beyond those applicable to the EAPC category. These requirements might include, for example, some or all of:

- Use only by registered operators who commit to (as a minimum) to compliance with the BA-developed [Cargo Bike Rider Training Standard \(CBRT\) and Codes of Conduct](#)
- Higher rider age limits or ideally, qualification via a Government-backed cycle logistics rider training and qualification framework, along the lines of the more general Bikeability training scheme, and based on the BA-developed CBRT standard linked to above.
- Size and/or weight limits above which access to cycle lanes may be limited
- Regular maintenance requirements.

However, if this were to be introduced it should be as part of a wider micromobility regulatory framework, for example the LZEV framework previously proposed by the current Government in the context of the legalisation of privately owned e-scooters.

Even if limited to responsible cargo bike operators we do not support the proposed changes in isolation, outwith such a proper framework.

Although greater power might enable some cargo cycles to climb hills with heavier cargo, this would increase the concern about heavy loads in large vehicles moving at high speeds on the descents. And in the majority of cities which are largely flat, operators would simply use the higher power to increase payloads and vehicle size further.

Finally we note that the cycle logistics sector is growing fast and is, in the UK and internationally, already successful under the current regulations. There may be some edge cases where more power or throttle operation are helpful, but in our view these do not at all justify the proposed changes to the EAPC regulations.

We also consider these changes unnecessary for private cargo e-cycle users - see Question 17.

Question 9 Provide any relevant evidence in response to the questions in the impact assessment – see paragraph 33. The consultation is limited to the 2 proposed changes to the regulations and the above questions. It does not extend to wider topics related to e-cycles, cycling or active travel, including mandatory insurance, licensing or helmets, the Highway Code, cycle training or riding in an antisocial manner. Responses that are not relevant will be disregarded.

We note first that the Impact Assessment, from the first page and throughout, notes the health benefits of current EAPCs (which are a form of active travel, because the rider must pedal) but then, without justification, assumes that these benefits will continue to be delivered by throttle e-bikes, which in our view are not a mode of active travel.

We consider that the impact assessment should be conducted on the basis that **all active travel health benefits would be lost** if the EAPC category no longer required pedalling.

We also note that one of the rationales provided for these proposals in the consultation documents is that "The government wants to support increased levels of active travel" (e.g. at para 11 in the impact assessment). By enabling propulsion entirely by motor, with no pedalling required, these proposals not only do not support this Government objective - they do the exact opposite and will undermine it.

EAPC users would (under the new specification) not need to pedal and thus not get the benefits of active travel. But also, other active travellers - those walking, wheeling or using pedal cycles - may well be negatively affected by throttle e-bikes using cycle lanes and shared spaces, reducing the attractiveness and subjective safety of active travel more widely.

Careful research and pilot schemes to evaluate these possible negative effects on active travel should be carried out before proceeding with these proposals.

Question 10 What, if any, evidence can you supply on the current size of the e-cycle stock owned by UK transport users and the total annual trips made?

We estimate the current UK EAPC fleet as between 0.5 and 1 million. Full market estimates from the BA's [Market Data Service](#) suggest 800K e-bike sales since 2018, but don't include hire fleets, B2B cargo cycle sales, or e-bikes created from kits. Data is also lacking on the attrition rate i.e. at which age, on average, e-bikes are withdrawn from service.

Other data we're aware of includes the OPSS's recent survey [here](#) - see page 64 of the report PDF - which suggests that ca 2% of the population own an e-bike (which would be 1.4m). This seems on the high side of our expectations.

Question 11 What, if any, evidence you supply on the current size of the e-cycle market in the UK, including manufacturing volumes, or its potential future growth rate?

The BA would be pleased to engage directly with DfT to provide evidence from our Market Data Service, which captures detailed sales, pricing and channel data for UK e-bike sales.

Size of market (sales volume): currently ca 150,000 units/year, not including hire/share fleets, B2B cargo cycle sales, or e-bikes created from kits.

Manufacturing volumes: The UK e-bike market is still largely supplied by imported e-bikes. We suggest DfT requests that UK e-bike manufacturers disclose their own production figures for this consultation; we do not have direct access to, or permission to reveal, commercially sensitive data.

Potential future growth rates: Currently sales are relatively static in the UK market, but the future growth potential is illustrated by multiple countries in mainland Europe where, under regulations which very closely align with the UK's current EAPC rules, sales have moved to a fast growth trajectory as a result of supportive Government policies, including ca 300 active subsidy schemes to kick-start e-bikes sales.

In France, for example, from a similar starting point as the UK in 2016, sales reached ca 750,000 units/year in 2022 following a programme of purchase incentives and grants. Similar growth rates are achievable in the UK under the current regulations, we believe, and the industry stands ready with policy proposals to help achieve this, as outlined in the [UK Cycle Industry Manifesto](#). The BA would be happy to provide further evidence of international comparator countries on request.

Question 12 Do you have any: estimate of the response that e-cycle manufacturers will have to the proposed regulatory changes and any costs and benefits associated with that response

The Bicycle Association has actively reached out to numerous e-cycle suppliers and manufacturers to support the development of this response. Almost without exception their response is to oppose these proposed changes.

Reasons include:

- Concerns that (as detailed above) these proposed changes would put at risk the long-term sustainability of the EAPC category as "not a motor vehicle" - which is key to its potential.
- Concerns that the cost of re-engineering their e-bikes for the UK market (which is relatively small in global terms) would not be worthwhile, leading to a significant reduction in consumer choice.
- Concerns that current product safety standards would no longer be applicable (as detailed above)
- Concerns that this would drive customers to buy poorly regulated products from online marketplaces instead, exacerbating the issue of e-bike fires which is negatively affecting the entire category (despite reputable products being very safe).

One supplier noted:

"We would not be able to justify the tooling and testing cost and therefore our customers (micro, small and medium businesses) would have to find alternative sources or lose out to the internet who won't need to test. Europe is a far more cycling oriented and bigger market, it is far easier for factories to work with that. Why does the UK think that the cycling nations have it wrong? Higher powered cargo bikes makes more sense but that is a tiny market – with a huge amount of hype about how it will change the world. I can't see it dramatically changing things and the economics on testing and development make even less sense."

Question 13 What, if any, evidence can you supply on whether and how market prices for e-cycles might be affected?

The BA would be pleased to engage directly with DfT to provide evidence from our Market Data Service, which captures detailed sales, pricing and channel data for UK e-bike sales.

We see no evidence that market prices for e-bikes would be reduced. If anything, they may marginally increase (because more powerful bikes would require bigger battery packs, which make up a significant part of the cost).

The Impact Assessment suggests that "[the proposals] may reduce the costs of e-cycles by allowing a greater range to be imported and used." This is puzzling. Already, almost all e-cycles are imported, and these range from very low cost to very high end, with a huge variety of specification.

We cannot see any reason why these changes would support importation of lower cost imports.

We also note that reputable importers carry out extensive checks on the safety and compliance of e-cycles which they import, and that the cost of this would not be reduced by these proposals.

Question 14 Specifically in respect of the proposed regulatory changes what estimate, if any, do you have on the response of: consumers to any change in e-cycle function and performance – in particular, how it might affect the number of trips taken transport users to any change in e-cycle function and performance – in particular, how it might affect the number of trips taken

We have no evidential basis on which to supply a quantitative answer.

However we note that there is an enormous body of evidence, including many Government publications, which identify "feeling safe on the roads" as the primary barrier to any form of cycling or micromobility (for example, see Chart 2 [here](#)).

We are not aware of any evidence that supports the assertions that it is lack of power or the need to pedal which are significant barriers to uptake. So on the basis of evidence that does exist, we consider it unlikely that making these changes would very significantly increase use of e-bikes.

It could however negatively affect other active travellers, if heavier, faster-accelerating vehicles which any rider over 14 can ride without pedalling are used on cycle paths, shared pavements or other areas where vulnerable road users mingle. It seems likely that some of the social issues already caused by 'gig economy' delivery riders, who often already use (illegally) throttle-controlled, higher power electric cycles, would become more widespread if these proposals were to be taken forward.

Finally, we would dispute the assertion in the Impact Assessment that "Enabling users to ride e-cycles with greater power or throttle assistance may also reduce the incentive for users to tamper with the settings of their e-cycles to achieve these and other objectives.". We consider that the opposite is more likely.

It seems probable that **modification or de-restriction of the existing fleet would be widespread** as users look to 'upgrade' their existing cycles to the new specification, taking these vehicles into a performance regime for which they are not designed or tested. This would legitimise the modification/de-restriction of vehicles and support a very questionable set of products such as 'dongles' and other means of tampering (all of which raise fire safety concerns). It is unlikely that any such modifications could be authorised by the manufacturers, whose products safety case (UKCA/CE conformity assessment) was built around the lower limits.

Furthermore, those who feel driven to tamper (and it seems unlikely that this change would satisfy them) will now simply have a more powerful starting point. Tampered-with 500W vehicles will be capable of very significant speeds and acceleration, much more so than for motors which start at the 250W nominal rating allowed under the current regulations.

Question 15 What, if any, evidence can you supply on the number and size of businesses that might be affected by these proposals – in particular, whether small and micro businesses may be affected?

The entire UK cycle industry would be affected. This includes ca 100 manufacturers, ca 300 distributors, ca 2000 retailers, directly employing ca 23,000 people in direct green jobs. Almost all are SMEs and microbusinesses.

If the likely negative effects (as we outline above) of this proposed change materialise, and as we suspect, the current regulatory status of the EAPC as 'not a motor vehicle' cannot be sustained, the industry is likely to be very hard hit indeed. E-bikes currently make up ca 10% of all cycle sales by units, but over a third by value. So any barriers to sales (such as any motor vehicle style requirements) could have a devastating impact on the UK cycle trade.

If the change were to be made overnight, with no significant transition or warning, the reputable UK cycle industry would not have product available to the new specification - suppliers need time to design, test and make available new models.

In the meantime there would be a very damaging move from consumers to buying direct from overseas sellers via online marketplaces instead (where any spec of e-bike is available). Any drop in reputable e-bike sales as a result could be very damaging to UK businesses which are already facing very challenging market conditions post COVID.

Question 16 What, if any, evidence can you supply on what impact these proposals might specifically have on disabled people?

We refer to and support the consultation response from [Wheels for Wellbeing](#), the charity representing disabled people who cycle.

Question 17 What, if any, evidence can you supply on what impact these proposals might specifically have on e-cargo bike users?

We address some aspects relating to commercial cargo bike users at Question 8 above and would also note that significant numbers of cargo cycles are used by families or as 'second car replacements'. In general, this market is already successful under the current regulations. In most cases these cycles use mid motor drive systems, which work through the cycle's gears. This means that almost any gradient can be managed already under the current rules, albeit slowly. So we do not see any justification from this usage case for the proposed changes.

Final comments?

In summary, the Bicycle Association opposes this approach and both proposals (re power and throttle) for the following reasons:

1. **It is unnecessary.** The current regulations work well overall.
2. **It is risky.** Short-term, it will drive customers to order high fire risk products online and/or to tamper with existing e-bikes. Longer-term, it risks moped-style regulations on the whole e-bike category. There are also as yet unquantified risks from more powerful, heavier e-bikes sharing cycle lanes. And allowing full speed throttles risks e-bikes losing the health benefits of active travel.
3. **It is the wrong approach.** If this must be done, create a new category for 500W throttle vehicles under a new LZEV framework, and leave EAPCs largely as they are.