

Smarter regulation: proposed changes to legislation for electrically assisted pedal cycles (EAPCs)

Response from the British Motorcyclists Federation (BMF) to the Department for Transport's Consultation

## Introduction

The British Motorcyclists Federation (BMF) is grateful for the opportunity to respond to the Department For Transport's consultation on proposed changes to legislation and related regulations for electrically assisted pedal cycles (EAPCs).

The BMF, formed in 1960, is one of the largest active motorcycling riders' groups in the world with around 214 affiliated motorcycle clubs giving the BMF a collective membership of over 65,000 riders. The BMF works closely with government Ministers and officials, and with numerous road safety organisations and other motorcycling and road transport organisations, to represent motorcyclists' interests at local, national and European level so as to ensure greater awareness of the needs of UK motorcyclists and that this translates into government road safety policy and highway design.

## **Proposals**

Do you support or oppose the proposed changes 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?

The BMF Response:

Oppose.

The BMF recognises the potential positive impact of some of the proposals set out in the consultation, in particular for disabled people in terms of making cycling more accessible. However, we are concerned about the significant risk that more powerful e-cycles would present to pedestrians and other vulnerable road users; in particular those who are disabled, visually impaired or have other mobility issues. Allowing e-cycles to be fitted with more powerful motors, as proposed, would significantly increase the risk of collisions with cyclists, pedestrians and other vulnerable footpath and road users. Increasing the power ratio of e-cycles to 500 watts is also likely to result in an increase in the size and weight of e-cycle batteries, and also the weight of any cargo carried, which in turn is likely to lead to more serious injury to riders and other vulnerable road and footpath users following any collision.

Overall, the BMF is not in favour of the proposals outlined in the consultation. The BMF believes that it would be preferable, rather than considering changes to e-cycle specifications in isolation as a means to solve specific issues, such as making e-cycles more attractive for travelling in hilly areas, to instead consider any amendments to current EAPC regulations as part of a wider and more comprehensive regulatory review of all unregulated light electric powered two wheeled vehicles. In the BMF's opinion, such a review should look at e-cycle regulations in the round, including current issues around unregulated, illegal and anti-social use of e-cycles, and other unregulated light electric powered two wheelers, that present a significant risk to the safety of pedestrians and other road users. A wider review, in line with the comprehensive LZEV framework type approach previously proposed by Government, should instead aim to put in place a framework of legislation and regulations that properly supports the aims of active travel, including improving health outcomes, reducing emissions and cutting congestion, whilst ensuring that current unregulated and antisocial ecycle, and other unregulated light electric powered two wheeler use, is effectively controlled and the sector is able to expand as part of a structured micro-mobility framework that better supports a future sustainable transport system.

The current proposals, as set out in the consultation, represent an unsystematic and partial approach to a much wider issue and are likely to lead to a number of unintended consequences that will effectively undermine future road safety and are likely to hinder rather than support the delivery of some of the wider benefits envisaged within the proposals.

The proposed changes are likely to see an increase in users selecting EAPCs over existing mopeds. Overall UK moped sales decreased in 2023 compared to 2022, as the use of EAPCs increased, most likely driven by the fact that riders

of EAPCs, unlike moped riders, are not required to undergo any mandatory road safety training, or register their vehicle, or display identifying number plates, or take out comprehensive insurance or wear mandatory safety equipment, such as helmets. The proposed changes are likely to see a further shift from other Powered Two Wheelers to EAPCs driven by a desire by users to avoid the cost and inconvenience of formal training and professional assessment, and other licensing and registration measures set out in statutory regulations, with a consequent negative impact on both the safety of e-cycle riders and on wider road safety. The proposed changes are also likely to put further stress on future moped sales with a potentially negative economic impact on the broader motorcycling industry, where sales have only recently started to recover following the pandemic. The proposals as set out are likely to adversely affect the future economic viability of small motorcycle dealerships and other related micro businesses.

Although the policy rationale behind the proposals envisages that enabling users to ride e-cycles with greater power or throttle assistance may reduce the current incentive for users to tamper with the settings of their e-cycles to achieve greater speeds, the BMF considers that the reverse will be the case. Not only will the proposed increase in the power and acceleration of EAPCs further blur the boundary between EAPCs and mopeds, the proposed changes are likely in BMF's view to lead to increased illegal modification and de-restriction of EAPC motors by owners, increasing safety risks to riders and other vulnerable road users and making it harder for UK Police officers to distinguish between legitimate EAPCs, illegally modified e-cycles, genuine mopeds and unregistered mopeds "masquerading" as e-cycles. At a time when UK Policing is struggling to deliver other core policing priorities, the additional workload for the Police as they attempt to distinguish between a legitimate EAPC, with increased power and acceleration and a "twist and go" throttle, and an unregistered motorbike, whilst also identifying illegally modified EAPCs, is likely create a significant strain on already stretched Police resources and undermine the wider safety and confidence of local communities, who are already seeing a rise in anti-social incidents featuring high-powered EAPC use.

Existing research also suggests that traumatic brain injuries are more severe in EAPC incidents compared to unassisted bicycles because of the higher speeds that riders of EAPCs can reach. More research is though needed to understand the point at which EAPCs become unsafe and to amend or introduce legislation accordingly. A recent US study on e-cycle accidents shows that the incidence of e-cycle related injuries, particularly head injuries, has surged in the United States since 2017. Over a five year period since 2017, there was a statistically significant 30-fold rise in e-cycle injuries and a statistically significant 30-fold

rise in hospitalisations. The incidence of head trauma from e-cycle accidents was approximately 49 times higher in 2022 versus 2017. ¹ The BMF believes that the proposals to increase the power and acceleration of EAPCs, and to allow "twist and go EAPCs with throttle assistance without the need for type approval, would similarly lead to an increase in accidents involving EAPCs with a corresponding increase in the severity of injuries to riders and other vulnerable road users, including pedestrians and cyclists.

The BMF is particularly concerned that increasing the power and acceleration capabilities of electric bikes will significantly increase the potential danger to pedestrians, and in particular those who are visually impaired, disabled, elderly or frail, especially where such bikes are ridden illegally on pavements as is often the case. At the moment riders of EAPCs are not required to undergo any formal training or to obtain a licence to be able to ride an EAPC, unlike moped riders. The incidence of accidents involving EAPCs and their riders has increased in recent years with pedestrians also killed or injured, including where EAPCs are being ridden illegally on footpaths. For example, on 6 July 2023 Mr. Jim Blackwood, a 91 year old army veteran was knocked down by an electric bike being ridden illegally on a pavement whilst taking his recycling out to his recycling bin. Mr. Blackwood subsequently died from his injuries. <sup>2</sup> Following Mr. Blackwood's death a Government spokesperson said "We want all road users, including pedestrians to feel safe which is why we have strict laws in place for e-cycles, including a 15.5 mph (24.9km/h speed limit for electrical assistance." The new proposals, to both increase the power and acceleration of e-cycles, would appear to fly in the face of the Government's previous reassurance on maintaining the safety of other road users and pedestrians. particularly from EAPCs being ridden in cycle lanes alongside unassisted cyclists or illegally on pavements.

Most e-cycles are powered by lithium-ion batteries, which can overheat, catch fire and cause explosions. When fires occur they tend to burn very hot and such fires can be very difficult for firefighters to extinguish. A recent report in the Guardian newspaper <sup>3</sup> cited figures produced by the Office for Product and Safety Standards (OPSS) drawn from data provided by UK Fire and Rescue services, which reveal what is believed to be the highest number of deaths recorded from EAPC fires in the UK in 2023. The London Fire Brigade has warned that EAPCs and e-scooters are now the fastest growing fire risk across

<sup>&</sup>lt;sup>1</sup> Fernandez AM, Li KD, Patel HV, et al. Electric Bicycle Injuries and Hospitalizations. *JAMA Surg.* Published online February 21, 2024. doi:10.1001/jamasurg.2023.7860

<sup>&</sup>lt;sup>2</sup> https://www.bbc.co.uk/news/articles/c88xz1411gpo

<sup>&</sup>lt;sup>3</sup> https://www.theguardian.com/news/2024/mar/09/unexploded-bombs-call-for-action-after-11-deaths-in-uk-due-to-e-bike-fires

London with 149 EAPC fires in 2023, and 3 deaths, up from 87 EAPC fires in 2022, when no deaths were recorded. The proposal to increase the power and acceleration of e-bikes is likely to see larger battery packs fitted to e-bikes, potentially increasing the severity of any such fire incidents in future.

Do you support or oppose the proposed changes to allow EAPCs to have throttle assistance up to 15.5 mph (25 kilometres per hour) without the need for type approval, instead of the existing 3.73 mph (6 kilometres per hour) as currently regulated?

The	<b>BMF</b>	Res	onse:
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Oppose.

The BMF opposes the proposal to enable throttle assistance without the need for type approval on the grounds that, along with the proposal to increase the power of e-cycle motors to 500 watts, this proposal would lead to increased risks for vulnerable road users and undermine wider road safety as a result of the increased power and speed of e-cycles and the likely carrying of heavier loads, particularly by delivery riders, with a direct impact in terms of the probability of more severe injuries to both riders and vulnerable road and footpath users.

As outlined above, BMF is particularly concerned about the significant risk to pedestrians and other vulnerable road users, including those who are disabled, from more powerful and faster EAPCs ridden by users who have undergone no formal training, with no insurance or identifying markers, and who currently often ride illegally on pavements presenting a serious risk to disabled persons, particularly those who are visually impaired or who have mobility issues.

Throttle equipped e-cycles are already permitted to be used legally under current regulations but on the condition that type approval is obtained. This requirement is in place to ensure that specified technical requirements are met. The BMF would not support any relaxation of these rules because of the adverse impact this would have on wider road and pedestrian safety.