

Department for Transport Open consultation

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

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Active travel agenda

These proposals are part of the government's Smarter Regulation Programme. The [Smarter Regulation policy paper](#) sets out its focus on how we can improve regulation across the board to reduce burdens, push down the cost of living and drive economic growth.

The government's [second cycling and walking investment strategy](#) sets out its commitment to active travel. This includes making walking, wheeling and cycling the natural first choice for shorter journeys and for half of all short journeys in towns and cities in England to be walked, wheeled or cycled by 2030.

This will help achieve important benefits for improving health, reducing emissions, cutting congestion and making local areas more attractive places to live and work. The government's objectives for active travel are underpinned by its projected investment of over £3 billion up to 2025, and the creation of Active Travel England, a new executive agency that is delivering its programme with local authorities to improve active travel across the country.

Electrically assisted pedal cycles

Electrically assisted pedal cycles (which we will interchangeably refer to as EAPCs or e-cycles), can play a key role in increasing cycling levels and supporting the government's objectives for active travel. In particular, e-cycles can make cycling more accessible. They provide assistance for cycling longer distances or riding up hills, which can make an important difference for anyone who may be older, disabled or have mobility impairments. E-cycles can also help cyclists who need to ride in business clothes without breaking sweat.

E-cargo bikes

E-cargo bikes can deliver the objectives and benefits of active travel as electrical assistance helps riders of cargo bikes transport goods with greater ease. In particular, the use of e-cargo bikes by freight and logistics operators can reduce congestion from other vehicles and improve air quality. To support the development of e-cargo bikes, the government has invested in supporting businesses and local authorities to transition to more sustainable business travel and last-mile deliveries through e-cargo bike grants, including £2.6 million for local authorities from 2 rounds of funding administered by the Energy Savings Trust between 2019 and 2022.

Current regulations

Classification of electrically assisted pedal cycles

[Current EAPC regulations \(as amended in 2015\)](#) set out the requirements an EAPC has to meet so as to fall outside the definition of motor vehicle contained within the Road Traffic Acts and to be treated as a cycle. The requirements are that the:

- cycle must be fitted with pedals that are capable of propelling it
- maximum continuous rated power of the electric motor must not exceed 250 watts
- electrical assistance must cut off when the vehicle reaches 15.5mph (25km/h)

An EAPC that complies with the above is not considered to be a motor vehicle within the meaning of the [Road Traffic Regulation Act 1984](#) and the [Road Traffic Act 1988](#).

EAPCs, therefore, are not required to be registered or subject to vehicle excise duty (road tax) and do not have to be insured as a motor vehicle.

The [Road Traffic Act 1988](#), however, sets out that EAPCs must not be ridden by anyone under the age of 14 years.

EAPCs are treated the same as pedal cycles in terms of what infrastructure they may use and can, therefore, use cycle lanes, tracks and other cycle facilities.

Throttle assistance

EAPCs that provide electrical assistance without the use of pedals are usually known as 'twist and go' e-cycles. It is possible to use these cycles in the same way as any other EAPC. However, under [assimilated EU Regulation 168/2013](#), vehicles with throttle assistance above 3.73mph (6km/h) require type approval.

Type approval is provided via the [Vehicle Certification Agency](#) and is there to ensure that a vehicle meets certain technical requirements. This is normally achieved at the manufacturing stage, but importers and individuals will be able to seek individual approval for vehicles that have not been type approved.

Proposed changes

The government proposes 2 changes to existing regulations:

- to amend the legal definition of 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
- to allow 'twist and go' EAPCs to have throttle assistance up to 15.5mph (25km/h) without the need for type approval

The proposed changes would require the government to bring forward statutory instruments to amend the current regulations. Pending the outcome of this consultation, the government would propose to lay this secondary legislation in Parliament in 2024.

E-cycles with increased power and throttle assistance in line with the proposed changes would be classified as EAPCs and would, therefore, be able to use the same infrastructure as pedal cycles, including cycle lanes, tracks and other cycle facilities.

The current regulations apply to Great Britain.

Rationale

The overriding rationale is to make EAPCs a more attractive and viable travel option for more people.

More specifically, increasing the power of EAPCs to 500 watts would make it easier for cyclists using EAPCs to ride up hills and gradients. This has the potential to enable more people to cycle, for example, if they live or work in areas with hilly terrain or they are less physically fit and would otherwise struggle to cycle up gradients.

EAPCs with 500 watts could be valuable for e-cargo bikes, because they would better enable delivery riders to transport heavier loads, including on terrain with gradients. E-cargo bikes are a growing area of interest and operations for logistics organisations and have the potential to support efforts to cut congestion and improve air quality.

Allowing throttle assistance up to 15.5mph (25km/h) could help make EAPCs more accessible. In particular, some stakeholders have identified how this could enable some disabled people to use EAPCs as a mobility aid and give them greater choice for their personal transport. Higher throttle assistance could also support users who are older, less physically fit or have mobility impairments, in addition to enabling e-cargo bike riders to transport goods with greater ease.

E-cycle users could benefit from the proposals because they may reduce the costs of e-cycles by allowing a greater range to be imported and used. 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.

By helping more people to use EAPCs, the proposed changes could support the government's wider objectives for active travel and the underlying benefits for this agenda, including improving health outcomes, reducing emissions and cutting congestion. By supporting e-cargo bikes, the proposals could also benefit the government's [Future of Freight plan](#) and, in particular, the use of urban consolidation centres.

Potential issues

The Department for Transport (DfT) is aware of some potential disadvantages to the proposals and would be interested in stakeholders' views on them.

Increasing the power of e-cargo bikes would enable them to carry heavier loads, which could increase the potential severity of injury caused to pedestrians and cyclists in collisions. Greater usage of e-cargo bikes could also increase the number of collisions, but this could be mitigated if it reduces other forms of freight traffic.

There may be greater safety risks where more powerful or heavier EAPCs interact with other road users, particularly where they are ridden on shared-use cycle tracks alongside pedestrians and are used illegally on the pavement. More powerful EAPCs will be able to accelerate more quickly and travel up hills and gradients at faster speeds. This could lead to EAPCs overtaking pedal cycles and other road users more frequently.

Increasing the power limit of EAPCs will increase their uncapped speed if they are tampered with so that electrical assistance does not cut off at 15.5mph as required. This would increase road safety risks significantly, including from collisions. Riding EAPCs that have been tampered with in this way is illegal and police forces are able to enforce this.

Increasing throttle assistance may reduce the health benefits of pedalling, but it could lead to more people cycling and cycling for longer distances, including by pedalling.

There may be a risk of more severe battery fires from more powerful e-cycles and this could be exacerbated by tampering. This will be considered as part of cross-government work into the safety of lithium-ion batteries used by e-cycles which, for example, includes the recent publication of [safety guidance on how to safely purchase, charge and use e-cycles](#).

Engagement

DfT will encourage responses to this consultation by identifying relevant stakeholder organisations and representative bodies and proactively contacting them to draw their attention to this consultation and seeking their written responses. It will target various organisations including those representing active travel, disabled people, fire and road safety stakeholders in addition to representatives from the manufacturing, engineering, freight and e-cargo industries.

The expertise provided by stakeholders through their consultation responses will inform a better understanding of the benefits and impact of the proposed changes, and how best to mitigate any risks.

Questions

There are seventeen questions in the consultation. Questions relevant to the Devon Countryside Access Forum are below. The excluded questions are aimed specifically at industry and manufacturing representatives. Responses can be made on an online form or in writing.

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.

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?

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?

Question 3

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

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?

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?

Question 6

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

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.

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.

Question 9

Provide any relevant evidence in response to the questions in the [impact assessment](#) – see paragraph 33.

Question 16

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

Question 17

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