

# Legalising rental e-scooter trials

## Introduction

Thank you for responding to our consultation 'Legalising rental e-scooter trials', your views will assist in deciding on how to alter regulations so that trials may begin, plus set the rules e-scooter users must follow.

The closing date for responses to consultation is 2 June 2020.

### **Print or save a copy of your response**

When you get to the end of this questionnaire, you will be offered the chance to either print or save a copy of your response for your records. This option appears after you press 'Submit your response'.

### **Save and continue option**

You have an option to 'save and continue' your response at any time. If you do that you will be sent a link via email to allow you to continue your response where you left off.

It's very important that you enter your correct email address if you choose to save and continue. If you make a mistake in the email address you won't receive the link you need to complete your response.

### **Confidentiality and data protection**

The Department for Transport (DfT) is carrying out this consultation to decide on how to alter regulations to enable e-scooter trials to begin and to set the rules e-scooter users must follow during these trials. As part of this we are asking for your views on:

- a definition of an e-scooter and its physical design
- the maximum speed and power limits to be allowed in trials
- a range of rules for legal e-scooter use during trials

This consultation and the processing of personal data that it entails is necessary for the exercise of our functions as a government department. For information that allows you to be identified, DfT will, under data protection law, be the controller for this information.

In this consultation we're asking for:

- your name and email address, in case we need to ask you follow-up questions about your responses (you do not have to give us this personal information, but if you do provide it, we will use it only for the purpose of asking follow-up questions)

- whether you are representing an organisation and the name of that organisation for identification purposes

[DfT's privacy policy](#) has more information about your rights in relation to your personal data, how to complain and how to contact the Data Protection Officer.

We may share responses with 3rd parties for analysis. However, we will not share any personal data and will keep your response anonymous.

Your information will be kept securely and destroyed within 12 months after the consultation has been completed. Any information provided through the online questionnaire will be moved to our internal systems within 2 months of the consultation end date.

## Personal details

### 1. Your (for contact purposes only):

name?	<input type="text" value="Rebecca Fuller"/>
email?	<input type="text" value="rebecca.fuller@urbantransportgroup.org"/>

### 2. Are you responding as: \*

an individual? (Go to 'E-scooter definition')  
on behalf of an organisation? YES

## Organisation details

### 3. Your organisation's name is?

<input type="text" value="Urban Transport Group"/>
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## E-scooter definition

We are proposing to define an e-scooter as a motor vehicle which:

- is fitted with no motor other than an electric motor
- is designed to carry one person in a standing position with no provision for seating
- has a maximum speed of 12.5 miles per hour (mph)
- has two wheels, one front and one rear, aligned along the direction of travel

- has a mass, excluding the rider, not exceeding 35 kilograms
- has means of directional control via the use of handlebars
- has means of controlling the speed via hand controls and whose power control defaults to the 'off' position

#### 4. Is the proposed e-scooter definition suitable for you?

Yes  
No

NO

Why?

No. We would suggest the addition of a minimum wheel size (and associated ground clearance) to assist riders to navigate uneven road surfaces. Most models of e-scooters have a wheel size of 8-10 inches, these small wheels make it difficult to safely travel over bumps and potholes. Safely accommodating these kinds of vehicles would require a significant increase in highway maintenance standards, something that transport authorities will find difficult to deliver given the ongoing backlog in road maintenance and the associated funding gap. Larger wheels may help in reducing the likelihood of riders falling off when travelling over uneven road surfaces. They are also easier to control at speed.

In the interests of safety, there should also be minimum requirements for other features, including, but not limited to:

- Lights: particularly important given e-scooters are low to the ground and less visible in traffic. As well as lighting at the front, a brake light and taillight would also be useful and should be automatically controlled.
- Brakes: some e-scooter models only have a front lever brake whilst the back brake is a mudguard like a kick scooter. This is unsafe as it is difficult for users to adjust their bodies, particularly at high speed. E-scooters should therefore be equipped with both a front and back lever brake to improve safety. Further detail will also be needed on minimum braking capabilities.
- Indicators: should be fitted to avoid riders having to take their hands off the handlebars to indicate using hand signals. Indicators should also be designed to avoid riders having to take their eyes off the road to use them.
- Bell/audio alert: to alert other road users to what would otherwise be a largely silent vehicle, potentially travelling at speed.
- Tyres
- Suspension

- Manoeuvrability
- Durability: a sturdier build quality would mean the vehicles have a longer life, helping to reduce environmental impacts and waste.

Given that e-scooters are currently illegal and we are able to start from scratch in defining what is allowed, the Government could take this opportunity to define high standards for safety and build quality.

## Maximum speed limit

We propose to allow e-scooters to be used up to 12.5 mph. This is the same speed limit applied in France, Germany, Denmark and some other countries. We consider this is an appropriate limit for e-scooters being treated like cycles and being used in cycle lanes and tracks.

However we also seek views on whether a speed limit of 15.5 mph would be more appropriate. This would match the speed limit for electrically assisted pedal cycles (EAPCs).

### 5. In your opinion the maximum permitted speed for e-scooter trials should be:

- 12.5 mph? YES
- 15.5 mph?

Why?

12.5mph should be the maximum permitted speed for the trials. 12.5mph is in line with other European standards and appears sensible on the grounds of safety for the e-scooter rider and other road users. Current models of e-scooters can be prone to having their speed unofficially enhanced. Consideration should be given to making the fitting of tamper-proof speed limiters mandatory. Limiting maximum motor power to 250 watts initially (as suggested below) may also help in reducing acceleration and speed, as could the use of geo-fencing to automatically cap speed within designated areas.

## Maximum motor power

We are considering including a maximum motor power of 350 Watts within the definition of an e-scooter.

### 6. In your opinion should a maximum motor power be included in the definition?

- Yes

No

YES

Why?

Yes. A maximum motor power should be included to help to prevent e-scooters travelling at speeds faster than permitted.

### 7. In your opinion is the suggested limit of 350 Watts maximum motor power appropriate?

Yes

No

No

Why?

No. As a starting point, 350 watts is more powerful than needed considering the speeds that the e-scooter will be limited to. 250 watts is more appropriate as a maximum for motor power during this trial as this will permit travel at speeds of between 12.5mph and 15mph. This would also align e-scooters with EAPCs which must have a maximum power output of 250 watts. For EAPCs, a bike exceeding this limit must be registered and taxed, requires a driving licence to ride and a crash helmet. However, it is worth noting that EAPC riders can pedal to provide additional power when needed (e.g. to climb hills).

Until more evidence is available on the safety impacts of different power levels in the specific case of e-scooters, 250 watts seems a sensible limit.

## Regulatory changes

Current regulations would require e-scooter users to have a full motorcycle, moped or car driving licence with appropriate training, wear a motorcycle helmet and register the e-scooters. They would not allow e-scooters to use cycle lanes and tracks.

We propose to regulate rental e-scooters in trials similarly to electrically-assisted pedal cycles. This would require changes to the current regulations. For the trials, we propose to:

- allow full or provisional licence holders to use e-scooters
- remove the requirements to wear a motorcycle helmet
- allow e-scooters to use the road, cycle lanes and tracks
- exempt e-scooters from vehicle registration and licensing
- exempt e-scooters from type approval requirements

During the trials, e-scooters will continue to be classed as motor vehicles, meaning requirements to have insurance and a driving licence will continue to apply.

**8. To what extent do you agree or disagree that, for the trials, we should change the regulatory requirements to:**

	Strongly agree	Agree	Disagree	Strongly disagree	Don't know?
allow e-scooters to be used by any full licence holder?	<b>In the case of a number of these questions, our responses cannot be simplified into agree or disagree as the issues are more nuanced – please refer to written responses below.</b>				

allow e-scooters to be used by any provisional licence holder?

remove the requirement for a motorcycle helmet and instead recommending cycle helmets?  
 allow e-scooters on roads (except motorways)?  
 allow e-scooters in cycle lanes and tracks?  
 exempt trial e-scooters from vehicle registration?  
 exempt trial e-scooters from vehicle licensing?

Strongly agree    Agree    Disagree    Strongly disagree    Don't know?

exempt trial e-scooters from vehicle type approval requirements?

Explain your choices:

allow e-scooters to be used by any full licence holder?

Given that these trials are expected to get underway quickly, allowing e-scooters to be used by any full licence holder initially may be a means to quickly ensure that users have a good understanding of the rules of the road. However, even with this understanding, riding an e-scooter is very different to operating other kinds of vehicles, it behaves differently on the road, is more vulnerable to being thrown by uneven surfaces, requires balance and has a different centre of gravity.

For the trials (if possible) and certainly in the longer term (to open up access to more people), it may be preferable to introduce mandatory training for e-scooters (in person and in a safe environment), rather than require users to be full licence holders.

Furthermore, it is important to note that requiring a full driving license to use an e-scooter – even if this is only a requirement for the duration of the trials - could limit the ability of the trial to meet the Government's stated aim to ease the burden on public transport given that those without a driving licence are more likely to rely on public transport.

Limiting use to full licence holders may also reduce the ability of the trials to present a full picture of the potential market for e-scooters – both for rental and purchase. In particular, requiring a driving licence is likely to exclude many younger people (17-30s), a key target market for e-scooters and a demographic who are increasingly choosing not to learn to drive.

Consideration should also be given as to how the requirement for licence holding would be enforced. A study of injuries to e-scooter users in Los Angeles and Santa Monica found that 10 per cent of injured riders were under 18 years old despite the fact that scooter-renters had to prove that they were over 18 with a licence in order to register<sup>1</sup>.

allow e-scooters to be used by any provisional licence holder?

See previous answer. Provisional license holding is no guarantee of knowledge or experience on the road and so offers no added value over opening up access to non-licence holders.

remove the requirement for a motorcycle helmet and instead recommending cycle helmets?

Head and neck injuries occur more frequently among e-scooter users than for cyclists and use of a cycle helmet should be at the very least recommended, and ideally, mandated. Unlike cycles, e-scooters have very little physical activity benefit meaning that, for e-scooters, we should be less concerned with minimising all barriers to entry and instead place safety first.

allow e-scooters on roads (except motorways)?

Agree.

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<sup>1</sup> <https://www.citylab.com/transportation/2019/01/electric-scooters-safety-statistics-injuries-bird-lime-vega/581482/>

E-scooters should be permitted on roads other than those where EAPCs are not permitted.

Should e-scooters become legalised, their introduction must form part of a wider plan to improve the safety of the road network for all users, including designing streets that prioritise pedestrians, cyclists and scooter users over cars.

It is also important to note that allowing e-scooters on roads will incur costs in terms of updating on-street signage.

Consideration should be given to what message the trials give to existing e-scooter owners and members of the public and how this will be managed in terms of making it clear that all e-scooters outside the trial remain illegal.

Without clear messaging, existing owners may think they can now use their e-scooters on public roads and the wider public may assume e-scooters are allowed and purchase their own. The situation could quickly become unmanageable and the police may lack the resources to keep illegal e-scooters off the road.

There is also the related question of how trial vehicles can be designed to look significantly different from other models and ensure that non-trial scooters cannot be modified to look as if they are part of the trial.

allow e-scooters in cycle lanes and tracks?

Agree, provided that the speed of the e-scooter does not exceed what is permitted.

Again, there will be costs associated with updating signage and concerns around the use of non-trial e-scooters (see previous answer).

exempt trial e-scooters from vehicle registration?

Agree. However, consideration should be given as to how trial vehicles will be distinguished from non-trial vehicles and the implications for enforcement and linking vehicles to any incidents reported to the Police.

exempt trial e-scooters from vehicle licensing?

Agree, but this may warrant consideration in the longer-term if a decision was made to legalise e-scooters.

exempt trial e-scooters from vehicle type approval requirements?

Whilst we recognise that establishing vehicle type approvals may slow down the implementation of the trials, there may be value in doing so to avoid the risk of large numbers of e-scooters being introduced for trials that may subsequently become unusable should they fail to meet a future type approval standard that may be developed to accompany any wider legalisation. If e-scooters are to be legalised, vehicle type approval will be necessary to ensure consistent standards around safety features, power and maximum speed are met. If the aim is to regulate in a similar way to EAPCs, e-scooters should be type approved as they can be propelled without pedalling.

## Final comments



## 9. Any other comments?

Many cities across the world have found themselves suddenly inundated with e-scooters and have had to face numerous challenges in managing this situation reactively. We are pleased to see recognition of the need for city controls to help ensure that the introduction of e-scooters can be safely managed. In the longer term, city powers to cap numbers, implement parking restrictions, set standards for operators to meet and require data sharing to aid network planning will be necessary to avoid adverse outcomes. Above all, cities need to be able to ensure that e-scooters help – rather than hinder – the achievement of wider objectives for their people and places from a pleasant and safe urban realm to a healthy population.

We welcome the opportunity that this trial offers for proactive and controlled real-world testing to inform a later decision as to whether e-scooters should be legalised. However, in bringing forward this trial the Government must ensure that the safety of e-scooter riders and other road users is not compromised in the haste to get vehicles on the road.

So that the trial is of maximum value in informing this decision and understanding the wider likely impacts it will be important to follow an agile ‘test - monitor and evaluate – iterate’ cycle to ensure the trial fully explores what works and what does not work and has the flexibility to adjust accordingly. Clear measures should also be set to determine whether the trials have been a success or a failure.

Furthermore, operators commissioned to run the e-scooter rental services should be required to share trip data with transport authorities to aid understanding of where and how the e-scooters are being used and inform network planning. Data should also be collected regarding what transport mode the user would have chosen if the e-scooter was not available.

Such data sharing will be crucial in understanding the extent to which e-scooters are indeed being used to replace public transport journeys, and in so doing, helping to mitigate the limitations on capacity imposed on public transport by COVID-19.

Conversely, it may be that e-scooter journeys replace walking and cycling journeys, posing a challenge for public health by reducing active travel.

Furthermore, from a different public health perspective, cleaning routines must be a vital consideration in the design of trials given the risk of infection posed by the use of shared vehicle fleets.

Given that reducing the burden on public transport is a stated aim of the trial, it will be important to ensure that inclusivity is placed at its heart. Those who rely on public transport, particularly the bus, are more likely than average to be on a low income, for example. They may be less likely to own a smartphone to be able to use an app-based booking system. They will also be less likely to hold a full or provisional driving licence. If e-scooters are to be presented as a viable alternative for short public transport trips, potential barriers to entry for the target group should be identified and addressed.

The consultation also states that e-scooters are seen as part of delivering a green restart of local transport. Whilst e-scooters produce no direct emissions, questions have been raised as to whether they can be truly considered a green mode, for example:

- How often do lithium batteries need to be replaced and are they routinely recycled?
- What is the expected lifecycle of an e-scooter? Do they tend to be fixed and put back on the road or are they treated as disposable items when they stop working? If they cannot be fixed, are they recycled or can they be used for parts?

- Where are the e-scooters manufactured and what is the carbon footprint of transporting them to their destination?
- Rental e-scooters are usually collected up after a certain point in the evening and may be moved/redistributed at various points in the day. This is done by cars and vans generating additional vehicle journeys and potentially worsening air quality if low emission vehicles are not used.

With these questions in mind, participating operators and suppliers of e-scooters should be required to prove their green credentials.