

## [E-scooter rental trials: outcome and summary of responses](#)

Updated 30 June 2020

### **1. Introduction**

On 18 May 2020, the Department for Transport (DfT) launched a public consultation on urgent legislation to allow trials of rental e-scooters to commence more rapidly and in more areas than initially planned.

The department had anticipated running trials of e-scooters in the 4 Future Transport Zones in 2021. On 9 May 2020, however, the department announced that, as a result of COVID-19, it would open up the opportunity of trials to more areas, with trials commencing in summer 2020. This will support the department's green restart of local transport and help mitigate reduced capacity on public transport.

The consultation sought views on the proposed regulations that would allow trials to begin and the rules e-scooter users must follow. The consultation asked about:

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

It is important to note that the proposals are designed to enable effective trials of e-scooters to be run, and therefore apply only to and for the duration of the trials. They do not predict what regulations for e-scooters may be in the future and any future regulations may differ from what we have proposed here.

The rules are not changing for e-scooters that are not used as part of the trials, they will remain illegal on the road, in cycle lanes and tracks, and on pavements, as outlined in our [powered transporters guidance](#).

Following central government guidance, the consultation ran for 2 weeks, closing on 2 June 2020. This shorter duration was deemed necessary as the changes are an urgent response to the COVID-19 pandemic.

In addition, the department is currently reviewing the regulations that apply to e-scooters as part of its 'Future of transport regulatory review'. A [call for evidence on micromobility vehicles](#) (which includes e-scooters) was launched in March and will run until 3 July 2020.

### **2. Summary**

The DfT received 2,193 responses: 2,017 responses from individuals and 176 from organisations.

A wide variety of organisations responded including:

- local authorities
- e-scooter suppliers
- police forces
- researchers
- insurers
- campaign groups
- transport consultancies

The department is grateful for the feedback received in the consultation. The responses have been useful in reaching policy decisions that will allow trials to begin.

Many positive comments were received about the potential benefits of e-scooters for the environment, for providing an alternative to public transport and private cars, and for helping travellers to social distance.

The majority of responses said the regulatory proposals for the trials were solid or represented good common sense.

There were more mixed views about the definition of an e-scooter, the speed limit and maximum power.

Concerns were raised about the safety of e-scooters for:

- those who are using them
- pedestrians
- older people
- disabled people, including those with dementia or visual impairments

Only a very small minority, however, said e-scooters were too dangerous to be legalised. A general theme from owners of e-scooters was that trials should allow private use; many said this was more hygienic than shared use.

Some respondents from rural areas were concerned that rental schemes would not be viable outside cities.

A minority said the proposals were suitable for trials, but would need to be altered if e-scooters were legalised.

### **3. Next steps**

The DfT is making regulations that will allow trials of rental e-scooters to begin.

The department is working with several local authorities and e-scooter operators who have expressed an interest in participating to deliver trials in areas throughout the country.

We are also putting in place monitoring and evaluations plans to gather evidence from the trials and assess the impacts of e-scooter use. GOV.UK will be updated with details of trial areas as soon as trials begin.

### **4. Responses to questions**

This section looks at each question in turn, summarising the responses received and the DfT's considerations.

#### **4.1 Is the proposed e-scooter definition suitable for you?**

We received 2,166 responses to this question: 1,208 said the definition was suitable and 958 disagreed.

#### **Responses in detail**

Most of the comments in favour of the definition said it:

- provided clear guidance
- considered basic safety
- aligned to the design of most pre-existing e-scooters
- excluded other forms of micromobility, so was not open to interpretation

Many respondents who supported the definition also suggested some amendments including:

- signalling ability
- light reflectors
- bells and horns for audible warnings
- wheel size
- maximum braking distance at full speed

Many respondents who disagreed with the definition, including some local authorities and police forces, suggested additions. The most common themes were braking system requirements and specifications for wheel sizes, to deal with road conditions. Mandatory headlights and rear brake lights were also mentioned.

Some commented that the 35kg proposed maximum weight was too low to allow for heavier batteries. Others commented that a single definition was unsuitable, and e-scooters should have classes like motorcycles.

Some e-scooter providers suggested that three-wheeled e-scooters or e-scooters with seats to assist people with mobility needs should be included.

The most prominent views were that the speed of 12.5mph was too low and should be raised to 15.5mph, and the proposed 350W wattage was too low to cope with inclines.

#### **Our considerations**

Based on the responses, our own research and discussions with key stakeholders, we will amend the definition of an e-scooter to incorporate the following elements.

'Electric scooter' means a motor vehicle that:

- is fitted with no motor other than an electric motor with a maximum continuous power rating of 500W and is not fitted with pedals that are capable of propelling the vehicle
- is designed to carry no more than one person
- has a maximum speed not exceeding 15.5 mph
- has two wheels, one front and one rear, aligned along the direction of travel
- has a mass including the battery, but excluding the rider, not exceeding 55kg

- has means of directional control via the use of handlebars that are mechanically linked to the steered wheel
- has means of controlling the speed via hand controls and whose power control defaults to the 'off' position

This definition introduces a power limit of 500W, increases the maximum weight to 55kg, increases the maximum speed not exceeding 15.5mph, and allows seated variations of e-scooters. These changes take account of the characteristics of most e-scooter rental vehicles available to operators and will allow subtle variations of e-scooters to be used. We have increased the weight limit to 55kg and introduced a higher power limit of 500W to ensure that the regulations apply to the range of e-scooters that may be used in trials. We have taken on board the respondents' views that a maximum weight of 35kg would not allow for designs with heavier batteries. The increased power limit will help e-scooters to climb hills and inclines.

We consider these higher limits are suitable as it makes these limits consistent with the regulations in Germany (which has some of the strictest regulations on e-scooter design). From consultation responses, however, we expect that most e-scooters used in trials will be within the weight limit consulted on.

We have removed the requirement that an e-scooter does not have provision for seating. We considered the consultation responses and agree that this requirement would unnecessarily have prevented variations of e-scooters being used in trials. This is expected to benefit those with disabilities or less able to get around who may not be able to use a standing e-scooter. From trials, we are seeking evidence on the possible benefits of micromobility for those with disabilities.

E-scooters used in the trials will be approved by vehicle orders issued by the Secretary of State. The minimum technical standards required of trial e-scooters will be written into the vehicle orders instead of regulations. Technical provisions will be in place, most notably in the areas of braking, lighting and stability.

#### **4.2 In your opinion, should the maximum permitted speed for e-scooter trials be 12.5 or 15.5mph?**

We received 2,145 responses to this question: 507 said the maximum should be 12.5mph and 1,638 said it should be 15.5mph.

##### **Responses in detail**

The main themes among those who favoured a higher speed were the maintenance of traffic flows to avoid congestion, and a higher speed making e-scooters a more attractive alternative to public transport.

Many respondents said electrically assisted pedal cycles (EAPCs) and e-scooters should abide by the same speed limits to simplify legislation and that, because e-scooters are generally lighter than EAPCs, they will cause less damage in the event of a collision. Another popular theme was higher speeds helping riders deal with inclines; riders with a higher body mass were also mentioned. Many of the e-scooters sold to date have a maximum speed of 15.5mph, matching most manufacturer specifications.

A recurring theme from respondents in favour of a 12.5mph speed limit was safety.

Respondents concerned with the safety of vulnerable groups, and most of those representing the insurance industry, motorists and cyclists supported this limit.

Respondents said higher speeds could lead to more accidents, increased impact in collisions and less control of the e-scooter. Other concerns included the small wheels on an e-scooter tackling imperfect roads and a less effective braking system than EAPCs. It was also suggested that a lower speed would be favoured by pedestrians (particularly older pedestrians) as this would increase their reaction times.

A small minority of responses suggested speeds lower than 12.5mph; one response said e-scooters should be treated like mobility vehicles.

Some respondents said the speed could be increased following the trials, if it was considered safe. Police forces were evenly split between the two speed limits in their responses.

##### **Our considerations**

The department has considered the views both for and against the proposed speed limits. On balance, we agree that maximum permitted speed limit for e-scooter trials should be

15.5mph. This makes the limit consistent with e-bikes, is in line with e-scooter rules in many other countries, and helps to avoid too many differential speeds with other road users. It is important that the evidence gathered in trials is representative of how e-scooters may be used in the future. As our regulatory review is considering a speed limit for e-scooters of 15.5mph, we wish trials to include e-scooters capable of that speed so that the evidence gathered can help determine what limit may be set in the future. That said, the definition retains flexibility for lower speed limits to be set in individual trial areas and in certain locations if areas choose to do so.

What type of modal shift we see in trials is also important in maximising the potential benefits of e-scooters; the benefits for air quality, emissions and safety are likely to be greater where people use e-scooters instead of cars. A higher speed limit is likely to encourage more users not to make journeys by car.

During trials, we will be closely monitoring the safety impacts of e-scooters, in particular the effect of speed on e-scooter safety.

#### **4.3 In your opinion, should a maximum motor power be included in the definition?**

We received 2,027 responses to this question: 1,062 said a maximum motor power should be included and 965 disagreed.

##### **Responses in detail**

Almost half of those who agreed with a maximum motor power raised safety as an important rationale. Others said it would limit speed and ensure the rules were obeyed (both in terms of users sticking to the rules and making it easier for the rules to be enforced).

A common theme was that not limiting the power would lead to either manufactures bringing more powerful models to market, or that users might 'hack' e-scooters to achieve greater speeds.

There were suggestions for issues to be considered when setting power and these included:

- use by a range of people (specifically different weight ranges)
- use in different terrains (for example, more power being needed for hills)
- intended use of the e-scooter (such as less power being needed for commuting vs more for off-roading or leisure activities)

Many respondents highlighted the interrelationship between power, speed and acceleration, and the need to understand the implications of limiting power without limiting speed. Many respondents said power needed to be defined in terms of 'peak' or 'continuous' power rather than a single limit.

Points raised by those who did not support the proposals included:

- a speed limit being sufficient
- a lack of clarity on the outcomes being sought
- the definition of wattage being arbitrary

Some said that for heavier users a maximum would be discriminatory. Inclines were also mentioned, where higher power would be more appropriate. This view was shared by many e-scooter suppliers.

A dominant theme raised was that many motor vehicles, such as cars, do not have a limit to their engine size, but users must abide by speed limits; this should be the same for e-scooters. Another popular theme was that motor power may be important to the distance and range that e-scooters can travel without needing to recharge, making it more attractive to users, which would in turn encourage modal shift, so it should not be limited.

#### **4.4 In your opinion, is the suggested limit of 350W maximum motor power appropriate?**

We received 1,990 responses to this question: 966 said 350W was appropriate and 1,024 disagreed.

##### **Responses in detail**

Stakeholders were split in their responses.

Some respondents agreed with a maximum power limit, but said they lacked the technical knowledge to judge if 350W was appropriate.

Of those who disagreed with the limit, the majority felt it was insufficient to account for heavier users, allow e-scooters to travel up inclines, and enable e-scooters to function normally in strong winds or on varied terrain.

Many respondents also felt a more powerful motor would allow users to commute longer distances and reduce the charging frequency. Some were concerned that insufficient power would dissuade potential users.

Alternative options for maximum power ranged from 450W to 2,000W, but 500W was the dominant view.

A small minority of respondents felt that 350W was too high and the maximum motor power should be lowered. Of these participants, a dominant view was that the power for scooters should be aligned with EAPCs at 250W.

Many local authorities, police forces and some e-scooter companies viewed 350W as a sensible and safe power limit for e-scooters. A common theme was that it would allow for speeds of up to 15.5mph (as suggested above) whilst carrying an average weight, and would be sufficient for assisting users up a shallow to medium incline. Many said power over 350W could lead to dangerous acceleration rates.

A consistent view was that 350W was sensible, in comparison with the 250W permitted for an EAPC, because e-bikes allow for additional propulsion by the user, whereas an e-scooter would rely fully on the power from its motor.

### **Our considerations**

The DfT agrees that a maximum motor power should be included in the definition. Based on the responses to questions 4.3 and 4.4, our own research and discussions with stakeholders, we will amend the definition of an e-scooter to introduce a power limit of 500W.

We agree that this will help e-scooters to climb hills and inclines, and that a lower power limit may cause e-scooters to climb hills very slowly and possibly unsafely. This new power limit will allow e-scooters to be used by heavier users on steeper inclines, and is consistent with the regulations in Germany (which has some of the strictest regulations on e-scooter design). The speed of e-scooters will still be limited, so we believe this change can be safely made with minimal other impacts.

## **5. Changing the regulatory requirements for trials**

In all cases, the majority of respondents agreed or strongly agreed with the proposed changes.

A small minority supported the proposals for the duration of the trials, but said they should be altered once the trials were over, especially in light of any evidence that might be gathered. For all the proposed regulatory changes, the DfT agrees with the majority of respondents and proposes to change the regulations.

### **5.1 To what extent do you agree or disagree that, for the trials, we should change the regulatory requirements to allow e-scooters to be used by any full licence holder?**

We received 2,045 responses to this question:

- 1,115 strongly agreed
- 410 agreed
- 180 disagreed
- 287 strongly disagreed
- 53 didn't know

#### **Responses in detail**

Comments in support of the proposals included full licence holders being more aware of the rules of the road, and e-scooter users acting more responsibly if they could be traced via the Driver and Vehicle Licensing Agency (DVLA). A small minority said e-scooters should only be used by people with a full licence.

### **5.2 To what extent do you agree or disagree that, for the trials, we should change the regulatory requirements to allow e-scooters to be used by any provisional licence holder?**

We received 2,038 responses to this question:

- 762 strongly agreed
- 664 agreed
- 260 disagreed
- 296 strongly disagreed
- 56 didn't know

#### **Responses in detail**

Many of the comments made in favour of full licence holders using e-scooters (such as road awareness and identification) also applied to provisional licence holders, but some respondents were concerned that a provisional licence could be obtained without any training.

Of those who were opposed to the licensing requirements, the majority said this was because licences were not required for bicycles or e-bikes and/or it would limit access. Some respondents suggested mandatory training would be more appropriate than the requirement for a licence, although there was no agreement on the type of training necessary.

A small number of responses, including some from local authorities, said the requirement for a licence might be discriminatory as certain groups are less likely to hold a licence.

The requirement for a licence creates a minimum age for use; a small minority of respondents said a minimum age should replace the need for a licence, but there was no agreement on the minimum.

### **Our considerations**

We have considered the points raised in response to questions 5.1 and 5.2. In enabling trials to begin quickly, we are constrained by existing legislation, meaning we cannot quickly remove the driving licence requirement.

We agree with the majority of respondents and intend to allow full and provisional licence holders to use e-scooters in the trials, opening trials up to the greatest number of people.

This most closely matches EAPC requirements within the existing legal constraints. The requirement for a licence will effectively create a lower age limit of 16 for participation in the trials. Provisional licence holders will not need to display L plates.

For non-UK licence holders, only full licence holders will be able to use e-scooters on their current licence. Other licence holders will need to obtain a UK provisional licence or exchange their licence.

There will be no mandatory training requirements; however, we see the benefits of user training (such as the [Bikeability scheme](#) for cycles) and would like to see training made available for e-scooter users who want it.

### **5.3 To what extent do you agree or disagree that, for the trials, we should change the regulatory requirements to remove the requirement for a motorcycle helmet and instead recommend cycle helmets?**

We received 2,048 responses to this question:

- 1,293 strongly agreed
- 471 agreed
- 106 disagreed
- 142 strongly disagreed
- 36 didn't know

### **Responses in detail**

The majority said motorcycle helmets or full-face helmets were unnecessary as e-scooters would be travelling slower than most bikes, and motorcycle helmets could restrict the ability to see and hear.

A minority, including some local authorities, said there was a case for making bicycle helmets mandatory. Others, including one safety organisation, said this could severely limit the number of people participating in the trials.

Some respondents said helmets, even if not mandated, should be provided by the e-scooter rental companies, but others said shared helmets might discourage use.

### **Our considerations**

We agree with the majority of respondents that requiring motorcycle helmets is disproportionate for e-scooters, which are limited to 15.5mph, and intend to remove the motorcycle helmet requirement.

We understand that helmet use reduces injuries and recommend the wearing of cycle helmets when using an e-scooter; however, evidence suggests that the effect of mandating them is mixed and, in line with our recent '[Cycling and walking safety rapid evidence assessment](#)', which included a review of helmets for cycles, we will recommend but not mandate their use for e-scooter users.

#### **5.4 To what extent do you agree or disagree that, for the trials, we should allow e-scooters on roads (except motorways)?**

We received 2,048 responses to this question:

- 1,271 strongly agreed
- 504 agreed
- 120 disagreed
- 111 strongly disagreed
- 42 didn't know

##### **Responses in detail**

Concerns were raised about the use of e-scooters on dual carriageways and routes frequented by heavy goods vehicles (HGVs).

Some respondents said they shouldn't be allowed on narrow roads, or roads with a speed limit above 30mph (a key theme).

A minority said pavements might be used where roads were not suitable or where the pavement was very wide. This was strongly opposed by organisations representing visually impaired and older people.

Some respondents said we should consider their use on paths in parks as e-scooters could be used for leisure.

#### **5.5 To what extent do you agree or disagree that, for the trials, we should allow e-scooters on cycle lanes and tracks?**

We received 2,046 responses to this question:

- 1,623 strongly agreed
- 353 agreed
- 21 disagreed
- 38 strongly disagreed
- 11 didn't know

##### **Responses in detail**

A consistent theme was that cycle lanes and tracks would allow e-scooters to be kept away from cars and other traffic. A very small minority said e-scooters should only be used on cycle lanes.

Some said they should not be used on cycle lanes with shared usage as they would pose a danger to pedestrians. There was some concern that cycle lanes might become too crowded, but many respondents said cycle lane use would encourage uptake and improve safety.

##### **Our considerations**

We agreed with the majority of responses to questions 5.4 and 5.5, and intend to allow e-scooters to be used on roads, cycle lanes and tracks, where possible, but not on pavements or motorways.

E-scooters will be able to use the same spaces as cycles, including shared spaces.

Cycle facilities will provide spaces to use e-scooters without other motor traffic, and e-scooters will generally travel at similar speeds to cycles. We expect this will increase safety and uptake of e-scooters.

Local authorities who take part in the trials will need to update their traffic regulation orders (TROs).

#### **5.6 To what extent do you agree or disagree that, for the trials, we should exempt trial e-scooters from vehicle registration?**

We received 2,038 responses to this question:

- 1,379 strongly agreed
- 316 agreed
- 118 disagreed
- 159 strongly disagreed
- 69 didn't know

##### **Responses in detail**

Most police forces and local authorities supported this proposal with a dominant theme being that e-scooters should be exempt from registration because they should be treated like bikes or e-bikes.

Concerns were raised around accountability and enforcement, with registration making vehicles easier to trace.

Some local authorities said, in the absence of licence plates or other clearly visible identifiers, it could be difficult for the police to ensure only permitted trial e-scooters were in use. Some respondents asked if apps developed by e-scooter providers to facilitate trials would be used to trace users.

### **5.7 To what extent do you agree or disagree that, for the trials, we should exempt trial e-scooters from vehicle licensing (vehicle excise duty)?**

We received 2,044 responses to this question:

- 1,411 strongly agreed
- 310 agreed
- 133 disagreed
- 129 strongly disagreed
- 61 didn't know

#### **Responses in detail**

Most police forces and local authorities supported this proposal.

A very small number of respondents said e-scooters were motor vehicles and should continue to be treated as such, but the majority said they should be treated like bikes or e-bikes.

There was a suggestion that if licensing becomes a requirement for e-scooters then the law should change for bikes.

One suggestion was the use of a licence fee for the upkeep of cycle lanes.

Some said licensing should be aligned with the requirements in other European countries.

For both registration and licensing, several respondents said these exemptions might be necessary for trials, but this should be reconsidered if e-scooters were legalised.

#### **Our considerations**

Having taken into account responses to questions 5.6 and 5.7, we will exempt trial e-scooters from vehicle registration and licensing, and thereby displaying registration plates.

During trials, we will require e-scooters to carry a unique identifier that will aid with enforcement, although e-scooters will not carry registration plates because these would not be suitable for the design of e-scooters.

Vehicle licensing requires a registration system to administer so this will also be exempted.

### **5.8 To what extent do you agree or disagree that, for the trials, we should exempt e-scooters from vehicle type approval requirements?**

We received 2,042 responses to this question:

- 1,241 strongly agreed
- 360 agreed
- 170 disagreed
- 150 strongly disagreed
- 121 didn't know

#### **Responses in detail**

Local authorities were generally supportive of this proposal.

Concerns around type approval included the expense involved, with some respondents saying it would mitigate against innovation or discourage small-scale manufacturers; and the current process being unfit for e-scooters, which have a small number of moving parts.

Those who were against the proposals said e-scooters should meet basic safety standards, and/or that single vehicle and type approval would control maximum speed, thus helping to ensure compliance with the definition. Insurers were in favour of trial e-scooters having type approval but police forces had no common view.

#### **Our considerations**

Most e-scooters without seats fall within the domestic single vehicle approval regulations for motorcycles. The DfT will exempt trial e-scooters without seats from obtaining approval under the single vehicle approval regulations, and thereby holding a certificate of approval.

The exemption to hold a certificate will be made via administrative orders; however, minimum standards will be set as conditions within these orders to ensure basic safety standards are met and that e-scooters used in trials are built to a suitable standard.

Seated e-scooters are eligible for whole vehicle type approval (or, alternatively, motorcycle single vehicle approval) and therefore must meet these requirements to be used during trials.

### **5.9 Additional comments**

#### **Other points raised**

General themes that emerged and were not covered in the responses to other questions included:

- concerns around the enforcement of any regulations
- the process for ensuring vehicles could be maintained in a roadworthy state
- the process for ensuring e-scooters were not dumped after use, with some responses favouring docks
- requests for e-skateboards to be used in the trial
- whether the design of the trial e-scooters would allow items to be carried (not hung on handle bars)
- rules around drink and drug driving
- the need to differentiate trial e-scooters from those that are still illegal
- the process for disinfecting shared scooters after use

#### **Our considerations**

Trials will be limited to rental e-scooters, which will allow trials to take place in a controlled manner while we assess their safety and other impacts, and ensure only e-scooters that meet suitable standards are used.

The evidence from trials will help shape future policy for all micromobility vehicles, including e-skateboards.

We hope to see a wide range of local areas and e-scooter operators participating in trials. This will provide an array of case studies of e-scooter use.

Local authorities will make arrangements with e-scooter operators to provide e-scooters in their area. These arrangements can vary between authorities, but can include requirements around e-scooter parking, docking and disposal.

All e-scooters used in trials must be maintained in a roadworthy condition throughout.

As e-scooters will continue to be classed as motor vehicles, offences such as drink driving will apply to them and can be enforced in the same way as they are for car drivers.

We are currently developing guidance for the public outlining the rules for using an e-scooter during trials, which will be published on GOV.UK as soon as it is available.