



**URBAN  
TRANSPORT  
GROUP**



# The future of e-scooters

What powers do cities need and what standards should be set?

# Introduction

In the midst of the COVID pandemic, the Government announced in May 2020 that trials of e-scooters would be fast tracked and expanded across the country.

Billed as a means to support a green restart of the economy, as well as mitigate reduced public transport capacity as a result of the pandemic, the trials were initially set to run for 12 months, but most have since been extended to November 2022.

Over 30 trials are now underway, including in a number of areas within the UTG network.

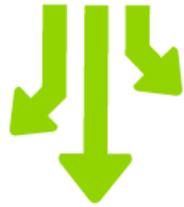
Meanwhile, use of private e-scooters on public roads, cycle ways and pavements remains illegal, but increasingly common. E-scooters are, however, legal to buy and sell. Unlike those designed for the rental market, they vary in build quality and safety standards, potentially placing users, and those around them, at risk.

With thoughts turning to the end of the trials, and increasing concern about illegal use, the time is right to explore what will happen once trials end and, in particular, what powers cities will need if e-scooters are legalised.

# Our approach

Our approach to all aspects of new mobility is guided by these five foundations

**To harness transport innovation, city regions need:**



Agile and devolved governance to support and protect wider goals for people and place



Long-term funding certainty giving space to plan strategically and creatively



Key standards set nationally, with the scope to go above and beyond locally



Open data, shared safely to inform decision making



Freedom to test new approaches on the ground

# About this paper

The remainder of this paper sets out first principles to consider in any regulatory reforms around micromobility, before moving on to our detailed recommendations on, first, powers to control the micromobility rental market and, second, on construction and use standards specifically for e-scooters, given concerns around the private e-scooter market.

The recommendations were developed via a series of workshops with UTG members, informed by lessons learnt from e-scooter trials and other dockless services.

The recommendations represent our collective position and are aligned with the five foundations outlined on the previous page.

## Section 1: First principles

## Section 2: Recommendations for the micromobility rental market

## Section 3: Recommendations for construction and use

### A note on terminology

Micromobility refers to small, lightweight vehicles typically with a speed of around 15mph or less, including, for example, e-scooters, bikes and e-bikes.

Whilst e-scooters are the focus of this paper, we use the phrase 'micromobility rental market' to reflect the fact that these recommendations are also applicable to existing and future free floating shared micromobility models, including bike and e-bike share. Non-micromobility shared schemes (e.g. car clubs, moped sharing) are out of scope.



# Section 1:

## First principles

# First principles

Before getting into the detail on the micromobility rental market and on construction and use standards for e-scooters, the following 'first principles' should be considered:

## Regulatory framework

- Private sector bike, e-bike and e-scooter rental should be viewed as one market.
- The definition and classification of an 'e-scooter' should be flexible enough to cover relevant future vehicle types or alterations to existing types.
- There should be the correct balance between prescribed minimum standards and outcome-focused requirements for rental schemes as well as construction and use standards.
- Police forces need a common framework and position to support local areas with enforcement and provide clarity for the public across the country.

## Retaining control

- Strategic transport authorities are best placed to shape rental schemes to suit local circumstances and priorities.
- Headline levels of controls for cities set during the trials should be retained and built upon in the future.

## Service continuity

- If legalised, there should be no break in service between e-scooter trials ending and the new legislative framework coming into force.



## Section 2:

# Recommendations for the micromobility rental market

# Recommendation 1

**Local areas need to be given responsibility for regulating the micromobility rental market**, as they have with the e-scooter trials. How this is implemented in individual city regions may depend on local circumstances and governance structures. However, where they exist, strategic transport authorities are best placed to ensure a coherent, useful service is provided that complements existing transport provision and reflects the needs and priorities of the people and places they serve.

Locally accountable strategic transport authorities are best placed to take on responsibility for regulating micromobility rental schemes in their areas.

With a broader geographical reach than individual local authorities, they can ensure that administrative boundaries do not prevent viable customer journeys or limit the potential for modal shift.

They can ensure that the service operates coherently across a wide geographical area, and complements travel patterns, provision and payment systems. They also have the holistic overview that can ensure services support and protect wider goals for people and place.

# Recommendation 2

A new **national enabling framework** should provide strategic transport authorities with the option to use powers to regulate micromobility rental services to ensure that they meet local needs and priorities, including options to go above and beyond national minimum standards.

It is for local areas to decide the extent to which they use the powers available to them, but as a minimum there should be options to control the following elements:

**Operators and fleets:** the number of operators, selecting those operators, specifying fleet sizes and composition, capping numbers if necessary.

**Parking:** specifying where vehicles can be parked across the service area.

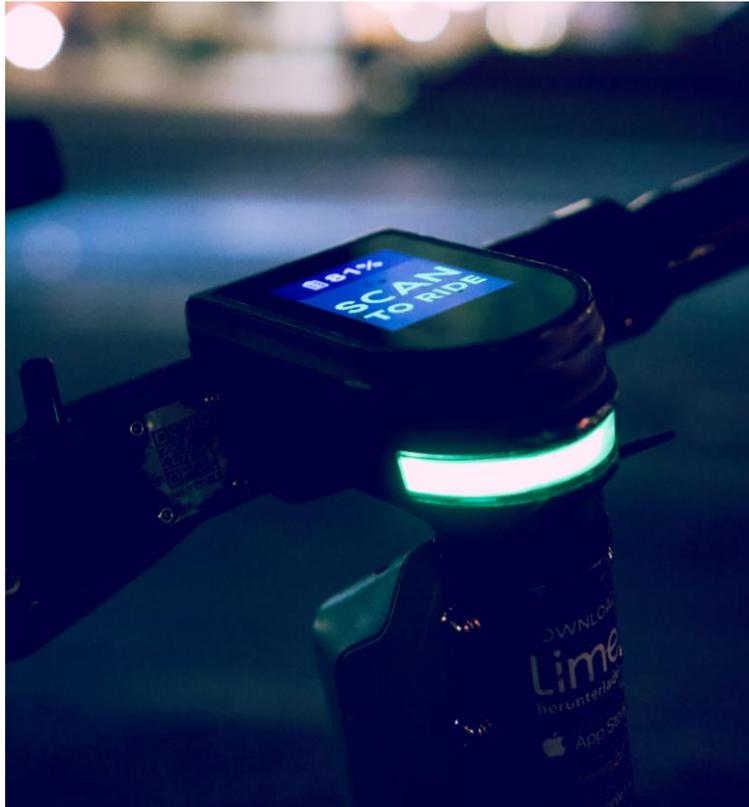
**Areas of operation, including geofencing:** ensuring only approved operators are allowed in the service area.

**Costs:** recovering reasonable costs from operators who use its roads and infrastructure.

**Contractual terms and operating standards:** setting conditions for operators, above and beyond national minimums, tailored to the local context e.g. training requirements for users, vehicle standards, maintenance, accessibility, environmental credentials.

# Recommendation 3

Micromobility rental scheme operators should be required to meet minimum **data sharing** requirements and provide certain categories of data to strategic transport authorities in their desired format and level of frequency.



Access to data is vital to enable strategic transport authorities to effectively plan coherent, safe and useful transport networks and to manage these in real time. Useful data, to be shared safely, would include:

- Live vehicle location and status
- Aggregated trip data
- Mode shift
- Demographics
- Safety critical data (collisions, incidents, driver bans)
- Other data, depending on local priorities, e.g. air quality data using on-board sensors, data to enable integration with Mobility as a Service offers.



# Risks if recommendations are not implemented

## Recommendation

## Key risks if not implemented

**Recommendation 1:** Local areas need to be given responsibility for regulating the micromobility rental market, as they have with the e-scooter trials. How this is implemented in individual city regions may depend on local circumstances and governance structures. However, where they exist, strategic transport authorities are best placed to ensure a coherent, useful service is provided that complements existing transport provision and reflects the needs and priorities of the people and places they serve.

Cities and city regions will be unable to prevent a patchwork of local approaches or gaps in provision. Micromobility services will not complement existing journey patterns and transport provision, limiting the capacity for modal shift.

**Recommendation 2:** A new national enabling framework should provide strategic transport authorities with the option to use powers to regulate micromobility rental services to ensure that they meet local needs and priorities.

Unmanageable deployment; flooded market; inaccessible streets and footways; additional costs for public sector; environmental and accessibility impacts; cross-border issues where operators are licenced in one area but able to operate in another.

**Recommendation 3:** Micromobility rental scheme operators should be required to meet minimum data sharing requirements and provide certain categories of data to strategic transport authorities in their desired format and level of frequency.

Transport authorities would have to rely on operators to voluntarily provide data, potentially in infrequent or less useful formats. They would be unable to monitor compliance or make evidence-led decisions to improve safety and optimise services for their communities.



**Section 3:**

**Recommendations for construction  
and use**

# Recommendation 4

If private e-scooters are to be legalised for use on public roads, the DfT should **set rigorous construction and technical standards for these at national level**, as is done for other vehicle types, such as e-bikes.

Maintaining the existing vehicle standards set for the e-scooter trials is unlikely to lead to safe products in the retail sector. All e-scooters used in the trials go considerably beyond the regulatory minimum standards set for them, meaning any good safety performance within trials should not be taken to mean that current minimums are sufficient for all vehicles. Moves towards legalisation should review and enhance existing standards.

Whilst standards should be outcome focused where possible (to allow for innovation and improvement) there should also be a foundation of clear, recognisable and enforceable minimum standards (e.g. requirements for minimum wheel size, stability, motor size). Not setting a minimum standard for wheel size, for example, could lead to an increased demand on already limited highway maintenance budgets, creating additional burdens on local authorities.

The next page lists the categories of standards that should be set as part of any move towards legalisation.

# Recommendation 4 continued – list of standards

Standards in these categories are set in some way by existing DfT definitions/  
technical standards for the trials:

Speed	Power	Brakes	Lighting and reflectors	Method of acceleration	Tamper proofing
Audible warning	Number of wheels and alignment	Size and weight	Handle bars	Propulsion type	Stability
	Seats	On-vehicle certification	Product/electrical safety	Stands and towing	

Standards in these categories are not currently set (or exempted) by existing DfT definitions/  
technical standards for the trials but should be taken into account in any moves towards legalisation:

Obsolescence, durability, lifetime carbon footprint	Suspension	Wheel size and type	Ability to be stopped by the Police	Type approval
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# Recommendation 5

Regardless of classification and definition in law, there should be **national minimum requirements around use of e-scooters** in terms of:

- Use on the road (and which parts).
- Applicable offences and enforcement - usage requirements such as licencing and vehicle registration will be key.

There is also an opportunity to use legal requirements to manage use in the following respects, if trials suggest intervention would improve safety:

- Licensing
- Vehicle registration and user IDs
- Insurance
- Training
- Road tax
- Maintenance
- Helmets



Getting these two requirements right will be vital if enforcement of good rider behaviour is to be viable

Minimum requirements and appropriate standards should also be considered for environmental and technical performance (e.g. capacity for geofencing); vehicles that are adapted for accessibility or used for freight; and conversion kits for kick scooters (if these are to be permitted).

### **Drones: a useful precedent?**

Drone owners are required to register their drones and to obtain and display an operator ID on their drone.

Anyone who flies the drone must pass an online test and obtain a flyer ID. In the case of e-scooters, in-person training (akin to Bikeability) could additionally be offered/required if issues arise.

Similar regulations for e-scooters could help ensure that safeguards are in place, not only at the initial point of sale, but also in the second hand market.



# Risks if recommendations are not implemented

Recommendation	 Key risks if recommendation not implemented
<p><b>Recommendation 4:</b> If private e-scooters are to be legalised for use on public roads, the DfT should set rigorous construction and technical standards for these at national level, as is done for other vehicle types, such as e-bikes.</p>	<p>Danger to riders, pedestrians and other road users in terms of collisions, falls, head injuries; fires caused by defective batteries; harm to walking, cycling and urban realm; electronic waste; increased highway maintenance costs; difficulty in stopping vehicles for enforcement and crime prevention.</p>
<p><b>Recommendation 5:</b> Regardless of classification and definition in law, there should be national minimum requirements around use of e-scooters in terms of:</p> <ul style="list-style-type: none"><li>-Use on the road (and which parts).</li><li>-Applicable offences and enforcement - usage requirements such as licencing and vehicle registration will be key.</li></ul>	<p>Lack of traceability of riders; potential for e-scooters to be used in criminal activity; danger to riders, pedestrians and other road users; harm to walking, cycling and urban realm; untrained, novice riders.</p>

# In summary

- Local areas need to be given responsibility for regulating the micromobility rental market. How this happens may depend on local circumstances. However, where they exist, strategic transport authorities are best placed to manage micromobility services in a way that enables **service provision to be matched to local needs and priorities**.
- Strategic transport authorities can also take a holistic view to safeguard wider goals for people and place and **ensure a coherent transport offer across a wide geographical area**.
- They need **access to data** from micromobility services to enable them to plan transport networks and manage them in real time.
- Beyond the rental market, it is essential that the DfT set robust **standards for the construction and use** of e-scooters, as is done for other vehicle types whilst retaining a degree of flexibility to accommodate future models and vehicle types.



# About Urban Transport Group

The Urban Transport Group is the UK's network of city region transport authorities.

We represent the seven strategic transport bodies which between them serve more than twenty million people in Greater Manchester (Transport for Greater Manchester), Liverpool City Region (Merseytravel), London (Transport for London), South Yorkshire (South Yorkshire Mayoral Combined Authority), Tyne and Wear (Nexus), West Midlands (Transport for West Midlands) and West Yorkshire (West Yorkshire Combined Authority).

The Urban Transport Group is also a wider professional network with associate members in Strathclyde, the West of England, Tees Valley, Nottingham, Wales, Northern Ireland, and Cambridgeshire and Peterborough.

We work to ensure that transport plays its full part in making our city regions greener, fairer, happier, healthier and more prosperous places.

