Overview of policy relating to e-scooters in European countries

The increased use and availability of e-scooters (electric scooters) in cities brings opportunities for sustainable modes and challenges for those managing the public space.

The fast pace at which cities have witnessed the increased popularity of e-scooters has highlighted the lack of regulatory frameworks for using and exploiting emerging mobility modes. This has resulted in the pressing need for local and national regulations and approaches to organise the
market and keep public spaces tidy. Over the last couple of years this has, in turn, resulted in widespread, yet dissimilar, amendments to national regulations.

**Context**

In only a couple of years, e-scooters have rapidly expanded throughout many cities in the USA and Europe. In 2019, two years after launching e-scooter operations in California, one e-scooter rental start-up had already entered the market in over 100 cities, spread across almost every continent, logging millions of rides both on their shared e-scooters and bikes. E-scooters are similar to conventional kick scooters, although they have a battery that powers an electric motor. These light, electric, free-floating vehicles are often made available in urban areas through sharing schemes that let users locate, reserve, (un)lock and pay for their use through their smartphones. Sometimes these schemes also offer e-bikes, scooters and mopeds.

Like other vehicles using the road, e-scooters need to operate within a regulatory framework. Cities have reacted to the trend of shared micro-mobility in different ways, ranging from total prohibition to total openness, with many variations in between. Some have adapted policy over time by reacting to developments on the ground, including responding to reactions from the public. Latecomers have usually taken a more restrictive approach than early adopters.

**In action**

In September 2019, a new mobility bill added e-scooters to France’s traffic law with measures including a minimum age (children as young as 8) and guidelines on where they can be used. E-scooters are banned from pavements, their speed limit on roads is 20 km/hour and it is mandatory for helmets to be worn by children under 12 years of age. In Lyon, a shared e-scooter operator has introduced a speed limiter that is based on global positioning system (GPS) where, within the city’s pedestrian zone, vehicles are restricted to 8 km/hour. Paris aims to limit the number of providers operating in the city, with a tender to select up to three operators, which will be allowed to continue providing their service. The national mobility bill hands local authorities the power to limit the number of vehicles and operators, and impose additional requirements on maintenance, noise and pollution.

In Germany, a licence for e-scooters for use on public roads is available if:

- their maximum speed cannot exceed 20 km/hour;
- front lights and side reflectors are fitted;
- two brakes that work independently are fitted;
- a bell or a signal that can be used to warn other users of an approach is fitted.

In early 2020, Italy’s Transportation Ministry published new rules for e-scooters – these are popular in Milan, Turin and Rimini. These were previously excluded from circulation in urban areas and on normal roads. The law sets a minimum age of 14 and wearing a helmet is mandatory for those under 18. E-scooters can be driven at a maximum speed of 25 km/hour on carriageways where bicycles are allowed and 6 km/hour in pedestrian areas.

While the number of electric scooters on Maltese roads has steadily increased, their use was not initially covered by any specific regulation. However, following a surge of reports of accidents linked with e-scooters, which resulted in calls for tighter regulations, new rules were introduced. Irrespective of whether e-scooters are privately-owned or part of a sharing scheme, the new rules require that riders must be 18 or over, hold a driving licence and be insured. A one-time registration fee of €11.65 is required for scooters, along with an annual licence fee of €25.
In Belgium, it is now legal to ride e-scooters on public roads as long as their speed is limited to 25 km/hour, which mirrors the requirement for e-bikes. In Sweden, e-scooters must have brakes, an audible warning device, such as a bicycle bell, and riders younger than 15 years of age are required to wear a helmet. In Spain, the national traffic authority sets a speed limit of 25 km/hour for e-scooters and requires them to be insured.

As the use of e-scooters is only legal on private land in the UK, micro-mobility schemes are not possible. The UK Government plans to review the regulation and governance of emerging transport modes, including e-scooters, beginning with a consultation on the use of e-scooters.

**Results**

In addition to those mentioned in the previous section, other EU countries have proposed regulations or published guidelines for local authorities on the use of e-scooters.

The exploitation of synergies between local authorities and micro-mobility service operators is also relevant. Specific e-scooter providers have deployed more collaborative approaches in cities, such as in Paris and Antwerp, by drawing up charters of good practice and usage rules, which can then inform policymakers. In Antwerp, this led to the city’s introduction of a first-come, first-served approach to the issue of permits for operation.

The novelty of the topic combined with the different regulatory and legislative frameworks, and the different levels of decision-making autonomy in each city, has led to the implementation of different regulatory approaches all over Europe. Nonetheless, most national and local regulations seek to define the following common criteria:

- the spaces where e-scooters can be used (e.g. roads, bike lanes, pavements, pedestrian areas and 30 km/hour areas);
- their compliance with safety rules (e.g. helmet, lights and turn signals);
- age requirements for their users;
- the need to reflect local government competencies in micro-mobility management;
- training requirements (e.g. driving licence).

As regulators grasp the inherent challenges in regulating and enforcing e-scooter sharing, it seems that a potential standardisation in policy will most likely take some time. Furthermore, given the novelty of the different regulatory frameworks that have been put in place, it might be too early to draw conclusions for the development of policy. The role of monitoring and evaluating e-scooter related policies will be essential to understand the impact of this increasingly popular transport mode.

**Challenges, opportunities and transferability**
The mainstream use of e-scooters responds to the increasing demand for micro-mobility solutions. It can be seen as complementary to public transport, democratising the way people move around cities. However, this democratisation is not without its challenges. Given the fast-paced, disruptive and ever-changing context in which e-scooters have appeared on the streets, governments will inevitably go through a challenging regulatory process of trial and error, with ongoing adjustments to policy.

In this instance, monitoring and evaluating policy is of extreme interest because of the unique characteristics of e-scooters and the need for flexible regulatory approaches to maximise their potential beneficial contribution to urban mobility.

Safety concerns are one of the most pressing issues to be tackled, particularly the needs and safety of other vulnerable road users. Despite the general notion that the number of accidents with e-scooters is relatively low, KfV, the Austrian Member of the European Transport Safety Council, has brought attention to the fact that e-scooter collision numbers may, in fact, be underestimated in the different existing accounts. Furthermore, there is a general understanding that e-scooter ridership is associated with a modal shift from cars, which in turn could lead to more road safety. However, the Danish Road Safety Agency conducted a study that indicates that e-scooter trips mainly replace trips by foot, bicycle, and public transport.

This context underlines the importance of setting limitations on their speed and power, as well as banning their use on pavements where cycling is not permitted. In case their use is allowed on cycle paths, e-scooters should be limited to 20 km/hour, as mandated in Paris and Sweden. The most common strategies for the enforcement of rules are associated with fines and/or confiscation of equipment, in case of infringement. However, cities (mostly in the US) have started experimenting with geofencing to enforce speed limits and restrict areas where e-scooters can operate. Despite the potential of this technique, such provisions seem to, at the European level, lack regulation respecting privacy matters and establishing an EU-level framework for geofencing. Additional equally relevant strategies can assist in making e-scooter safer, ranging from design, regulation to operation, such as:

- Ban the usage of sidewalks and/or enforce a low speed limit;
- Enforce a 30 km/h or less speed limit, in places where vulnerable users share space with the vehicles;
- Improve the design of the vehicles, to increase road grip and stability;
- Data collection on e-scooter crashes, to assess the vehicles safety performance;
- Remove incentives to dangerous behaviour (i.e. per-minute rental fees);
Additionally, the European Transport Safety Council’s report on Urban Road Safety calls for the need for data and regulation for e-scooters and new forms of mobility to assess its impact on road safety and to reflect on national and city-level regulations and infrastructure adjustments. At the city level, it issues specific recommendations on urban road safety that can greatly contribute to a higher level of safety associated with e-scooter usage, particularly the adoption of 30 km/h zones supported by traffic calming measures.

Another particular challenge relates to the space e-scooters take upon the public space, which in turn has spillover effects for safely using the micro-vehicles and occupying public space. To tackle the matter of street clutter, space reallocation and adequate parking need to become a reality. If the parking of e-scooters is not controlled, it may adversely affect the mobility of vulnerable road users (e.g. blind and partially-sighted people, senior citizens and children). In response to chaotic e-scooter parking, several cities are reallocating several car parking spaces to e-scooters. An illustrative example is the mobility hubs are being created to address this issue while combining different types of shared vehicles and last-mile solutions (i.e. e-scooter and bicycle parking, including car-sharing stations linked to Public Transport, real-time transport information, etc.)

An additional topic of contention relates to the environmental impact of e-scooters. While they may be zero-emission vehicles, initial studies seem to indicate that these vehicles are not as environmentally friendly as initially thought. Their reduced life span (some studies indicate as little as three months to a year), the common charging and maintenance model and the waste generated by the disposal of their parts does not seem to abide by the highest standards of sustainability. E-scooters operators need to address these concerns, not only to promote sustainable mobility but also for the sustainability of their business models.

Specific regulations have been implemented all over Europe, but without an all-encompassing framework, with considerable differences in the chosen approach between local and national levels, but also across countries. In many cases, local approaches were put in place earlier simply because they did not need national approval for this purpose., whereas other cities had to wait for national guidance. All things considered, case-by-case policies can be transferred easily to address universal issues raised by the inclusion of e-scooters in urban mobility, with necessary adaptations to take account of local characteristics.
In Depth

Additional relevant information can be found at:

- International Transport Forum report on Safety Micromobility
- European Transport Safety Council’s report on Safer Roads, Safer Cities: How to Improve Urban Road Safety in the EU
- Polis Discussion Paper on Macro Managing Micro Mobility
- E-scooter regulations in Germany and France
- Shared Micromobility Policy Toolkit: Docked and Dockless Bike and Scooter Sharing
- Evaluation of Small Motorised Vehicle by the Danish Road Safety Agency (in Danish)

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