The Motorcycle Industry In Europe

ACEM POSITION PAPER

Mobility

Micromobility: The case of the Personal Light Electric Vehicle

With urbanisation on the rise, cities suffer from ever-increasing traffic congestion. Solutions exist to cope with this situation: Powered two-wheelers can provide an excellent alternative mode of transport, as their light weight and agility are perfect to combat congestion.

Micromobility is now also rapidly growing as a personal mobility option for European citizens. Since the majority of trips taken in urban centres today involve distances of less than 8 km, it would seem that micromobility products could also efficiently contribute to efforts to reduce congestion.

As stated by the European Commission during a conference on the topic of micromobility in Ljubljana on 14 October 2019, ACEM believes that micromobility vehicles, as well as all other vehicles, need to operate in a regulatory framework that defines where they can be used, at what speed, after which training, as of what age and in compliance with which design safety rules.

ACEM has been involved in Road Safety policy determination ever since the association was formed, as its members have constantly worked towards increasing the safety of their vehicles and their use.

Whilst not representing the interests of micromobility manufacturers, service providers or users, ACEM would like to hereby present its position on micromobility to help to secure a safe environment for all on our roads.

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Definitions issue

As with any new trends and products, there are many new terms that flourish. This may lead to confusion. In order to avoid misunderstandings, for the purpose of this paper and the ACEM discussion, the following intends to clarify key notions and terms:

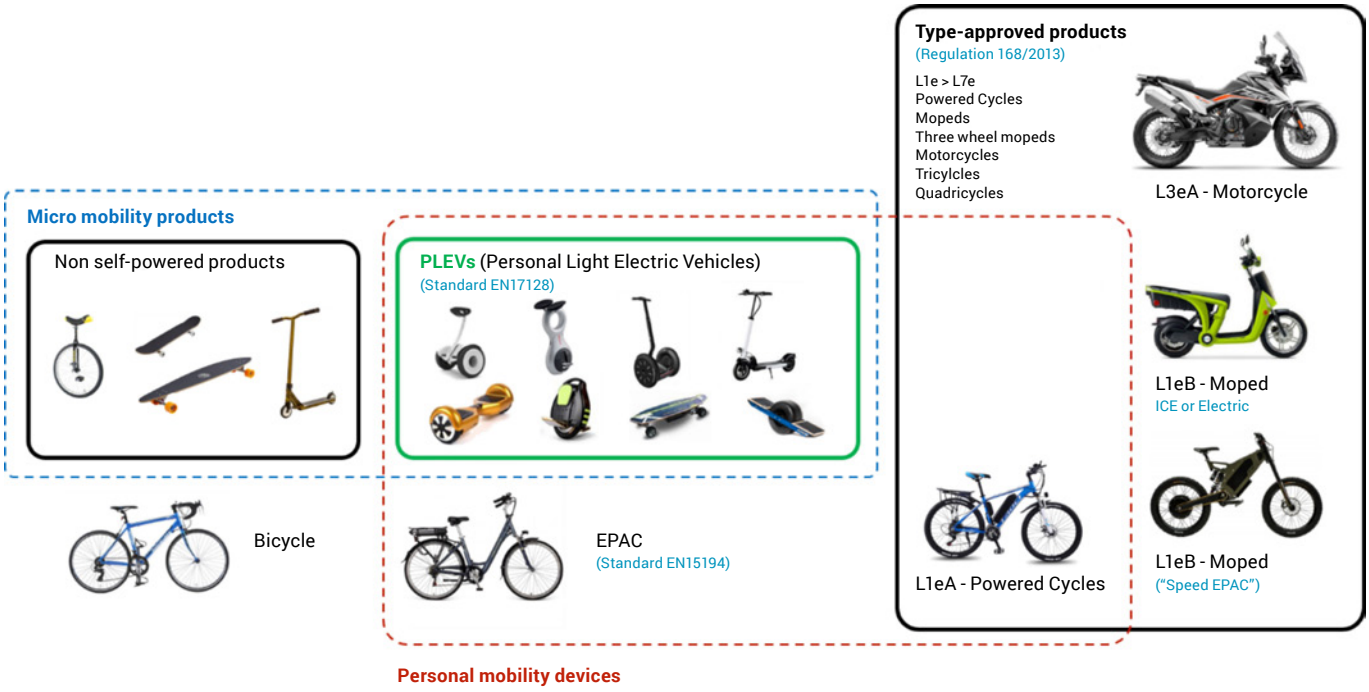
Micromobility products: Generic term encompassing any product intended for the transport of people or goods, self-propelled or not, that does not currently fall under Type Approval Regulation (EU) 168/2013 or is neither a bicycle nor an EPAC.

PLEV (Personal Light Electric Vehicle): light electric vehicles, covered by the new CEN standard EN 17128, that do not fall under Type Approval Regulation (EU) 168/2013 or which are neither bicycles nor EPACs.

PMD (Personal Mobility Device): covers the widest range of products, including EPACs and Type Approved powered cycles classified as L1eA. This term is used in the context of the policy definition process started by the European Commission in 2019.

ACEM emphasizes the need to look at the regulatory frameworks applicable to PLEVs in order to find the best possible solution to regulate, as a first step, the design and use of PLEVs solely. Issues related to the L1e classification (powered-cycles, so-called "speed EPACs" and "traditional mopeds") should remain under the remit of the separate discussions at DG GROW level.

The following aims to summarize, at a glance, the wide array of vehicles used as personal mobility means by European citizens. It does not take into account the "utility" vehicles designed for the transportation of goods.



Safety first: design requirements

There is a wide range of micromobility products in the market today: mono-wheels, kickscooters and e-kickscooters, hoverboards, among many others. These vehicles are not mere toys but real means of transport used on European roads, bicycle lanes and even on pavements.

More and more of these tend to be electrically propelled or provide some sort of assistance to the user. ACEM believes that a minimum set of design requirements should apply to manufacturers of PLEVs wishing to market their products for use in the European Union.

Such rules should notably include reasonable legal requirements (already in place for other types of mobility products) on specific issues, such as:

- Construction safety (structural integrity and generic requirements for safe use)
- Electrical safety (notably battery-related)
- Maximum speed (pedestrian mode, max. speed mode)
- Maximum power
- Power-to-mass ratio
- Maximum torque (measurement)
- Lighting performances
- Braking performances
- Anti-tampering

It would also seem appropriate that all separate vehicle systems (brakes, lights, battery etc.) should follow the same regulatory requirements as those set for the whole vehicle.

CEN TC 354 has now finalized its work on a first standard (n° EN 17128:2020) addressing safety requirements and test methods for “non-type approved light motorized vehicles for the transportation of persons and goods and related facilities - Personal light electric vehicles (PLEV)”.

Adopted in July 2020, this standard specifies the safety and electromagnetic compatibility requirements and test methods of the following personal light electric vehicles: without any seating position and/or; electrically power-assisted vehicles and/or; self-balancing vehicles with or without a seating position; which are intended for use on public and/or private spaces and intended primarily for the transportation of one person in an urban environment.

This European Standard is intended to cover all common significant hazards, hazardous situations and events of PLEVs, when used as intended and under conditions of misuse that are reasonably foreseeable by the manufacturer.

Furthermore, ACEM believes that the norms that have been drafted, provide an initial response to most of the safety issues related to the design of these products. In particular, the maximum speeds defined in the standard (pedestrian mode 6 km/h, max speed 25 km/h) seem appropriate.

In the near future, EN 17128 should be further revised, e.g. splitting the standard in two parts, one for self-balanced products and another for non-self-balanced ones, and safety requirements should be further optimized.

ACEM calls on the European Commission to include PLEVs in the Machinery Directive 2006/42 and amend the Directive to include the requirements set in the standard as compulsory for placement on the EU market.

Furthermore, certification for placing on the market should be made stricter in light of the limited market surveillance activities at national level. In particular, the issue of "self-certification" currently in use should be assessed, addressed and modified if need be, by European policy makers.

Vehicles with a max. speed by design of more than 25 km/h, that therefore do not meet the CEN EN 17128 standard requirements, or with a max. power output of more than 250 W (same as for EPAC), should be handled by the EU Type Approval Regulation 168/2013.

In order to facilitate the categorization of vehicles, the following characteristics can be used to separate micromobility devices from other types of vehicles:

- max. vehicle speed
- max. power
- auxiliary propulsion/self-propelled
- self-balancing/not self-balancing
- seat/no seat (or saddle)

Micromobility products such as Personal Light Electric Vehicles (PLEVs) are new mobility means used on European roads, bicycle lanes and even on pavements.

Safety first: appropriate usage

Design requirements are of utmost importance to ensure product safety. However, ACEM believes that the way the product is used should also be regulated to ensure road safety.

In the past few years micromobility products have become commonplace in public spaces, notably by way of erratic deployments by sharing scheme operators. Some of these vehicles are also owned by private undertakings. Major trends indicate that these vehicles are used:

- On pavements
- On bicycle lanes
- In general traffic

ACEM urges local policy makers to take immediate action to regulate the flow of these vehicles that mingle with either other vulnerable users (pedestrians, cyclists) on pavements and cycle lanes or with road users in traffic (buses, cars, vans, motorcycles and mopeds).

However, ACEM does not take any position on whether local authorities should forbid the use of these vehicles on pavements, bicycle lanes or in traffic.

Nevertheless, and regardless of the local authorities' choice, ACEM believes that micromobility products should be subject to traffic rules when used on roads and use requirements should apply without distinctions between products. This should encompass rules on insurance and any other already in place at national or local level. Speed limits should also be strictly enforced on the basis of the EN 17128:2020 standard (6 km/h on pavement / 25 km/h max.).

Micromobility products have become commonplace in some public spaces, with increasing numbers of sharing schemes on offer.

Safety first: user's equipment

Powered two-wheeler users understand the need to be protected, as they are truly vulnerable road users. Similar understanding should be advocated towards micromobility users, who are often less familiar users of personal mobility products other than cars.

ACEM urges policy makers to focus the general public on the safety considerations when using these vehicles. ACEM recommends the voluntary use of helmets, protective equipment (notably gloves) and, due to the small size of these vehicles, enhanced conspicuity elements (reflective wear, non-glaring lighting devices).

Beyond voluntary use, ACEM further recommends that the use of such equipment follows the same national regulatory system, if one is in place, in the following way:

> 25 km/h: as for the moped segment
≤ 25 km/h: as for the bicycle segment

Safety first: market surveillance and enforcement

A rule can become meaningless if not properly enforced. ACEM therefore calls on policy makers and national/local authorities to make the enforcement of the above rules and requirements a priority.

This is not only to make sure that traffic laws are respected but also to ensure that products brought into the European market for distribution do meet EU quality and safety standards.

ACEM takes this opportunity to stress the high level of incidents that have triggered recalls under the RAPEX scheme[1].

It is crucial to make sure that traffic laws are respected but also to ensure that products manufactured in or brought into the European market do meet EU quality and safety standards.

[1] RAPEX 2019 electric scooters/hoverboards/mono-wheels

Safety first: data accuracy for greater understanding

As micromobility products continue to evolve, local police departments and governments should ensure that accident or crash data is properly reported, avoiding improper classification of micromobility vehicles. Accurate data will be important for additional study of these developing forms of transport.

ACEM supports this study and would encourage, an examination of their impact on travel patterns and other road users, and metrics for further development.

About ACEM

The European Association of Motorcycle Manufacturers (ACEM) represents manufacturers of mopeds, motorcycles, three-wheelers and quadricycles (L-category vehicles) in Europe.

ACEM members include 18 manufacturing companies: BMW Motorrad, Bombardier Recreational Products (BRP), Ducati Motor holding, Harley-Davidson, Honda, Kawasaki, KTM, KYMCO, MV Agusta, Peugeot Scooters, Piaggio, Polaris Industries, Qooder, Royal Enfield, Suzuki, Triumph Motorcycles, Yamaha and Zero Motorcycles.

ACEM also represents 20 motorcycle industry associations in 17 different European countries. About 300,000 jobs depend on the L-category industry in Europe. There are about 35.3 million motorcycles and scooters on Europe's roads (2015 figures).

To find out more about ACEM please visit www.acem