## ROAD TRAFFIC (ELECTRIC SCOOTERS) REGULATIONS 2023

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## **ROAD TRAFFIC (ELECTRIC SCOOTERS) REGULATIONS 2023**

I, Eamon Ryan, Minister for Transport, in exercise of the powers conferred on me by sections 5, 11 and 12 of the Road Traffic Act 1961 (No. 24 of 1961), and section 4 of the Road Traffic Act 2004 (No. 44 of 2004) (as adapted by the Transport, Tourism and Sport

(Alteration of Name of Department and Title of Minister) Order 2020 (S.I. No. 351 of 2020)), hereby make the following regulations:

#### Part 1

### **Preliminary and General**

#### Citation

These Regulations may be cited as the Road Traffic (Electric Scooters) Regulations 1. 2023.

#### Commencement

2. These Regulations shall come into operation on the day immediately following the day on which these Regulations are made.

#### **Definitions**

3. In these Regulations—

> "authorised distributor" means, in respect of a particular vehicle, a person who meets either or both of the following conditions:

- the person holds a franchise from the manufacturer of the relevant (a) vehicle to sell particular makes and models of vehicles manufactured by that manufacturer and of which the relevant vehicle is one;
- (b) the person is, in writing, authorised to represent the manufacturer of the relevant vehicle and to act on the manufacturer's behalf in matters covered by these Regulations;

"braking device" means the combination of parts whose function is progressively to reduce the speed of a moving vehicle or to bring it to a stop, or to keep it stationary if it is already stopped; which consists of a control, a component or components in which the forces opposing the movement of the vehicle develop, and a transmission system (which may be mechanical, hydraulic, pneumatic, electrical or a combination of these) linking the said control and the said component or components;

"design gross vehicle weight" means the gross weight of a vehicle laden with the heaviest load that it can reasonably carry having regard to the electric drive train, brakes, tyres and general construction of such vehicle, as specified by its manufacturer or authorised distributor:

"electric scooter" means a type of powered personal transporter with handlebars, two-axles and at least one electric motor with mainly electric propulsion, designed for the carriage of one person in a standing position, with no provision for seating;

"I.S. EN 17128:2020" means the adopted Irish version of the European Document EN 17128:2020, Light motorized vehicles for the transportation of persons and goods and related facilities and not subject to type approval for on-road use - Personal light electric vehicles (PLEV) - Requirements and test methods;

"lighting-up hours" means the period commencing one half-hour after sunset on any day and expiring one half-hour before sunrise on the next day;

"lit" means the emission of a continuous light or a light that flashes not less than 60 times in each minute;

"manufacturer" means a person who manufactures a vehicle or has such a vehicle designed or manufactured and markets that vehicle under the manufacturer's name or trademark;

"manufacturer's plate" means a data plate affixed to a vehicle in the course of manufacture;

"maximum continuous rated power" means the maximum net power of an electric drive train at direct current (DC) voltage, which a drive train can deliver over a period of 30 minutes as an average manufacturer's declared value;

"maximum design speed" means the manufacturer's maximum design speed which a vehicle is incapable, by reason of its construction, of exceeding on the level under its own power;

"maximum net power" means the maximum value of the net power measured at full load:

"net power" means the power obtained on a test bench at the end of the crankshaft or its equivalent at the corresponding engine or motor speed with the auxiliaries and determined under reference atmospheric conditions;

"pneumatic tyre" means a tyre which—

- (a) is provided with, or together with the wheel on which it is mounted forms, a continuous closed chamber inflated with air to a pressure substantially exceeding atmospheric pressure when the tyre is in the condition in which it is normally used but is not subject to any load,
- (b) is capable of being inflated and deflated without removal from the wheel or vehicle,
- (c) is such that, when it is deflated and is subjected to a normal load, the sides of the tyre collapse,

and is of such thickness as to minimise, so far as is reasonably practicable, vibration when the vehicle is in motion, and is so designed, constructed and maintained as to be free from any defect which might in any way cause damage to the surface of a road;

"reflector" means a reflex reflector the reflected light of which is capable of being returned substantially within an angle not greater than 3 degrees with an imaginary line connecting the reflector and the source of the light;

"Retro-reflective marking material" means a surface or a device from which, when directionally illuminated, a relatively large portion of the incident radiation is retro-reflected;

"soft tyre" means a tyre (other than a pneumatic tyre) of soft or elastic material, which material is either-

- (a) continuous round the circumference of the wheel, or
- (b) in segments so fitted that, so far as is reasonably practicable, no space is left between the ends thereof,

and is of such thickness as to minimise, so far as is reasonably practicable, vibration when the vehicle is in motion, and is so designed, constructed and maintained as to be free from any defect which might in any way cause damage to the surface of a road;

"weight unladen" means the weight of the vehicle excluding the driver or a load but including battery power supply units used to power the vehicle;

"wheel", in relation to a vehicle, means a wheel the tyre or rim of which, when the vehicle is in motion, is in contact with the ground.

## Application

4. These Regulations apply to the use of electric scooters in a public place.

#### Part 2

# Ordinary speed limits - electric scooters

Speed limit - electric scooters

5. The ordinary speed limit prescribed for an electric scooter in respect of all public roads is 20 kilometres per hour.

#### Part 3

## Use of electric scooters

#### Minimum age

6. A person under the age of 16 years shall not use an electric scooter in a public place.

6 [ • insert SI number (when allocated)]

Carriage of goods - prohibition

7. The use of an electric scooter for the carriage of goods is prohibited.

Carriage of passengers - prohibition

8. The use of an electric scooter for the carriage of more than one person at the same time is prohibited.

Seat

9. An electric scooter shall not be fitted with a seat.

Adherence to permissible weight

10. An electric scooter when in use shall not exceed the design gross vehicle weight.

Prohibition on modification

- 11. A person shall not modify an electric scooter—
  - (a) in a manner which compromises the safe use of the vehicle,
  - (b) so that the physical or technical characteristics of the vehicle in use no longer correspond to the manufacturer's design specifications and the information contained on the manufacturer's plate, or
  - (c) in a manner that enables the driver to alter upwards the maximum design speed or maximum net power of the vehicle either directly or indirectly while in use.

Prohibition on towing

12. An electric scooter shall not tow another vehicle, any equipment, implement or any other item of any kind.

#### Part 4

## **Electric scooter obligatory requirements**

General

13. An electric scooter and its equipment shall be designed, constructed and maintained so that it is safe, roadworthy and does not endanger, impede or inconvenience the driver, other road users or members of the public.

# Design speed

An electric scooter shall not exceed the maximum design speed of no more than [20] kilometres per hour in accordance with the requirements of section 8 of I.S. EN 17128:2020.

## Maximum continuous power

15. An electric scooter shall not exceed [0.4 kilowatts (kW)] maximum continuous rated power of the electric motor, or combination of electric motors.

### Maximum weight unladen

16. An electric scooter shall not exceed the maximum vehicle unladen weight of no more than [25] kilograms.

#### **Dimensions**

17. An electric scooter, including the handlebars, shall not exceed 2,000 mm in length, 800 mm in width and 1,500mm in height.

## Steering

18. An electric scooter shall be fitted with a strong and efficient steering mechanism which enables it to be turned easily, quickly and with certainty and which is so designed, constructed and maintained that no overlock is possible and that the wheels will not under any circumstances foul any part of the electric scooter.

## **Braking**

- 19. An electric scooter shall be fitted with two independent braking devices, (1)with one acting on the front wheel and the other acting on the rear wheel.
  - Each braking device shall be operable by the driver without removing (2)either hand from the steering control.
  - (3)The combination of braking devices shall be capable of stopping the vehicle in a safe, efficient and fast manner by achieving a minimum deceleration value of 3.5 metres per second squared within the design speed range.
  - Where one braking device fails, the other shall be capable of reaching (4) minimum deceleration of 44% of braking effect as specified in paragraph [3].

- 8 [ insert SI number (when allocated)]
  - (5) The braking devices shall be operable at all vehicle speeds including where the vehicle reaches maximum design speed and comply with the requirements of 15.4.2.4 of I.S. 17128:2020.

# Lighting and reflectors

- 20. (1) An electric scooter shall be fitted with a front position lamp, a rear position lamp and reflectors.
  - (2) A front position lamp shall—
    - (a) be white in colour,
    - (b) when lit be capable of adequately illuminating the road and the objects in the direction of vehicle movement during lighting-up hours,
    - (c) be visible during lighting-up hours in clear weather for a distance of at least [50] metres, and
    - (d) be positioned on the centre line of the vehicle.
  - (3) A rear position lamp shall be—
    - (a) red in colour,
    - (b) visible during lighting-up hours in clear weather for a distance of at least [50] metres, and
    - (c) positioned on the centre line of the electric scooter.
  - (4) Reflectors or retro-reflective material shall—
    - (a) be fitted to the front, rear and both sides of the electric scooter,
    - (b) when fitted to the front, be white in colour and may be combined as one device with the front position lamp,
    - (c) when fitted to the rear, be red in colour and may be combined as one device with the rear position lamp, and
    - (d) when fitted to the side, be white or auto yellow retro-reflective marking material.

# Supplementary lighting

- 21. (1) An electric scooter may be fitted with a rear stop lamp and direction indicators.
  - (2) A rear stop lamp, where fitted to an electric scooter—
    - (a) shall be red in colour,

- (b) may be combined with a rear position lamp to provide a red light stop signal function with sufficient light intensity and distribution, and
- (c) shall be so constructed as to be actuated by the application of the braking device of the electric scooter and when so actuated to show a red light to the rear of the electric scooter.
- Direction indicators, where fitted to an electric scooter shall— (3)
  - (a) be amber in colour,
  - (b) be fitted in one or more pairs to indicate change of direction,
  - (c) be constructed and fitted as not to mislead other road users or members of the public,
  - be visible and fully observable from the front, rear and both sides of (d) the electric scooter, and
  - (e) show a light which flashes constantly at the rate of not less than 60 and not more than 120 flashes per minute.

### Use of lighting

- 22. Where an electric scooter is driven in a public place during lighting-up hours, the front position lamp, rear position lamps and reflectors with which it is required to be equipped shall at all times be shown duly lit, except
  - for a reasonable period after the commencement or before the ending of lighting-up hours provided visibility is adequate,
  - while the vehicle is stopped in the course of traffic, or
  - while the vehicle is being driven in conditions of good visibility on a (c) which a speed limit under Regulation 5 applies and which road to continuous system of public lighting affording is provided with a illumination equivalent at least to that afforded by dipped head lamps.

# Lighting maintenance

Lighting shall be kept clean, lit and unobscured when the electric scooter is in use 1. during lighting-up hours.

## Restrictions on lighting

- 2. An electric scooter shall not be fitted with lighting, which when lit— (1)
  - (a) shows any light to the front except a white light,
  - (b) shows any light to the rear except a red light,

- (c) is capable of misleading other road users or members of the public, and
- (d) causes undue dazzle or discomfort to oncoming road users or members of the public.
- (2) Subparagraphs (a) and (b) of paragraph (1) do not apply to direction indicators.

## Electrical and battery safety

- 3. The electric scooter and the components of its electrical system, including the battery, shall be so designed, constructed and maintained so as to—
  - (a) comply with the requirements of sections 6, 9, 10 and 11 of I.S. EN 17128:2020.
  - (b) protect against the risk of electrolyte leakage, fire, explosion and electric shock, and
  - (c) protect against the risk of injury and danger to any person by the placing or insulating of electric cabling.

# Audible warning device

4. An electric scooter shall be fitted with an audible warning device, bell or horn enabling the driver to give sufficient warning of the approach or position of the vehicle whenever necessary in a public place.

## Wheels and tyres

- 5. (1) An electric scooter shall be equipped with wheels with a minimum diameter, including the tyre, of [200] mm.
  - (2) A wheel on an electric scooter shall be fitted with pneumatic or soft tyres designed for on road use.
  - (3) Each wheel on an electric scooter shall be so designed, constructed and maintained comply with the requirements of section 15.3 of I.S. EN 17128:2020 and be capable of supporting the proportion of the design gross vehicle weight applicable to the relevant axle, at all vehicle speeds, including maximum design speed.

### Structural integrity and footrest

- 6. An electric scooter shall be so designed and constructed to comply with the requirements of section 12 of I.S. EN 17128:2020.
  - An electric scooter shall be so designed and constructed to comply with the footrest requirements of section 15.1 of I.S. EN 17128:2020.

## Manufacturer's plate

- 7. The manufacturer of an electric scooter shall affix a manufacturer's plate (1)to that vehicle in a clearly visible location.
  - A manufacturer's plate shall be unique to each electric scooter and shall (2) not be reused on another vehicle.
  - A manufacturer's plate shall be in a permanent form and shall remain (3) affixed to the electric scooter during its lifetime.
  - (4) A manufacturer's plate shall contain the following information in relation to a vehicle—
    - (a) manufacturer's name and model,
    - (b) maximum design speed,
    - (c) maximum continuous rated power,
    - weight unladen and permitted weight laden, and (d)
    - (e) serial or identification number.
  - (5) A person shall not without lawful authority modify, deface or remove a manufacturer's plate.

### CE marking

8. The CE conformity marking consisting of the initials "CE" as shown in Annex III, shall be affixed to an electric scooter visibly, legibly and indelibly in accordance with that Annex, to Directive 2006/42/EC of the European Parliament and of the Council of 17 May 2006 and shall not be impaired by any other marking affixed to the scooter[1]."

<sup>[1] [1]</sup> OJEU REFERENCE

[ • MINISTER'S NAME IN CAPITALS], Minister for Transport.