

**Electric Bicycle and Scooter Draft Policy**

**1 Background**

EU regulations introduced by the European Commission created new sub-categories within the L1e vehicles category (for light, powered, two-wheel vehicles), L1e-A and L1e-B, which electric bicycles can be assigned to. The Department recognises that applying the same rules to the different classes of bicycle is no longer practical.

	Electrically assisted bicycles below the thresholds for type approval	L1e-A (Powered Cycle) (2, 3 or 4 wheels)	Cycles designed to pedal in L1e-B (Two-wheel moped)	Mopeds in L1e-B (Two-wheel mopeds)
Defining regulation	EN15194	Regulation EU No 168/2013	Regulation EU No 3/2014	Regulation EU No 168/2013
Maximum motor assisted speed	25km/h	25km/h	45km/h	45km/h
Maximum permitted motor power	250W	1,000W	4,000W	4,000W
Assistance factor limited	No	No (However, testing is a requirement for type approval)	Maximum motor power 4x human power	No
Pedalling required to move	Yes (Walk-assist allows electric drive up to 6km/h)	Yes (Walk-assist allows electric drive up to 6km/h)	Yes (Walk-assist allows electric drive up to 6km/h)	No

The table shows that the maximum permitted motor power for the L1e-B category is 4000W. However, the most powerful motor found on a cycle designed to pedal in L1e-B was rated at 850W. It also noted that around half of the cycles designed to pedal in L1e-B found for sale in the EU have motors with an output of less than 400W. Research highlighted that there was very little difference in the likelihood or severity of collisions affecting conventional and electrically assisted bicycles.

Some EU countries treat cycles designed to pedal in the L1e-B category in the same way as other vehicles in that category. Riders are required to hold a driving licence, third party insurance, wear an approved helmet and their vehicles are required to have a licence plate.

Electric scooters on the other hand are a new and innovative mode of personal transport emerging around the world, and as such, research in this area is limited. At present the definitions, classifications and legislation regarding e-scooters differs considerably from country to country. Some countries have opted for a liberal approach, whilst others have adopted tighter restrictions on electric scooter use.

Most popular e-scooters appear to have a maximum speed of around 15.5mph, similar to the L1e-A type of electric bike. There are a small number of e-scooters on the market that can exceed 30mph. They operate using a throttle, come with fitted brakes and, sometimes, lights.

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Currently on the Isle of Man, e-bikes must have a maximum power output of 250 watts. The motor must not be able to propel the bike when it is travelling more than 15.5mph. These bikes are classed as a normal pedal bike and therefore can be used on cycle paths and anywhere else pedal bikes are



allowed. At this time, L1e-B class e-bikes are classed as a motorcycle/moped and need to be registered and taxed. A driving licence is required and a helmet must be worn. E-scooters are currently illegal to ride on public roads, pavements or cycle lanes, though some are already used on the Island.

The Department recognises that a clear policy and classification relating to electric scooters and bicycles are needed.

## 2 Purpose

The Isle of Man Government is committed to the health and wellbeing of its residents creating an enjoyable place to live, grow, work and play. As the use of electric bicycles and scooters becomes more popular and technology improves, the Department has identified that a clear, concise policy is required to support the adoption of these technologies.

This policy supports the Government's objectives:

- Health & wellbeing – e-bikes contribute to healthier lifestyles, even though the electric-assist reduces some physical activity. Studies show that e-bikes can provide moderate-intensity physical activity and will improve fitness levels for those who would otherwise experience low physical activity. Small electric models result in quieter, more comfortable public spaces for people. Noise pollution is a health concern, leading over time to stress, hearing loss, sleep disturbance, and learning problems in children.
- Climate change – electric bikes and scooters offer an alternative mode of transport to high polluting vehicles. E-bike and e-scooters will improve local air quality and reduce negative environmental outcomes by replacing high-emitting vehicles.
- Creating a better place to live – in terms of travel space, electric bikes and scooters are much more efficient compared to cars. Both e-bikes and e-scooters can serve many short, single-occupancy vehicle trips using much less space, easing congestion in and around town centres. Additionally it would reduce parking issues as the space needed for an e-bike or e-scooter is considerably smaller.



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## 3 Policy Proposal

Legislation be submitted to Tynwald for approval to class L1e-A and L1e-B electric bikes as bicycles or equivalents for day-to-day purposes.

It is proposed that:

- No new restrictions are placed on the L1e-A class e-bike.
- An age restriction of 16 years and above is placed on the use of the L1e-B class e-bike.
- A cycle helmet must be worn when using the L1e-B class e-bike.
- E-scooters with a maximum speed of 15.5mph are treated as bicycles.
- E-scooters are allowed on walkways and roads.
- The use of high powered e-scooters remain prohibited at this time, but kept under review.
- When an e-bike or e-scooter are on a shared footway, they must give way to pedestrians.
- The Highway Code will be amended to reflect the increasing use of these technologies.

### - Offences

It will be an offence to:

- Ride an L1e-B class e-bike under the age of 16.
- Ride an L1e-B class e-bike without a prescribed helmet.
- Ride without effective lighting and braking systems.

The offence penalties are to be determined.

Issue/Rev Number	Date	Approved by	Description
0.1	28/09/2020	OM	Original document created
0.2	15/12/2020	JR	Amendments made