

Electric Bicycle and Scooter Public Consultation

1 Proposal

The Highway Services Division wants to encourage a modal shift in transport choice away from cars to less damaging forms of transport.

The Isle of Man currently allows low powered electric bicycles to be classed as bicycles and used on the Island’s road as any other bicycle. Electric scooters are currently illegal. There are an increasing number of higher powered bicycle and scooter options becoming available in Europe and there is opportunity to modify legislation to take advantage of these changes in technology to further support the strategic objectives of Government.

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.

The Department’s policy is to increase the number of people cycling and travelling actively, and is considering a permissive and supportive initial approach to electric scooters and higher powered electric bicycles.

2 Purpose

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

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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 license, 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.

The Department recognises that a clear policy in relation to electric scooters and bicycles is needed.

3 Options Considered

Age

Driving a powered or power-assisted vehicle, on or off road, brings a certain level of responsibility which increases with the power and weight of the vehicle. However, most cyclists riding non-electrically powered bicycles would be able to reach the same maximum speed permitted by the Class A e-bike. Many cyclists are also able to reach the top speed of the Class B e-bike.

Taking this into consideration, it is proposed that there should not be any age restrictions for the Class A e-bikes, however, it is considered appropriate that riders must be 16 years of age or older to use an e-bike of the L1e-B class due to their increased speed. For e-scooters, which fall under the same power classification as the L1e-A electric bike, it is suggested that no age restriction should be imposed.

Helmets

Helmets are not currently mandatory for non-electric bicycles or scooters. Given that riders of normal bicycles can comfortably reach the same speeds as the Class A e-bikes and e-scooters, it does not seem appropriate to make helmets mandatory for the L1e-A class of e-bike and e-scooter. There is some evidence to suggest that mandatory wearing of helmets lowers the up-take of cycling and may encourage drivers to pass closer. Observation on the Isle of Man would also suggest that most cyclists wear a helmet.

For the Class B e-bikes however, due to their increased speed, it is proposed that a cycle helmet be worn.

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Clothing

There are no formal requirements proposed on clothing for either class of e-bike or e-scooters. The need to dress in specialist clothing or equipment may put some people off riding or scooting as it diminishes the convenience, increases cost and can be sartorially off putting. Again, many riders choose to wear highly visible clothing to improve their safety by making themselves more visible to other road users, which reflects Rule 59 of the Highway Code.

Bicycle Accessories

The use of e-scooters and e-bikes will only be permitted as long as they have appropriate lighting and braking system. No other accessories are deemed mandatory for e-bikes or e-scooters.

Bicycle Lanes

Class A e-bikes are permitted to use cycle lanes. As e-scooters can perform to at least the same speed as the Class A e-bike, it is recommended that they are also permitted to use the cycle lanes. It is also proposed that Class B Bikes also be allowed to use cycle lanes.

Just because a space is shared, does not remove rider and driver responsibility to drive to the conditions and for taking responsibility for avoiding pedestrians.

Test

As the e-scooters and the L1e-A type e-bike perform to a similar level as a non-electric bike, it is not recommended that a test is introduced. For the L1e-B type e-bikes, the proposed age restriction of 16 years and above should ensure that only more mature and responsible riders can operate these bikes and so no formal test is necessary.

Licence plate

The Department is proposing a permissive policy to maximise participation. Some of the trials in the UK require the scooter rider to have a provisional licence or full licence. Some European countries require a licence for the L1e-B class bicycles. Some require no licence or registration.

It is proposed that none of the e-bike classes or e-scooters should be required to be registered or carry a licence plate. Introducing registration process for e-bikes and scooters will be counterproductive to the Government's Active Travel Policy. It would also prove costly to both the owner and Government. Highway Services are only aware of one jurisdiction that has bicycle registration and that is an anti-theft measure. One of the UK trials is considering introducing registration plates on the rented scooters because of some incidents of anti-social behaviour.

Tax

It is the recommendation that Road Tax is not introduced for electric bike or scooters. E-bikes, which are the heavier of the two, can weigh around 25kg. Taking this into account, the damage that these bikes would cause to the road is negligible. Alongside this, e-bikes and e-scooters offer a very environmentally friendly transport option, producing zero emissions. Again, Road Tax could act as a financial deterrent to the adoption of active travel.

Insurance

As with bicycles, the damage that can be caused by electric bicycles and scooters is far less than that from heavier vehicles. Insurance protects the insured person from loss, not the person who may have property damaged. Whether the person has insurance or not does not change their liability if

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they cause damage. Insurance is for the protection of the insured person, but it can give comfort to the other party after an incident. If anybody, insured or not, hurts someone or causes damage then they are potentially liable. Mandatory insurance is felt to be disproportionate to the level of damage or hurt likely to be done by someone on a bike or scooter.

Passengers

Passengers should not be permitted on e-bikes or e-scooters, unless the vehicle is specifically designed to incorporate more than one rider, for example, a tandem bicycle. This is to promote the safety of all users.

Alcohol & Drugs

The use of any electric bike or scooter should be prohibited when under the influence of alcohol or drugs. The police has powers under current legislation in relation to riding whilst drunk.

4 Impact Assessment

Currently on the Isle of Man, L1e-A class 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-bike are classed as a motorcycle/moped and needs 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.

Data is limited, but there is some evidence that up to 10% of car journeys could be replaced by scooters. There is, however, an indication that a shift from cycling to scooters also takes place.

Worldwide safety evidence is again very limited at this stage. Electric scooter braking performance (stopping distance) and stability testing over 25 mm steps, replicating a pothole, are similar to the performance of a bicycle. Again, data is very limited, but some evidence suggests a scooter incident rate of 0.02%. As electric bicycles and scooters become more common on the Island, there will, of course, be an increase in the number of accidents being reported involving these vehicles.

This policy supports the Government's objectives such as:

- Health & wellbeing – encouraging people to opt for active forms of travel, which will contribute to a healthier lifestyle.
- Climate change – using zero emission modes of transport rather than high polluting vehicles.
- Creating a great place to live – helping to reduce issues such as congestion and parking, whilst also reducing noise pollution.

5 Consultation

The Department is seeking views on its draft policy proposal and would welcome written submissions. If you wish to submit your views on the proposal, you are invited to respond:

By email to: doiconsultation@gov.im

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Or in writing to:

Oliver McGowan, Research and Analysis Officer, Highway Services Division, Department of Infrastructure, Sea Terminal, Douglas, IM1 2RF

The closing date for consideration of responses is 12th March 2021.