7 November 2024

E-bike Regulations Review

Thank you for the opportunity to comment on the government's review of e-bike regulations.

Bicycle Network is pleased to see the government is considering ways it can help more people ride every day, which is our mission. Riding a bicycle, including pedal-assist bikes, helps people achieve the minimum physical activity they need to reduce the risk of developing diabetes, heart disease and some cancers.

E-bikes have the potential to get more people riding because of the power assistance while pedalling. While e-bike riders don't exert themselves to the same levels as bicycle riders, they still achieve moderate exercise and tend to ride more often than if they were on bicycles.

These health benefits are mixed with other benefits when an e-bike is chosen over a car, such as reducing climate emissions, air pollution and cost of transport.

Bicycle Network does not support the use of throttle-assist e-bikes for general use and so our comments are concerned with pedal-assist e-bikes only. We recognise the benefit of limited throttle-assist for people with disabilities who find it hard to pedal with enough force from a standing start but believe those e-bikes should be treated separately from the general regulations, using the existing provisions for medical exemptions for vehicle modification.

Question 1: What are the three most important factors that should be considered when making changes to e-bike regulations?

Safety of riders and people around them: Increasing the speed of e-bikes may increase the severity of collisions, even though what is being proposed is only a 7km/h difference on current speed assistance levels and still within the speed range achieved on bicycles. Sometimes this will be perception as much as actual risk, especially for people walking on paths shared with bicycles and e-bikes, however, e-bikes are heavier than bicycles and so an increased mass moving at an increased speed poses higher risk. By applying the formula Ek = (mv2)/2 to this higher speed the increase in collision energy is substantial.

Ability to increase exercise levels: We have long talked about the health crisis in Tasmania, with rising levels of preventable illness from diabetes, heart disease and some cancers. Helping more people to exercise every day will go a long way to reducing the risk of some of these diseases. Tasmanians walk when they can but many people who would like to ride are concerned because of the lack of safe infrastructure. For older people, people with some disabilities, and people who live more than a couple of kilometres from their destinations, e-bikes allow them to choose active transport and recreation and reap the exercise benefits.

Tasmania's topography: While Australia strives for uniform laws and regulations, Tasmania is quite different to other states because of our hilly terrain and dispersed settlement patterns. E-bikes allow people to overcome the barriers of steepness and distance but one of the problems that has emerged is the ability of e-bikes to adequately handle hills, especially when carrying loads like small

children, groceries or work equipment. There is a case to be put that Tasmania could step outside national regulatory approaches because of our topography and dispersed settlement.

Question 2: Do you support a change to increase the legal speed of power assistance to 32kph?

We don't support an increase to the legal power assistance speed at this stage. Tasmania is lacking in safe places for people to ride separated from vehicle traffic and pedestrians. Until this infrastructure deficit is addressed, people will need to keep accessing shared paths and footpaths and an increased speed with a heavier frame than a bicycle is a potential risk for other path users.

While Austroads recommends paths be designed to allow for cycling speed of at least 30km/h, many shared paths in Tasmania are under the 3m minimum width recommended by Austroads.

The number of people who are confident riding on roads may increase with increased speed assistance but at this stage those numbers are a small proportion of the population, with more people feeling more comfortable riding separated from traffic.

Many e-bike riders are returning to riding after years of not riding. While riding an e-bike is the same as a bicycle, acceleration, speed and weight are different. It may take a while for riders to get used to an e-bike and doing so at a lower speed assistance level of 25km/h will be easier than at 32km/h.

It would have been useful to see research from countries that allow higher speed assistance, such as New Zealand and Canada, which shows there is no increased safety risk to riders or other users, but without that it's difficult to approve a higher assistance level.

It is also worth considering that the e-bike pedelec standard as first developed – and later adopted in Australia – was based on the concept of a shared speed envelope of 25km/h, which permitted the mixing on paths of cyclists, runners, walkers and electric-assisted bicycles in a safe speed environment. This approach conforms with the Safe Systems vehicle heterogeneity principle followed by all Australian states, which would discourage admitting higher speed and weight e-bikes into this environment.

Question 3: What factors should be considered if we implement Option 1 (allow maximum speed assistance to be increased)?

For people riding on roads on painted lanes or in traffic, a higher speed assistance could be implemented without any other measures.

A higher speed assistance will mostly affect other users on shared paths and footpaths and so consideration needs to be given to mitigating actual and perceived risk in that environment.

Advisory signs for riders reminding them to slow when passing other users could be installed more widely. At potential conflict points on paths, such as road crossings or narrowing of width, other measures to slow a rider down such as advisory signs painted on the path and raised or different surfaces introduced.

Education campaigns about safe use of paths could be implemented by state and local governments, reinforcing the need for all users to stay left, to slow down when passing other users, maintain a steady course, keep dogs on short leashes and children under supervision.

Rider education programs, such as Bicycle Network's Back on Your Bike program, would also be useful as this encourages and supports older riders getting on e-bikes after years of not riding. It prevents crashes caused by misjudgment of the speed or weight of the bike, especially when taking corners or trying to stop on an incline. Without rider education programs, increasing the speed assistance could put unskilled or "rusty" riders at risk.

Question 4: Do you support a change to increase the maximum power assistance from 250 watts?

Yes, it's obvious from the consultation findings that the 250 watt motor for e-bikes is not enough for some riders who are navigating hills and carrying loads such as children, groceries, and work equipment.

Increasing the power fulfils the objective of providing more low-emission transport options in the state as cargo e-bikes become more appealing as a car replacement if the level of exertion can be lowered. More powerful bikes also create opportunities for more business and freight movement using cargo e-bikes and e-trikes.

It should be an individual choice whether riders want a more powerful motor that gets them up hills but drains the battery, or whether they want a balance between power and battery range.

Because there is no evidence to support a move away from the pedelec standard, we believe an increase in power should be a trial rather than immediate change to the regulations. Such a trial should be for a minimum of 24 months to allow retailers to bring in higher power models and for enough of those to be sold for evidence to be gathered. There is also the option for bike mechanics to modify existing e-bikes to increase the wattage if the motor is larger than 250 watts.

We'd prefer the trial to cap power at 350 watts. This would be an incremental change to the pedelec standard that can be measured to determine if it improves the performance of e-bikes without a detrimental impact on the safety of riders or other path users.

Question 5: Which factors should be considered if we implement Option 2?

The danger with this option is that heavier and more powerful bikes will be more dangerous in a crash if the speed limit is tampered with. This means police will need to pay more attention to e-bikes that are illegal. A problem that has already arisen in Tasmania is converted e-bikes that are throttle controlled, have motors more powerful than 250 watts, are not speed limited and are being ridden on roads and paths. These illegal e-bikes are obvious and more a matter for law enforcement than regulation as they have already occurred in a conservative regulatory environment.

An education campaign in partnership with retailers may be appropriate to help people choose a power suited to their circumstances. While some people living on steep hills and/or carrying heavy loads will prefer a high-powered motor, other riders may prioritise battery range and so stick with the lower 250 watt models.

Question 6: Do you support the introduction of a new category for "speed e-bike" in Tasmania?

We do not support a speed e-bike category. Like the question about moving to 32km/h assistance level, Tasmania is not currently equipped with suitable infrastructure to accommodate fast e-bikes. Countries like the Netherlands that successfully introduced this class have a more sophisticated

cycling culture and infrastructure provision, with many more dedicated cycleways not shared with pedestrians that can accommodate these bikes.

When we are encouraging more street speed limits to drop to 30km/h to protect people walking, riding and wheeling, it doesn't make road safety sense to encourage vulnerable e-bike riders to mix with traffic at 45km/h. The risk of serious injury and death would be increased if a car moving at 50km/h hits a person on an e-bike riding at 45km/h.

Even if speed e-bikes are banned from shared spaces and bike paths, it would be very difficult to enforce as they look like other e-bikes. Speeding bikes in such spaces are likely to engender resentment towards all bicycle and e-bike riders, which is not the way to build a healthy cycling culture. And higher speeds could result in more severe crashes for riders and other road/path users.

Question 7: Which factors should be considered if we implement Option 3?

Enforcement would be a key factor to ensure such bikes are used where intended and as the paper points out, enforcing speed limits may be more successful than enforcing speed limiters.

A new registration class could be implemented for speed pedelecs, but that would be complicated by licensing being set up for higher-speed mopeds rather than lower-speed bicycles. It also brings in the perception that all e-bikes should be registered, which would severely dampen uptake and so reduce all their potential benefits in getting people active, and cutting emissions, pollution and congestion.