



Submission to the National Transport Commission
Barriers to the safe use of personal mobility devices
Consultation Regulation Impact Statement

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Alice Dixon-Wilmshurst
Policy Officer

Physical Disability Council of NSW
3/184 Glebe Point Road, Glebe NSW 2037

02 9552 1606
www.pdcnsw.org.au
alice.wilmshurst@pdcnsw.org.au

Who is the Physical Disability Council of NSW?

The Physical Disability Council of NSW (PDCN) is the peak body representing people with physical disabilities across New South Wales. This includes people with a range of physical disability issues, from young children and their representatives to aged people, who are from a wide range of socio-economic circumstances and live in metropolitan, rural and regional areas of NSW.

Our core function is to influence and advocate for the achievement of systemic change to ensure the rights of all people with a physical disability are improved and upheld.

The objectives of PDCN are:

- To educate, inform and assist people with physical disabilities in NSW about the range of services, structure and programs available that enable their full participation, equality of opportunity and equality of citizenship.
- To develop the capacity of people with physical disability in NSW to identify their own goals, and the confidence to develop a pathway to achieving their goals (i.e.: self-advocate).
- To educate and inform stakeholders (i.e.: about the needs of people with a physical disability) so they are able to achieve and maintain full participation, equality of opportunity and equality of citizenship.

Introduction

The Physical Disability Council of NSW (PDCN) appreciates the opportunity to provide feedback the National Transport Commission (NTC) on barriers to the safe use of personal mobility devices (PMDs). PDCN will not answer all questions in the Consultation Regulation Impact Statement, rather we will provide responses to questions outlined on page 3 of the discussion paper.

PDCN supports the development of a nationally agreed framework for the safe interaction of PMDs with pedestrians, including users of motorised mobility devices (MMDs) and other road users on pedestrian infrastructure and roads. We believe the creation of national guidelines and the removal of regulatory barriers are constructive changes that can be made to increase the safety of both people with disability using these devices and the community.

PDCN also supports increasing clarity around PMD classifications in the Australian Road Rules. However, PDCN believes that a detailed cost/benefit analysis should be undertaken as part of this project to ensure that everybody benefits. There should be no change to the road rules that is going to put the safety of PMD users at risk, or negatively affect pedestrians and other road users.

Is the definition of the problem accurate?

Australia, and the world, has seen an increase in the use of Personal Mobility Devices (PMDs) as a sustainable, alternative form of travel. PMDs include electric scooters, hoverboards, mopeds, electric skateboards, Segways and power assist devices for manual wheelchairs. As the discussion paper highlights, however, regulations have not kept up with the increase in use and the improvements in technology. There are many different devices on the market now, and the current Australian Road Rules (ARRs) need to be amended to reflect these changes.

There is also a lack of national consistency in the regulations, which can lead to confusion and safety issues for PDM users and other road users. In addition, PMD users may be unaware that they are using an illegal device. PDCN agrees with the discussion paper that the problem is there is no nationally consistent framework to ensure safety, and as such PMD users are traveling on footpaths and roads without consideration for other pedestrians, or their own safety. A recent survey of mobility device users by PDCN found that 94% of respondents believe there should be a nationally consistent approach for regulating their use. Participant statements included:

"Everything needs to be nationalised in this country. The same road rules for every state, the same parking laws and mobility laws." – survey respondent no. 37

"This gives continuity across the board." – survey respondent no. 46

"Makes sense if I travel to another state I would want to know my device is legal and having standardization makes it easier to travel and not having to rent another etc." - survey respondent no. 177

There is also evidence that suggests some people with disability use PMDs, particularly Segways and manual wheelchair power assist devices, as an alternative form of transport,^{1,2}. This is an area that would benefit from further research into the numbers of people with disability using these devices, and this should be taken into consideration, as any regulations shouldn't restrict a person's right to mobility. Additionally, this concern was reflected in comments from the survey as, while there was majority support for the regulation of these devices, respondents did not want to see any regulations that might discriminate against people with disability who use these devices, or were too strict and may deter people from using them. Participant statements included:

"So long as it's one that is informed by research and disabled human rights, not by a media ableist moral outrage." - survey respondent no. 30

"Disabled persons should not be expected to learn completely different rules. This is a barrier to travel." – survey respondent no. 40

"The regulations should not restrict any options from a disabled person that they can physically handle. I worry that well meaning people, who have no clue what it's like to have people make arbitrary decisions on your ability to live your life, would always err on the side of caution which may see my independence restricted." – survey respondent no. 64

"Yes but only if it is sensible...tightening restrictions is not needed. The vast majority of users are not 'hoons' and if they are like me would much prefer not having to have the need to use them." – survey respondent no. 124

¹ Metz, R., 'Disabled Embrace Segway', *New York Times*, 2004, access on 4 December 2019

<https://www.nytimes.com/2004/10/14/technology/circuits/disabled-embrace-segway.html>

² Sawatzky, B., Denison, I. and Tawashy, A., 'The Segway for people with disabilities: meeting clients' mobility goals', *American Journal of Physical Medicine and Rehabilitation*, 2008, v.88, iss. 6

PDCN recognises these devices provide an alternative form of transport and offer many benefits, however in the interests of the people we represent, we would like to see nationally consistent regulations regarding where they can be used and at what speed. PDCN would like to see a solution that considers safety without compromising on people's ability to use these devices (as some of our cohort may use these as an alternative mode of transport).

PDCN would also suggest that there needs to be ongoing monitoring of safety issues and further research conducted into who uses these devices and for what purpose. The limited research that has been conducted suggests that PMDs are primarily used by males aged between 30 – 40 years.^{3,4} This data, however, comes from studies into related injuries, so further study would be useful in identifying who actually uses these devices, separate from whether or not they have had an accident. For the respondents to the PDCN survey, the majority of whom are people with disability (92%) who use motorised mobility devices (95%), safety is a concern when it comes to the use of PMDs. Participant statements included:

"They (PMD users) tend to be less aware of motorised mobility users and don't allow sufficient space on the footpath." – survey respondent no. 14

"The scooters that are docked on footpaths made it dangerous, wheelchair users already have enough obstacles." – survey respondent no. 30

"Scooters with idiots at breakneck speeds swerving in and out of people is dangerous. This is a trend in Australia, UK, Paris, Amsterdam, St Petersburg, Oslo, and all the Baltic Capitals!!" – survey respondent no. 70

In conclusion, PDCN suggest that further research is required. There is limited research into who uses PMDs and why, the incidence of PMD related injuries or death, and the impact these devices have on other pedestrians and road users, and whether the benefits do outweigh the costs. For the foreseeable future, a nationally consistent framework is recommended, however we would suggest that this in an ongoing issue that needs to be closely monitored, to ensure the needs of all road users are considered.

What are the likely costs and operational impacts of the problem for government bodies, businesses/operators and other organisations?

The burden of regulation for an issue such as this is two sided – on one hand, you face alienating people, by overregulating, but on the other, you risk injury and possible death by doing nothing. Neither is particularly appealing to government, however in this instance the cost of doing nothing would seemingly outweigh the benefits. If PMDs continue to be used without any regulation, it is likely we would see an increase in injuries and possible death, placing a significant financial burden on the government in terms of healthcare and administration costs. This would use public resources, such as emergency departments and police, which could be better utilised elsewhere.

³ Tan et al., 'The price of personal mobility: burden of injury and mortality from personal mobility devices in Singapore – a nationwide cohort study', *BMC Public Health*, 2019, vol. 19

⁴ Trivedi, T.K., Liu, C., Antonio, A.L.M., Wheaton, N., Kreger, V., Yap, A., Schriger, D. and Elmore, J.G., 'Injuries associated with standing electric scooter use', *JAMA Network open*, 2019, vol. 2

We can see from recent incidents in Europe and the UK that the rise in e-scooter use has seen a rise in related injuries and deaths, with 11 e-scooter related deaths since January 2018.⁵ As a result, countries such as France have brought in new laws and regulations around the use of e-scooters.⁶ It is currently legal to ride e-scooters in France, Germany, Belgium, Austria, Sweden and Switzerland, but many of these countries are reviewing the regulations as a result of the rise in incidents. France, for example, has realised that people's safety is at risk and regulations are essential to protect people. Singapore has also noticed an increase in the use of e-scooters and other PMDs,⁷ and introduced the Active Mobility Act (AMA) 2017 and Active Mobility Regulations 2018, to regulate the use of these devices on Singapore's footpaths and roads.⁸

There is also the cost of negotiating with lobby groups campaigning to make these devices legal (as can be seen in the UK⁹), and the backlash from relevant industry groups who are trying to grow a business and provide increased choice to consumers. As the popularity of these devices grow, and people start to fully understand their benefits, the government may come under increased pressure from consumers and industry groups to ensure these devices are available without strict regulation.

In addition, there needs to be some consideration of the impact on infrastructure, and the cost of this to the government. While it is still relatively unknown what impact these devices will have on public infrastructure, any upgrades or improvements that may be needed will come at a cost to the government, and in turn the public in the form of an increase in taxes.

What are the likely costs and operational impacts of the problem on the broader community?

The impacts on the community are numerous. Firstly, there is the risk of injury, and the related financial cost, of allowing people to use these devices unregulated. Of particular concern is speed, and the impact it will have if speed restrictions aren't imposed. PDCN's recent survey of motorised mobility devices users found that 66% of respondents agree that PMD users should be subject to speed and weight restrictions, with the comments indicating that of most concern to people is the speed at which PMDs travel. Participant statements included:

"Speed yes, weight is hard to assess." – survey respondent no. 46

"Speed restrictions. Yes. Weight restrictions. No." – survey respondent no. 58

"Agree re speed, disagree re weight." – survey respondent no.71

⁵ BBC News, *Electric scooters: Europe battles with regulations as vehicles take off*, accessed on 4 December 2019 <https://www.bbc.com/news/world-europe-49248614>

⁶ BBC News, *E scooters: France introduces new laws to "restore tranquility"*, 2019, accessed 4 December 2019 <https://www.bbc.com/news/world-europe-50189279>

⁷ Tan et al., op. cit

⁸ Singapore Government, *Active Mobility Act 2017*, accessed 13 December 2019 <https://sso.agc.gov.sg/SL/AMA2017-S251-2018?DocDate=20190805>

⁹ Shead, S., 'How electric scooter startups are battling the UK Government to change a law dating back to 1835' *Forbes*, accessed 6 December 2019

<https://www.forbes.com/sites/samshead/2019/08/28/how-electric-scooter-startups-are-battling-the-uk-government-to-change-a-law-dating-back-to-1835/#1bf8aca12bd1>

“Not so much weight, but speed in congested areas.” – survey respondent no. 165

“Speed restrictions only. I have personally witnessed some use of PMDs on public pathways travelling in excess of 25kmph. I have seen them overtaking cyclists. This is very dangerous especially when these paths are part of a dog off leash area.” – survey respondent no. 172

Users of these devices are not currently required to have insurance (and PDCN is not suggesting they should), placing a financial burden on both parties in the case of an accident. Regulations that restrict the speed these devices can travel at would reduce the likelihood of incidents, and the reduce the cost related costs for all involved.

Secondly, there are the health impacts on the community. These devices are growing in popularity, but for some this means they are no longer comfortable walking on footpaths, which impacts on their physical and mental health. The discussion paper only gives limited consideration to the impact of PMDs on other pedestrians. PDCN, along with other representative organisations including Victoria Walks, is concerned about the impact these devices will have on other pedestrians, including people with mobility impairments, people with vision or hearing impairments, young people with disability, older people and parents with prams.¹⁰

Furthermore, the positive effects of physical activity are well documented,^{11, 12, 13} and a reduction in physical activity could have flow on effects including increase in obesity, cardiovascular disease, mental health issues, and a myriad of other problems. This would place an added financial burden on the government. However, this would require further research and monitoring to fully understand the possible long-term health impacts.

Is government action needed?

As can be seen from incidences in France and the UK, government action, in the form of a consistent national framework, is needed to ensure the safety of all road users is protected now, and into the future. If these devices were to remain unregulated, the safety risks to users and other pedestrians would increase, the market would continue to grow and the costs for government would become greater.

PDCN supports the proposed regulatory framework and adoption of **Option 3 – Speed Approach 1**, outlined in the RIS. This is supported by survey respondents, 66% of which agree PMDs should be subject to speed and weight restrictions, and 80% agree that PMDs should be permitted to travel on shared pedestrian infrastructure.

PDCN also believes that whatever speed limits are decided for motorised mobility devices (MMDs), these should also be applied to PMDs, particularly in regard to speed in high pedestrian use areas. We also suggest, however, that further research needs to be undertaken to assess the long term impact of these devices. We also believe that any new regulations should be implemented in conjunction with a

¹⁰ Victoria Walks 2019, *Submission to National Transport Commission Issues Paper: Barriers to the safe use of innovative vehicles and mobility devices*, accessed 4 December 2019

¹¹ Better Health Channel 2019, accessed 10 December 2019

<https://www.betterhealth.vic.gov.au/health/healthyliving/walking-for-good-health>

¹² Heart Foundation 2019, accessed 10 December 2019, <https://walking.heartfoundation.org.au/benefits-of-walking/>

¹³ Harvard Health Publishing 2018, accessed 10 December 2019 <https://www.health.harvard.edu/staying-healthy/walking-your-steps-to-health>

comprehensive, nationwide education and awareness raising campaign to ensure all PMD users are aware of their rights and responsibilities.

Are there other related issues you consider relevant?

PDCN would like to see the new power assist technologies for manual wheelchairs to be considered as part of these regulations, and subject to the same regulatory and speed framework that is eventually adopted.

The devices PDCN is referring to are electric powered handbikes. These are powered attachments to a manual wheelchair that enable the wheelchair to go much faster than other devices and fundamentally change the behaviour of the chair. Examples of this type of device include Batec Handbike, Klaxon Klick, and Quikie Attitude. PDCN suggests that these devices be considered for regulation because of the speed at which they are capable of travelling (up to 25km/h), making them akin to a power assisted bicycle in terms of speed.

However, it is important that any regulations make a distinction between electric powered handbikes, as described above, and low speed power assist devices for manual wheelchairs. These include the SmartDrive, Smoov, Alber Emotion Wheels and Quikie, amongst many others. They are small, lightweight devices that attach to a manual wheelchair and are designed to assist users by taking the strain off their upper body, as they often experience injury and stress in their shoulders, back and arms due to repetitive action common in manual wheelchair use.

PDCN does not believe low speed power assist devices should be considered in ANY regulations pertaining to MMDs or PMDs, as they only marginally alter the weight of the wheelchair and they don't facilitate speed any higher than manual wheelchair users can push (6km/h).

Recommendations

Recommendation 1: That the proposed regulatory framework for personal mobility devices and Option 3 -Speed Approach 1 be adopted into the Australian Road Rules.

Recommendation 2: That further research be undertaken into who uses these devices and why, including the rates of use by people with disability (as an alternative to wheelchair or mobility scooter).

Recommendation 3: That users of PMDs be required to wear a helmet, and the device required to have a bell, braking system and lights.

Recommendation 4: That NTC establish a comprehensive, nationwide education and awareness raising campaign to ensure all PMD users are aware of their rights and responsibilities.

Recommendation 5: That PMDs be subject to the same nationally consistent regulations (particularly with regard to speeds) for road and footpath use that is decided upon for MMDs.

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