

Speaking Note for JOC on Transport, Tourism and Sport

Wednesday 27 November 2019

A Chathaoirleach, Deputies, Senators

Thank you for your invitation to attend today's meeting of the Joint Oireachtas Committee on Transport, Tourism and Sport. I am accompanied by Ms Sharon Heffernan (Research) and Mr Aidan McGinty (Vehicle Standards) from the Road Safety Authority (RSA).

Committee members will be aware that the Minister for Transport, Tourism and Sport Shane Ross requested the RSA to research how eScooters and other such vehicles were regulated in other countries, particularly other Member States. A report was submitted by the RSA to the Department for the Ministers consideration.

The following is a summary of the report including the recommendations made by the RSA at the time to Minister Ross. I have also included some information on recent events / publications for the Committees information.

Electric personal mobility devices – a review

In January 2019, the RSA commissioned Transport Research Laboratory (TRL) to review current practice and the safety implications of powered transporters. Powered transporters were defined as 'a variety of novel personal transport devices which are mechanically propelled (i.e. propelled by a motor) as well as or instead of being manually propelled'. These include devices such as electric scooters (e-scooters), Segways, hoverboards and powered unicycles.

The aim of this work was to inform considerations for future policy and regulatory framework updates by the RSA regarding the operation of powered transporters in Ireland. To achieve this, TRL adopted a two-pronged approach, first completing a literature review, and then a series of international case studies.

Literature review

Following a stringent search and selection process, 45 pieces of literature relating to powered transporters were reviewed. Although there was a noted lack of robust evidence available for review, the findings of the literature review indicated that policy and legislation be developed:

- To encourage the use of personal protective equipment when using powered transporters (e.g. helmets). This could be completed via a targeted public awareness campaign, and by placing responsibility with powered transporter providers to promote safety.
- To require training be undertaken by operators of powered transporters prior to their use in public.
- To specify safety standards for powered transporters (e.g. weight or size restrictions, minimum lighting/conspicuity standards etc.), which could possibly be enforced through a type-approval or certification process.

- To specify user requirements (e.g. age limits, licence requirements), and how and where the different devices can be used (e.g. footways vs. cycle paths vs. roads, and the rules for each of these).

It is important to note, however, that there is currently little evidence to base these proposed standards and requirements on. Although direct evidence is lacking, it was clear from the literature reviewed that these devices have potential benefits for active transport, reducing traffic congestion and improving air quality. Anecdotal evidence suggests that e-scooter related injuries increase with greater e-scooter use however.

It was also noted that regardless of legislation/enforcement in relation to powered transporters, in most countries there has been increased uptake by users, such that an outright ban would not be practical to enforce.

Case studies

Eleven countries were investigated for the case study portion of this report, including: Ireland, the UK, the US, Germany, France, Switzerland, Spain, Belgium, the Netherlands, the US, New Zealand, Australia and Israel. Summaries were produced for each country in terms of any current powered transporter-related legislation, safety policy/recommendations, restrictions on usage (e.g. minimum age requirements, restrictions to certain roads) and next steps.

The findings of these case studies highlighted the difficulties being faced by regulators, policy makers and the general public in relation to these devices. In particular:

- There is a lack of consistency in terms of how different types of powered transporters are being defined and named (e.g. the same make and model of a device can have a different name in a different country).
- This kind of technology is developing at a rapid pace, such that many countries have had to take a reactive approach when developing and revising policy and legislation, as usage and the legislative context changes.

RSA recommendations

In light of the findings of the report, recommendations were made to the Department of Transport, Tourism and Sport, to guide the Minister if he was of a mind to legislate for the introduction of such devices. The overall recommendation is that a restrictive approach be taken in terms of regulating for these devices in Ireland in the interest of road safety. Specifically, this means applying restrictions to the devices themselves, the operators who provide these, the roads on which they can be used, and the age of user. More specifically, consideration be given to the following:

- Electric personal mobility devices, including e-scooters, should be defined in legislation, and any such definition should be sufficiently broad to future-proof the legislation to account for the pace of development of this technology. Consideration could be given to revising the classification of a mechanically propelled vehicle (MPV), or indeed the creation of a new category of electric MPV (eMPV)
- Devices permitted on Irish roads should adhere to minimum safety standards e.g. maximum speed of 20km/h. In addition, design features for devices permitted on Irish roads should prioritise safety

features, such as brakes, lighting and audible warning mechanisms. A review of the draft EU standard, CEN, could be considered in this context.

- Some jurisdictions allow such devices on footpaths provided they do not exceed a speed of 6km/h. From a practical perspective this would be very difficult to enforce, and therefore because of the risk which the use of these devices would pose to pedestrians if travelling at higher speeds, the recommendation is that they should not be used on footpaths.
- There is merit, also on safety grounds, to limit their use to roads with a speed limit of 50km/h or less. Ideally, their use should be curtailed to 30km/h zones. They could be used in cycle lanes, where available.
- A system should be put in place whereby device operators must seek a permit for the leasing of these devices, either from a national authority, or from a local authority. They must adhere to specific guidelines (e.g. safety features of devices, parking of devices while not in use, proposals to avoid congestion) for the granting of a permit. Each relevant Local Authority should oversee compliance with these guidelines, and mandate training as part of the permit approval process. They could also limit the number of permits to ensure an over proliferation of these devices does not occur.
- In some countries an age restriction applies to the user, depending on the power of the device. This is a pragmatic approach that should be considered e.g. minimum age of 16 for use of a device with a maximum speed of 20km/h. This does not include making PPE mandatory, however users should be encouraged to wear helmets and high visibility clothing, as per our recommendation for cyclists.
- Rather than regulating for the use of these devices at national level, it may be appropriate for Local Authorities to pass bye-laws to regulate for these, depending on the suitability of local infrastructure. Local Authorities will need to give consideration to the future-proofing of infrastructure to account for the growth in popularity of these devices. Overall, from a safety perspective, it is critical that Ireland's infrastructure is fit for purpose to accommodate the safe use of these devices, and that dedicated parking spaces are provided, or adequate collection measures are implemented, to avoid a proliferation of hazards on pavements or roads / cycle lanes. The Transport Strategy for the Greater Dublin Area 2016 - 2035 calls out the inadequacy of the current infrastructure (Section 3.2), and consideration must be given by transport planners to ensure the current infrastructure is enhanced for all vulnerable road users, and capable of accommodating electronic personal mobility devices.

Finally, legislation will also need to be considered to give An Garda Síochána the necessary powers to enforce the safe and legal use of electric personal mobility devices.

Personal transporters and casualties

It is widely acknowledged, both nationally and internationally, that there is a lack of data in relation to collisions and/or injuries resulting from the use of powered transporters. This is typically due to difficulties in classifying the various powered transporter devices when they are captured in national collision data. Definitive statistical information in relation to safety, and also mobility patterns (e.g. modal share, and the proportion of which modes are being displaced by powered transporter trips), are needed to further inform policy and legislation regarding powered transporter use. Although a series of studies referenced in the

TRL report on electric personal mobility devices provide snapshots of injury rates from powered transporters (e.g. [Kim et al. 2018](#) reported on 65 patients submitted to hospital in Korea between January 2016 to December 2017, while [Do et al. 2016](#) reported on 35 cases in the Canadian Hospitals Injury Reporting and Prevention Programme between 2015-2016), national-level data is needed.

Other recent events/publications

Micro-mobility: the next big thing?

A recent European Commission conference on micro-mobility (October 2019) highlighted the need for renewed planning to ensure road safety as the popularity of powered transporters continues to grow. Amongst other topics, conference participants discussed the need to integrate micro-mobility solutions into public transport, such that they can be complementary to this, rather than replacing it. Tailored infrastructure to accommodate this will likely be needed, which may be city or jurisdiction specific.

The need for a minimum technical standard for powered transporters was discussed, as was the recommendation that different modes of transport be kept separate to minimise potentially dangerous interactions with other road users. It was suggested that overregulation be avoided, but that a common regulatory framework be drafted which address safety aspects such as speed limitations, guidance for parking, minimum age requirements, technical requirements etc.

PIN flash report 37 – Safer roads, safer cities: How to improve urban road safety in the EU

A recent report by the ETSC (June 2019) examines how best to reduce road traffic collisions that occur on urban roads, the majority of which involve vulnerable road users. It focuses in part on the safety challenges facing cities and towns across Europe in light of the rapidly changing means that people are using to travel in urban environments. The need for tailored infrastructure, education/awareness campaigns, and national legislation/city-level regulations to accommodate growing use of shared/personal powered transporters is highlighted, as is the unfortunate lack of data to further inform policy and legislation regarding their usage. Given the often restricted space in urban areas for travel, this must be used efficiently to ensure road users are not put at increased risk.

Key recommendations regarding the use of powered transporters (particularly e-scooters) included that traffic regulations on space sharing be defined (e.g. whether e-scooters should travel on the pavement, cycle paths, or on the roads with motorised traffic), that e-scooter collision data is collected, and that further research on the road safety implications of powered transporters be conducted.

International Transport Forum (ITF) report – Regulating app-based mobility services: Summary and conclusions

A recent report by the ITF (August 2019) considers how new, app-based mobility services (including carsharing, bikesharing and e-scooter sharing services) can be effectively regulated to ensure innovative forms of urban mobility deliver their full benefits for society, while ensuring the safety of road users. Based on an ITF Roundtable, this report discusses the various benefits (e.g. cheaper, more comfortable and timely transport options) and risks (e.g. safety and security concerns, cluttering public spaces with bicycles/e-scooters) associated with app-based mobility services. Amongst a series of recommendations, the authors propose that the broader urban policy environment is taken into account when designing regulations for app-based mobility services. Mitigating greenhouse gas emissions, reducing congestion and

air pollution, and enhancing mobility particularly through the promotion of active travel are of substantial societal benefit, and regulatory design for mobility services should account for such factors. In line with this, it is recommended that suitable infrastructure is invested in, to ensure these benefits are maximised, while reducing road user risk.

References:

Transport Research Laboratory (2019), *Review of current practice and safety implications of electric personal mobility devices*, June

European Commission (2019), *Micro-mobility: the next big thing? – Participants Declaration*, 14 October 2019, Ljubljana, Slovenia,

European Transport Safety Council (2019), *Safer roads, safer cities: how to improve urban road safety*, 37 PIN Flash report, June.

ITF (2019), *Regulating App-based Mobility Services: Summary and Conclusions*, ITF Roundtable Reports, No. 175, OECD Publishing, Paris.

Moyagh Murdock
CEO
Road Safety Authority