Title: Cork City Development Plan Submission by Wind Mobility
Date: 16th September 2021

Introduction

The following submission for the **Cork City Development Plan** sets recommendations for infrastructure and amenity planning for the provision of e-scooters and e-mobility in Cork City.

Considering the forthcoming Road Traffic (Amendment) (Electric Scooter Trials) Bill and the direction of travel of mobility practices across Europe, it would be prudent of Cork City Council to consider infrastructure and amenity requirements now for the roll-out and increased usage of e-scooters across the county.

Based on WIND Mobility's experience dealing with City and County Councils across Europe and the UK, we a have drafted a brief submission to support you with your forthcoming plan.

Why should e-scooters/e-mobility be considered within the plan

New types of travel such as zero emission mobility give the opportunity to transform our towns and cities, making them greener and quieter. WIND believes that robust planning to invest in e-scooters as an alternative to motor vehicles would have a net societal benefit for the sustainability of Cork City

A number of domestic and international bodies support our view.

The Road Safety Authority commissioned a report at the request of former Minister for Transport Shane Ross on how e-scooters could be regulated and safely used on Irish roads. The findings suggest that powered transporters have great potential as an innovative transport solution, with early evidence suggesting they are perceived positively.

The Royal Society for the Prevention of Accidents published a Road Safety Factsheet highlighting some of the benefits of e-scooter use. The Factsheet states that e-scooters have the potential to solve some of the biggest issues facing urban mobility such as reducing carbon emissions. Traditional motor vehicles are inherently inefficient due to the fact they use lots of energy in order to pull their own weight – one kilowatt hour (kWh) of energy allows a petrol-powered car to travel less than a mile. When using an e-scooter, 1 kWh provides 80 miles of travel. Coupled with their reduced usage outputs due to an electric motor, they are much more energy efficient and environmentally friendly to use.

Furthermore, e-scooters are energy efficient to manufacture due to their low weight. When the inefficiencies of motor vehicles are paired with congestion, a problem that is rife in cities, there is a huge environmental impact.

The Royal College of Physicians estimates that deaths due to exposure to air pollution result in a social cost of £20 billion per year, and 80% of the concentration of nitrogen oxides (significant environmental pollutants) at the roadside are caused by road transport.

Key considerations for XX County Development Plans

General

- Cork City Council must prepare now for significant increase in e-scooter usage ahead of the passing of new legation.

Road usage

- The Council should consider micro-mobility infrastructure development to allow more safe room for road users such as cyclists or e-scooters to travel safely, including extended segregated cycling lanes and greenways.
- The Council should consider introducing designated go-slow areas in congested urban areas to minimise the risk of road accidents with pedestrians and e-scooter users.

Parking

- The Council should consider setting the location of e-scooter parking bays by pre-existing city bike locations, where possible. If there are no existing stations, plans must be put in place for the introduction of new bike and e-scooter parking bays, to allow for ease of use and the security of the vehicles.
- The Council may consider a policy which includes the removal of some car parking spaces and replacing them with e-scooter parking.
- Parking placement regulations should be defined to avoid e-scooter parking on congested pedestrian pathways.

Technology

- The Council should consider developing physical and virtual maps to clearly indicate where e-scooters are allowed to travel and at what speed.
- Data sharing between road use monitoring organisations and e-scooter companies should be encouraged for efficient e-scooter operation in urban areas.

Case Studies to consider

Nottingham

WIND Mobility currently provide e-scooters to Nottingham City Council in the United Kingdom. As part of the rollout process in Nottingham, cross-stakeholder engagement was required between the Nottinghamshire Police, Trent University, University of Nottingham, NET Trams, and the local blind community to ensure a smooth adaptation of this new mode of transportation.

The initial piece of work for consideration was the routes and areas where e-scooter users could travel. Nottingham Council decided to provide funding for a 12-month trial of an e-scooter scheme, stating that they were allowed to be used in the same spaces as bicycles, meaning they can be ridden on public roads and cycle paths but not pedestrian pavements (in accordance with the regulatory changes brought forward by the Department for Transport).

The e-scooters can be used by anyone over 16 who has at least a provisional UK driving license. Each e-scooter has 'geo-fencing' capability, meaning that if an e-scooter travels outside its permitted area, it slows and comes to a stop. This has permitted the Council to protect areas where they do not want e-scooters, such as market squares.

To ensure that the e-scooter users were complaint with road usage requirements in Nottingham, WIND provided guidelines for users including a map of the city explaining where the e-scooters are legally allowed to travel.

Nottingham County Council found that after 12 months of the trial, the e-scooters had been used more than 240,000 times and around 16,000 people were registered users, with a daily average of more than 1,500 riders.

Milan

WIND Mobility has worked for over a year and a half with the Milan Municipality and the Italian Government to define the regulatory framework for sharing e-scooters. Using advanced technology systems, they set up the operational areas, including Go-slow zones of 6km/h and digitally mapped over 350 strategic parking bays downtown, as well as further mapping areas where e-scooters are prohibited. Riders are permitted to use the e-scooters on roads, but not on pedestrian pavements, roads with tramlines, or through tunnels.

Two key considerations can be made from this case study.

Firstly, designated Go-slow areas should be established in congested urban areas to minimise the risk of road accidents with pedestrians. It is important to ensure robust safety features on e-scooters, such as inbuilt lights, helmets, and reflective devices, in order to reduce road accidents with pedestrians. With Go-slow speed regulations you can ensure greater e-scooter road safety. Improved GPS tracking technology also allows for enhanced monitoring of e-scooter road use.

Secondly, the allocation of parking spaces for e-scooters is worth noting. Milan Municipality wanted to make the entire downtown a 'no free-floating area' and install 350 mandatory parking bays. To do this, detailed mapping, and the roll out of the necessary GPS technology is required. An extensive communications campaign was also rolled out to ensure users were up to speed.

Tel Aviv

WIND Mobility has been operating in Tel Aviv for over two years, working closely with Tel Aviv Municipality to create the most convenient and safe last mile transport option for residents. Tel Aviv is the economic and cultural capital of Israel and home to a high number of big high-tech companies with 500k people living in the city. Tel Aviv is mostly known as a 24-hour city, while 30% of the city's citizens are between the age of 18-35.

E-scooters in Tel Aviv may only be parked at one of the 700+ designated parking bays in the city centre. Users are only allowed to ride e-scooters in bike lanes, not on roads or pedestrian pavements. Over 300 No-go areas and parking bays throughout the operational area were defined for the roll-out, preventing e-scooters from being parked close to hospitals, schools, universities, and some other institutions. Specific Ride-through areas were defined, and over 30 Go-slow zones were established in the most crowded areas.

The e-scooter schemes of Tel Aviv have also attracted media coverage, often praising the convenience and reduced environmental impact that it provides. There has been some critical media coverage of inconvenient scooter parking, which Tel Aviv addressed by requiring the providers to put dedicated parking racks in place and to share ride data with city officials. Furthermore, as of January 2021 helmets have been made mandatory for riders, and WIND has worked with the National Road Safety Authority to improve restrictions and safety.

Lack of proper infrastructure, such as public transportation and light train, high numbers of internal and external tourists, and stable and convenient seasonality, all brought people to prefer to use alternative transportation modes for daily commuting and moving through the city instead of the public services.

Traffic congestion was also a significant challenge for e-scooter users navigating the city safely. To reduce traffic congestion in the city a new micro-mobility infrastructure plan

has been developed that is adding 160km of road space for micro-mobility. The designation of further micro-mobility road space would reduce traffic congestion and road accidents and would also have an environmental advantage as overall road use of highly polluting vehicles would decrease. The monitoring of e-scooter usage through improved city traffic analytics software and data sharing has also contributed to improved management of fleet numbers and parking.

About Wind Mobility

WIND Mobility is a micro-mobility sharing company founded in 2017 to provide urban users with a sustainable first and last-mile micro-mobility solution. WIND offers convenient, affordable, and easy-to-use access to short distance transportation in urban areas. With its eco-conscious and sustainable product, WIND aims to make cities more liveable by reducing congestion, harmful emission, and noise levels. In October 2020 alone, over 135,000 users travelled a distance equivalent to 30 times around the world, saving an amount of CO2 equivalent to over 800 flights from Paris to New York.

WIND currently operates in 25 different cities across Europe, the Middle East, and Asia, and strives to be a reliable partner for cities, users, and the service providers it works with – which is why WIND has always adopted a conservative approach to expansion. WIND believes that getting things right in each market is more important than rapid growth and scale.

WIND's broad base of operations experiences in cities across the world has given them some key city infrastructure planning insights that WIND would like to share with you, using some case studies from our international operations.

The following is a list of cities we currently work alongside local authorities in to develop a sustainable and efficient e-mobility solution:

- Nottingham
- Derby
- Tel Aviv
- Milan
- Rome
- Turin
- Bari
- Modena
- Monza
- Reggio Emilia
- Le Barcarès
- Perpignan
- Bordeaux
- Palermo
- Parma
- Reykjavik
- Seoul
- Busan

Conclusion:

Thank you very much for taking the time to consider our submission. Should you require any clarification on the points raised or a further discussion, please do not hesitate to contact felix.eggert@wind.co.