Trials to legalise e-scooters in Ireland begin in Dublin

Pilot project across five DCU campuses aims to set the bar for e-scooter safety standards in Ireland and worldwide.

Ireland's first e-scooter trial kicked off at DCU yesterday involving the university's five campuses and representing the collaboration of e-scooter operator TIER, Irish tech firm Luna, SFI research centre Insight and Smart DCU, a district of Smart Dublin.

The trial is happening in tandem with efforts to make scooters street legal across Ireland.

Commencing operations on DCU campuses, the trial aims to set the bar for e-scooter safety standards in Ireland and worldwide.

Smart city data

As part of the project, TIER and Luna are equipping a fleet of 30 scooters with advanced computer vision technology, allowing DCU-based Insight researchers to explore a rich new source of smart city data.

With the Luna technology, TIER e-scooters are capable of running pedestrian detection and lane segmentation algorithms, allowing the vehicles to understand how many people are in their path, as well as preventing vehicles from being used on footpaths.

The vision data generated by the fleet will be analysed by DCU-based Insight researchers, with a view to identifying smart city use cases and applications of value to local authorities, in line with the mission of Smart Dublin. The first such use case will be the development of an AI model that can alert cities in realtime to blocked footpaths - whether the blockage is the result of a tipped over scooter, a badly parked car, a fallen tree, or other impediment.

TIER's unique model allows users to swap depleted e-scooter batteries - in return for free travel - at charging stations hosted in local retail outlets. Pilot data from the Energy Network in Finland reveals the average convenience store enjoys an average of €18,000 additional income as a result of TIER users entering to switch batteries.

Leading the charge for legal e-scooters

Pictured (from left): DCU President Professor Daire Keogh; Minister of State at the Department of Transport Hildegarde Naughton, TD; and head of Central Public Policy at TIER Jinél Fourie. Image: Julien Behal

The pilot project, which launched yesterday (20 July) and will run until early 2022, will also explore other insights, particularly around user behaviours and attitudes, which can feed into any commercial shared e-scooter schemes that may be launched in Dublin and elsewhere across Ireland in the future.

“Ireland is truly leading the way in the space of the use of e-scooters and I very much look forward to seeing this pilot get moving across DCU campuses,” said Hildegarde Naughton, TD, Minister of State at the Department of Transport with special responsibility for International and Road Transport and Logistics.

“This is an interesting and exciting time in transport – the innovation and momentum is palpable here today. It is my job now and the job of Government to play our part and progress the necessary legislation required for the safe use of e-scooters in Ireland. I look forward to seeing this pilot progress across campus and I am particularly interested in learning of its outcomes and insights which I am certain will inform us in further progressing legislation in this space.”

In addition to being a world first academic-industry research project focused on computer vision in e-scooters, the pilot is also Ireland's first major structured e-scooter trial. The purpose of the research project is to simultaneously improve e-scooter safety and to explore the Smart City possibilities associated with computer vision equipped micromobility vehicles and the valuable data they can generate on behalf of all stakeholders.

“This is such an important research pilot project for TIER in Ireland and we are excited to have launched this trial across the five campuses of Dublin City University,” said Fred Jones, TIER’s regional general manager for Northern Europe.

“It is an exciting opportunity for detailed research on smart city applications of e-scooters as well as modal shift, as we partner with Luna and Insight to help the University to reduce its carbon footprint and offer a more sustainable, safer first and last mile public transport solution. We hope to apply all project learnings to future TIER operations in Ireland.”

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“Cities and towns everywhere are looking towards smart technology to help find solutions to some of the operational challenges that are holding the scooter industry back from fulfilling its potential,” said Andrew Fleury, co-founder and CEO of Luna.

“The fact that this technology also has the ability to turn scooter fleets into mobile sensor networks, and thereby assist the city across multiple areas from road condition monitoring to street infrastructure mapping, is very exciting for all the project stakeholders.

A Luna eclipse

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“This project is a really strong fit for Insight and our mission of conducting high impact research in data analytics to the benefit of the individual, industry and society, through enabling better decision making,” explained Prof Noel O’Connor, CEO of the Insight SFI Research Centre for Data Analytics.

“The project involves world leading research into the potential smart city applications of the Luna and TIER “camera as a sensor” approach to managing shared scooter fleets, and aligns perfectly with the Smart DCU initiative under the auspices of Smart Dublin. We see the project as central to our vision of Empowering Citizens through Smarter Societies.”

Daire Keogh, President of Dublin City University added that Luna emerged from theDCU Alpha innovation campus.

“They say it takes a village to raise a child and similarly it takes an ecosystem to launch a new innovation.

“The fact that Luna is now engaging directly with the research community based in DCU, connecting the University back into the Smart Dublin initiative of the four local authorities, and bringing industry leaders like TIER into our ambit, is a great validation of our ‘University of Enterprise’ strategy,” said Keogh.

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