

# Cellnex and Dublin City University (DCU) partner on Ireland's first 5G enabled 'Smart Campus'

- 5G deployment will facilitate Mobile Edge Computing capability across DCU's Glasnevin,
  Alpha & Sports campuses.
- Campus spin outs, start-ups and tenant companies to use infrastructure to test smart city applications.

Cellnex Ireland, Ireland's largest independent telecoms infrastructure provider, has partnered with Dublin City University (DCU) to develop Ireland's first 5G-enabled smart campus, which will further the objectives of the 'Smart DCU' initiative.

Smart DCU is a collaboration between Dublin City Council and partners Enable, Insight and DCU Alpha. The goal of Smart DCU is to develop, test and trial cutting-edge technology innovations utilising three campuses with almost 18,000 students from 55 countries worldwide. Smart DCU is an ongoing program to make the DCU campuses a microcosm of a smart city, and thereby offer great insights into how a smart city can better function for the benefit of its citizens and stakeholders.

The partnership, officially launched today, will see Cellnex install a range of telecommunication infrastructure to ensure there is uninterrupted 5G coverage across the main campus, the nearby DCU Alpha Innovation Campus, and the DCU sports campus, and ultimately support smart city, connected vehicle (V2X) and internet of things (IoT) applications across three DCU campuses.

Rolling out 5G coverage of this scale will facilitate Mobile Edge Computing (MEC) capabilities on the campuses. MEC allows for the increased adoption of bandwidth-heavy applications, such as internet of things, virtual and augmented reality, remote medical monitoring and connected and autonomous vehicles. MEC is heavily reliant on 5G, and the partnership with Cellnex will now give DCU students, staff, researchers and partner companies the ability to trial new technologies in a real-world environment.

Cellnex and Smart DCU are now seeking to collaborate with mobile network operators to develop 5G capabilities across the campuses.

The partnership will be particularly advantageous to university start-ups, spin outs and partners, with a testbed becoming available to trial the latest innovations to tackle the problems of tomorrow. This live smart city testbed environment will assist in commercialising collaborative research which takes place across DCU.

It is expected that DCU will utilise the infrastructure in a number of ways, including:

- Smart building monitoring to encourage sustainable energy use
- Smart parking to reduce bottlenecks
- Enhanced robotics and 'last mile' delivery capabilities
- Augmented reality learning experiences
- Video analytics and IoT for sports teams

Ronan O'Connor, Commercial Director of Cellnex Ireland, said:



# press release

"DCU is a vibrant and research-focused university, with an existing innovation pedigree through DCU Alpha. This partnership will allow DCU to take its IoT and smart campus activities to the next level. Continued adoption of 5G and IoT applications is vital in creating a competitive economy, while also solving pressing issues at a societal level which would not have been possible without this groundbreaking technology. This is a partnership which is incredibly exciting for Cellnex, and we look forward to collaborating with the MNOs to facilitate what will be truly unique testbed for a third level setting in Ireland."

# Kieran Mahon, Smart DCU Projects Facilitator, said:

"Smart DCU, under the auspices of the Smart Dublin project, has been established as a microcosm of a smart city, allowing the campus infrastructure to be used as a testbed for new technologies like Mobile Edge Computing, in partnership with world leading innovative companies like Cellnex. DCU is very excited about the innovation and research possibilities that this partnership will help unlock".

# **Andrew Fleury, CEO Luna Systems,** said:

"The presence of this MEC capability in DCU Alpha, opens up a whole new field of research and commercialisation opportunities for Luna. Our computer vision safety technology for micromobility already operates on the 'edge', meaning our technology is computing safety parameters in real-time on the scooter or bike equipped with Luna hardware. The Cellnex infrastructure brings this opportunity to the next level, by allowing us to investigate how 5G and mobile edge computing could ensure fast, reliable communication between road infrastructure, vehicular traffic, micromobility riders and pedestrians to reduce collisions".

#### **ENDS**

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# **About Cellnex Ireland**

The business launched in 2015 with the acquisition of 300 sites from Irish state forestry company Coillte, and through further acquisitions and investment now has as portfolio of over 1,800 sites. Cellnex specialises in maximising the efficient use of tower infrastructure through hosting the equipment of multiple operators on its sites, thereby reducing costs for users and reducing the proliferation of unnecessary towers. For more info: www.cellnex.ie

#### **About Cellnex Telecom**

Cellnex Telecom is Europe's leading operator of wireless telecommunications infrastructures with a portfolio of 138,000 sites including forecast roll-outs up to 2030. Cellnex operates in Spain, Italy, Netherlands, France, Switzerland, Austria, the United Kingdom, Ireland, Sweden, Denmark, Poland, and Portugal. Cellnex's business is structured in four major areas: telecommunications infrastructure services; audiovisual broadcasting networks, mission and business critical networks and solutions for smart urban infrastructure and ser-vices management (Smart cities e the "Internet of Things" (IoT)).

The company is listed on the Spanish stock exchange and is part of the se-lective IBEX 35 and EuroStoxx 100 indices. It is also part of the FTSE4GOOD, CDP (Carbon Disclosure Project), MSCI and Sustainalytics sustainability indexes. For more information, visit <a href="https://www.cellnex.com">www.cellnex.com</a>





# **About Smart DCU**

Smart DCU is a collaboration between Dublin City Council and partners Enable, Insight and DCU Alpha. The goal of Smart DCU is to develop, test and trial cutting-edge technology innovations in partnership with industry and local communities.

The wealth of research and start-up expertise within the University makes DCU an ideal Smart District, in particular the expertise of Smart DCU's partners. Enable is a leading IoT research centre with a presence in eight universities, while Insight is one of Europe's largest data analytics research organisations, and DCU Alpha is a commercial innovation campus that promotes the growth of research-intensive businesses.

The DCU Glasnevin campus can be viewed as a microcosm of a city. Many of the challenges faced within the campus mirror those we experience in our day-to-day lives. Smart DCU projects explore some of the key issues facing urban centres today. How can we improve mobility to, from and around our city? How can we reduce carbon emissions? How can we harness green energy more efficiently? Smart DCU bridges the gap between research and practice; transferring key learning and knowledge from the latest developments in smart city research, into smart city initiatives.

To date, Smart DCU has supported a range of pioneering projects, from the trialling of hydrogen powered buses, to the use of technology to support DCU's status as the world's first Autism Friendly University.