

Case Study: Trinity College Dublin



NEXEDGE NXDN delivers multi-site coverage at Trinity College Dublin

Introduction

Founded in 1592, Trinity College Dublin is one of the seven "ancient universities" of Great Britain and Ireland and the only one located in Ireland. Its 47-acre campus blends historic and modern architecture. A globally recognised institution ranked among the top 100 universities, it is also a major tourist attraction, drawing over two million visitors annually.

The campus is home to several landmarks, including a renowned library that serves as a legal deposit library for Ireland and the UK, housing nearly 5 million books and receiving over 100,000 new items each year.

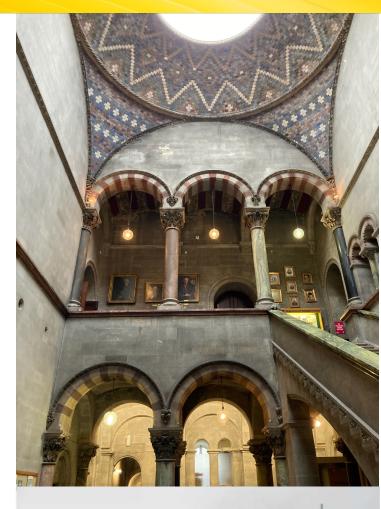
The Challenge

Trinity College Dublin's existing radio communication system was fragmented, with separate analogue and digital channels serving different departments. The system lacked interoperability, preventing seamless communication between teams such as Security, Library, and the Business School.

Coverage was also a significant issue, particularly in basement areas and newly constructed buildings, due to infrastructure limitations and ad-hoc system evolution over time. The Security & Attendants team relied on a single repeater, resulting in dead zones across the campus, which posed a risk to safety and operational efficiency.

To address these challenges, a modern, integrated radio solution was required to provide full campus-wide coverage, enhance connectivity between departments, and ensure reliable communication in critical areas.







The Solution

To address Trinity College Dublin's communication challenges, a new multi-channel digital radio system was implemented, providing seamless campus-wide coverage and interoperability between departments. Following extensive site testing, Critico recommended the NEXEDGE NXDN system, which uses UHF frequencies for superior coverage, including in basement areas. A four-site, eight-channel network was installed, allowing security teams to roam between repeaters without losing signal. The system also features emergency and man-down alerts for enhanced safety, while all departments can communicate independently or coordinate in emergencies. This future-proof solution ensures reliable, efficient communication across the entire campus.

The Benefits

- Full Campus Coverage: Eliminates communication blackspots, including basements and remote buildings.
- Seamless Connectivity: Enables instant communication between Security, Library, Business School, and other departments. Enhanced Safety Features: Man Down and Emergency Alerts ensure rapid response to incidents.
- Improved Operational Efficiency: Reliable communication streamlines daily operations and emergency management.
- Future-Proof System: Scalable digital solution with maintenance support for long-term reliability.



System Installed

Hand Portable Radios: 100+ no. NX-3320E2/3

Mobile Base/Radios: 2no. NX-3820E

Radio Repeaters: 4no. NXR-1800E

Other devices/Accessories: 6-way Battery Chargers, Earpieces, spare Batteries



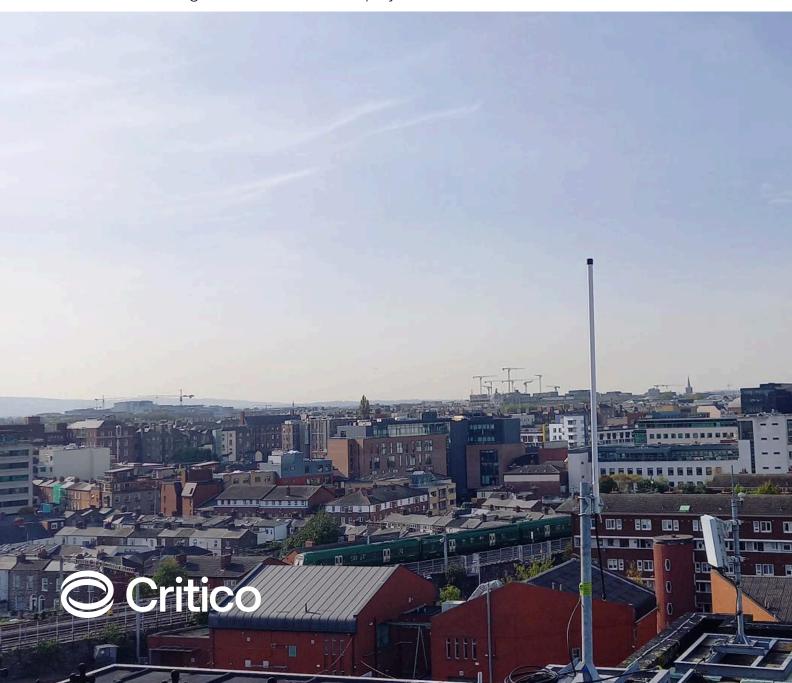




Final Thoughts

The successful implementation of the NEXEDGE NXDN digital radio system at Trinity College Dublin has transformed campus-wide communication, eliminating blackspots and enhancing connectivity across all departments. With crystal-clear audio, extended range, and advanced safety features like Man Down and Emergency Alerts, the system ensures a reliable and secure communication network. Designed for versatility, it supports multiple channels to streamline operations and improve efficiency.

Here's what Sean O'Neill, Senior Sales Executive at Critico, said about the project - "Critico is proud to have delivered a future-proof solution that enhances safety, coordination, and day-to-day functionality at Trinity College. A special thanks to Zachary Chambers and the Trinity College team for their collaboration, as well as the dedicated engineers who made this project a success."



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