

Partnering for innovation in world-class communications networks R&D

eircom Business Solutions – technical expertise supporting R&D at one of the world’s foremost ICT research organisations, WIT’s Telecommunication Software and Systems Group (TSSG).

At Waterford Institute of Technology’s Telecommunication Software and Systems Group (TSSG), pushing the boundaries of what’s possible is central to researchers’ work. A long-term partnership with eircom Business Solutions has delivered essential support to TSSG for more than a decade. Most recently, eircom Business Solutions helped develop a brand-new communications and cloud networking testbed for TSSG, incorporating a substantial upgrade of the wired network infrastructure within WIT.

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The project attempted something never before tried: the development of a multiprotocol radio network able to emulate a range of mobile technologies, including 3G, LTE and WiMAX. Supported by a Science

Foundation Ireland grant, TSSG also sought to use the network to explore the full extent of modern unified communications tools, with an eye towards developing innovative new services for IP voice and video. Close collaboration with eircom Business Solutions’ highly experienced solution architects successfully delivered the infrastructure, which now acts as a flexible research tool for the testing of new mobile services into the future.

Technical knowledge and practical experience

“This network will allow us to experiment with emerging technologies, and do so in a widespread and distributed laboratory environment,” said Jerry Horgan, Infrastructure Manager, TSSG. It’s really about the flexibility of what we can do going forward because this testbed has to run for the next five years, and technologies will change during that time. eircom Business Solutions’ expertise was a huge help here because as we were deploying unified communications, they started questioning the way we’d been planning to do it. “It’s that detail-level expertise that’s so valuable: eircom Business Solutions understood what we wanted to do, and they made



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What did eircom Business Solutions do for WIT and TSSG?

- Substantial upgrade of wired network infrastructure: core network now runs at 10 GB
- Technical consulting and engineering expertise to shape and deploy unified communications for TSSG’s demanding R&D environment
- Enabled deployment of a new, flexible, multiprotocol radio network, able to emulate technologies ranging from WiMAX to LTE
- Deployed a Cisco telepresence solution for rich video communication over voice and video, incorporating Cisco WebEx for conferencing

Benefits for WIT and TSSG at a glance

- Stable, future proofed core network with significantly increased capacity for student and staff use.
- Significant new research assets including multiprotocol radio network and unified communications deployment for testing purposes
- Long-term IT partnership with eircom Business Solutions delivers access to detailed expertise over a wide portfolio of technologies.
- Upgraded infrastructure facilitates access to vital applications including Microsoft 365, Gmail, Moodle and Lync.
- TSSG benefited from eircom Business Solutions’ experience in deploying robust telecoms for a distributed campus environment