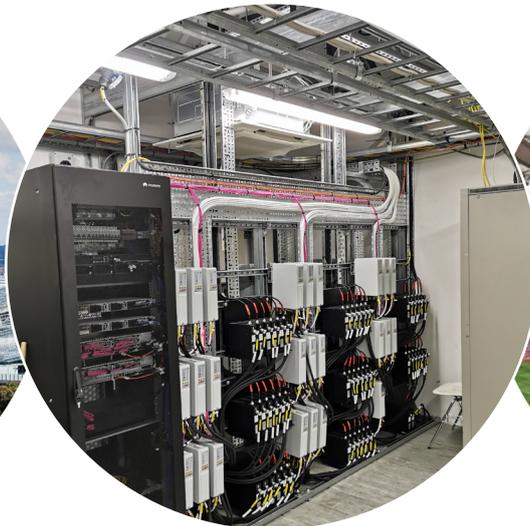


Project: Eir Network Modernisation
Location: National Stadium, Croke Park and Aviva Stadium
Client: Eir Mobile



In 2018 Eir Mobile signed an agreement with Huawei Technologies to modernize the Eir Mobile network. As a proven, preferred telecoms build supplier in Ireland, Spectrum Telecom Installations Limited has been supporting Huawei and Eir Mobile since the very start of the network modernisation programme.

The scope of the agreement was to add new equipment and provide additional legacy technologies with vastly improved capacity as well as the first 5G deployments for Eir Mobile.

As part of the coverage upgrade plan, Spectrum has completed a significant upgrade of the Aviva Stadium and National Stadium at Croke Park, which were both complicated and technically demanding site upgrades.

AVIVA STADIUM

Project Deliverables

Installation of enhanced 2G,3G,4G and 5G technologies inside the Aviva Stadium

This project delivery was required in an extremely secure and restrictive work environment at the Aviva stadium. In addition to this, the project timeframe was also at the very start of the global Covid 19 pandemic. These both severely complicated the workspace environment for Spectrum's multi-disciplinary workforce including Installation Technicians, Electricians and Commissioning Engineers.

A plethora of access and site permits, medical certificates and accreditations were required, making this location one of the most difficult site locations to deliver to date with regards to the deployment of workers at a site location.

The design for the Aviva stadium also made this location the highest capacity site in the Eir Mobile network. A typical site has on average 1-2 RRU's (Remote Radio Units - the equipment creating the RF signal picked up by the end user), however, at this Aviva Stadium site, Spectrum successfully deployed 50+ RRU's into this new in-stadium DAS (Distributed Antenna system).

Integrating this volume of radio equipment into a single seamlessly connected node, had not been done before on this scale in Ireland. Deploying mobile radio network equipment inside buildings such as the Aviva stadium also creates problems with regard the type and certification level of materials deployed. Fire resistance and RF shielding requirements are understandably high. Co-ordinating the sourcing and deployment of these materials was incredibly complicated when combined with the access and COVID19 restrictions in place at the time.

Croke Park

Project Deliverables

Installation of enhanced 2G, 3G, 4G and 5G technologies inside Croke Park Stadium

As the National Stadium of Ireland, Croke Park was a restrictive access site, providing a complex working environment for the Spectrum multi-functional build teams. Accessing the site with relevant permits, medical certificates, and accreditations, made Croke Park a complicated stadium to access and work in.

Croke Park's Eir Mobile site consists of 3 layers of nodes and technologies. An indoor 2G/3G/4G DAS from within the physical confines of the buildings, a multi sector 2G/3G/4G macro solution site with 35+ sectors, to cover the inside of the stadium for the and 5G coverage within the stadium from a dedicated active antenna node.

All technologies and nodes were subject to strict outage limits whilst works were being completed. A multi week schedule of permissible time frames for specific works was in place for the duration of the upgrades.

Alignment of our Spectrum Technicians, Commissioning Engineers, Electricians and Riggers along with the logistics of delivering specialist materials with such restrictive access protocols, made Croke Park a particular challenging build, but one that was nonetheless completed successfully on time by Spectrum.

Benefits

- Working with severe access constraints and outage limits did not delay the project
- The integration of new Covid-19 protocols, which maintained the workforce safety during the works
- Efficient in-house logistics management of a high-volume of materials
- Delivery of the highest capacity site on the Eir Mobile network
- Installation of multiple nodes across 2G/3G/4G/5G technologies