

The FTTH Council Europe Interview series:

CEO Ian Duggan



Who are 4site?

We are a leading engineering solutions provider for major telecommunications infrastructure operators. Established in Ireland in 2002, with a registered subsidiary in the UK, our mission from the outset has been to deliver innovation and excellence in every engagement.

Our highly skilled in-house technical teams provide a true turnkey service, from design, survey and build to the ongoing maintenance of world-class fibre and wireless networks. We adapt technology, tools and processes to deliver reliable and future-proofed services.

Our clients include Vodafone, SIRO, Cignal, Huawei, 2RN (RTE), Three, Nokia, CityFibre and CommScope.

4site joined the FTTH Council in 2018. As only the second Irish company to be accepted into the Council, we are delighted to be part of the ecosystem delivering Fibre to the Premises (FTTx) across Europe, supporting our key customers and continuing to explore new opportunities.

What do 4site do differently?

In 2017, 4site invested €250,000 in Ireland's first 'Fibre Centre of Excellence'. Located at our headquarters in Limerick, the Centre showcases expertise in fibre design, survey and planning. Visitors can see first-hand how our engineering excellence is focused on enabling continuous improvement and innovation in fibre network design and delivery.

We have invested in specialised training for graduate engineers, building our capacity to meet not just current demands, but also those of next-generation network developments, including 5G. We are continuously growing our competencies and knowledge base to increase our FTTH production output across Ireland and the UK.

We pride ourselves on a design-led approach that leverages smart and innovative technology to drive efficiency for clients. A new customised mobile app is one example of this. Developed in conjunction with [Esri Ireland](#), it has delivered a 50% reduction in data collection time and a 25% reduction in planning /design turn-around, resulting in significant time and cost savings for clients.

Another example is the use of the latest drone and UAV (Unmanned Aerial Vehicles) technology by our survey teams. The aerial perspective allows us to accurately and efficiently establish the lay of the land and best access routes, whilst identifying potential challenges and planning issues before they arise. (<http://www.4sitenetworks.com/4site-drone-technology/>)

Why do 4site want to be part of the FTTH Council Europe?

We value the opportunity to be part of a well-established forum to meet with like-minded people, to share ideas and best practice thinking. We want to learn from others, and, as the largest fibre design company in Ireland, we want to share our knowledge and innovations.

Our experience of delivering fibre in the UK demonstrates how we can innovate as part of an ecosystem. Closer to home, we have played a major role in rolling out fibre across Ireland and are happy to share our experiences and design methodology.

In 2018 Ireland became part of the European FTTH league table, joining the group of countries that have a minimum of 1% of households subscribing to a 100% FTTH service. According to the Market Panorama report¹, Ireland had 30,000 FTTH/B subscribers, up from less than 20,000 in June, making FTTH the fastest growing broadband segment in the country.

Many of our clients are already members of the Council. We believe that membership of an important, independent neutral body will help accelerate shared goals in creating leading-edge technologies that will deliver excellence to customers.

What do you see as the priority for fibre roll-out?

In telecoms right now, it's all about bandwidth capacity and market penetration. We are always amazed at how quickly our industry has changed in such a short period of time. When we started in this business a little over two decades ago, we had no idea that consumers and businesses would develop such an insatiable appetite for data and mobile phones.

Understanding the customer – consumer or business – is key. Operators will win more customers by delivering a better user experience, so the onus is on us to provide infrastructure for a consumable service that prioritises customer satisfaction and network performance in rural as well as urban areas. These are the foundations for building out great networks in the future.

What makes this a challenge is a growing list of applications and services that have the power to transform businesses and the consumer experience. There is a surge of innovation around electric vehicles, IoT, robotics, advanced analytics, artificial intelligence, automation and blockchain, where the cumulative effect is to put more pressure on networks. It's our job to build out infrastructure that must support the global adoption of these technologies by businesses, utilities and consumer-focused services.

How is the market changing?

The telecoms industry is ferociously competitive so change in the supplier landscape is a constant. Headlines tell the story: the [Belgian government](#) wants a new player for 5G; the UK has set targets to make full fibre connections available to 15 million premises by 2025; Telefonica is closing its copper exchanges in Spain and other national operators are expected to follow.

Concerted efforts are being made in Europe to stimulate healthy competition and increase investment in fibre networks and 5G. To accelerate this, the European Commission has put a proposal forward on the 'European Electronic Communications Code' which should soon enter into force. For the first time, investment in very-high capacity (VHC) networks is becoming a legally binding objective of the EU regulatory framework.

¹ FTTH/B Market Panorama for the FTTH Council Europe by IDATE:
http://www.ftthcouncil.eu/documents/IDATE_European_FTTH_B_panorama%20at_Sept_2017_VF.pdf

These are exciting times. In Ireland and other countries, however, some things stay the same. We need to progress more with rural broadband. As a nation, Ireland has the capabilities, skill and talent to be a world leader in fibre penetration and the proof point will be delivering services to a population previously starved of high-speed connectivity.

Is fibre in competition with wireless networks?

It is important to understand that the prerequisite of swift 5G deployment is significant fibre densification. Fibre and 5G networks will be complementary to each other but ubiquitous connectivity should be everyone's goal and can only be achieved if wireless and fibre operators are on the same page.

There will, however, be clearly defined use cases. Some specific future applications and uses cases, such as connected cars, can be seen as particularly linked to wireless and 5G infrastructure for their final interface with the user, however with the quantity of data networks will have to deal with, fibre infrastructure will be a necessity to be able to offload the data from the wireless networks and to avoid congestion.

The FTTH Council has recently launched a project² on 5G-Fibre convergence, which aims at quantifying how much dependency on fixed fibre infrastructure the next generation of wireless networks will have and also at understanding the potential cost savings which could be made from building a converged 5G-fibre network.

At 4site, we see huge opportunities in the fibre and wireless areas of our business and look forward to playing a part in a fast-unfolding future.

² Fibre for 5G: a story of convergence, results of the study to be revealed at the FTTH Conference 2019 in Amsterdam (12-14 March) <http://www.ftthcouncil.eu/documents/PressReleases/2018/PR%20Fibre%20for%205G%20V%2021june.pdf>