



# Success Story

## Metranet Brings Gigabits for All to Brighton

### Introduction

Brighton, UK located roughly 47 miles southeast of London, is a large city with almost 500,000 inhabitants. It is also the second largest digital hub in the UK second only to London. However, unlike most residents in London, getting high speed broadband was difficult and time consuming if available at all. Brighton is a historic city over a thousand years old but needed faster reliable high speed communications to maintain its role as a leading digital hub. High speed communications are also a key component in supporting several huge annual events such as Brighton Pride and the Brighton Marathon. Events that draw up to 300,000 people and require gigabit connectivity to function properly.

### The Challenge

Brighton like many towns in the UK was relying on Open Reach to upgrade Internet Access speeds to a gigabits and to do so across the entire city. The approach taken by Open Reach was to use fiber. But there was just one catch – the fiber did not exist and would have to be deployed. Getting permits, approvals and then actually doing the digging was expensive and time consuming – sometimes years and tens of thousands of dollars/mile.

In addition, Brighton has been in existence for over 1000 years. City center streets, buildings and layout are crowded leaving little room for disruptive activities such as digging holes in the streets for new fiber.

And it was not just the city center that was starved for high speed Internet. The entire municipality including government, police, education, retail, commercial and residential locations need to be served citywide.

## Solution

Enter [Metranet](#), an ISP founded in 2005 and focused on using wireless technologies and systems to serve their customers. As Open Reach stalled and failed to deliver the gigabits promised, Metranet turned to Siklu with its full portfolio of Fixed 5G wireless solutions operating in the 60GHz and 70/80GHz bands.

Metranet was familiar with legacy sub 6GHz products from their start. As the demand for more bits accelerated and interference in the sub 6GHz bands increased dramatically, these older systems were not able to deliver the gigabits required.

Using mmWave systems from Siklu addressed both issues. With the narrow beam widths inherent at these higher frequencies meant the network would experience virtually zero interference now and in the future. In addition, with a total of 24GHz of spectrum available in the two bands delivering gigabits, in some instances 10Gbps full duplex, was easily achievable.

Using Siklu design tools including [WiNDE](#) (Siklu's automated network design tool) and leveraging the largest portfolio of mmWave systems allowed Metranet to serve any location in the city with over 400 connections to date and growing. All based on a 5G fixed wireless network that boasts 99.999% availability – or to make it simple a total of 6 minutes of downtime per year.

Because the Siklu based network delivered on the gigabit promise, Metranet was able to use the Gigabit Vouchers from the LFFN program.

## Result

The Fixed 5G Metranet network in Brighton is constantly growing as new customers are connected. Hundreds of businesses in the city of Brighton are now benefitting from exceptionally fast broadband speeds through a hugely innovative Siklu-based network. Metranet plan to continue to take advantage of the reoccurring government led voucher schemes to which they currently have over 100 vouchers left to deploy. With the massive capacities supported, additional applications are being considered to add to the network. Metranet plan to stay ahead of local operators by maintaining by embarking on a new 10Gbps wireless ring across the city based on our EtherHaul™ 8010FX radios.

When a new customer contacts Metranet for service, they don't have to wait months or longer for connectivity via fiber. Leveraging the broad product portfolio with different speeds, sizes of radios and more means Siklu systems can support almost any customer no matter where they are or what they need. When this is coupled with the comprehensive set of tools in Siklu's SmartHaul suite of software including WiNDE, our Element Management System and Link Budget Calculator the end result is customers getting service in days.

Stated Roger Horlock, Managing Director of Metranet Communications, "If you are going to build a network with fixed wireless products, I would recommend you build it with carrier grade equipment such as Siklu and do it in conjunction with the various gigabit voucher schemes that are available to get a quicker ROI."

