

case study



Providing WDM backhaul solution for national FTTP rollout

Introduction

The adoption of FTTH networks across the UK is slowly beginning to gain momentum. As of October 2021, the UK has a full fiber coverage of just over 27%. Ogi, formerly known as Spectrum Internet, a new full fiber provider to underserved towns in South Wales, are using WDM backhaul (Wavelength-Division Multiplexing) to actively build full fiber broadband across the country. Following a significant investment from Infracapital, towns across South Wales will be amongst the first to benefit from full fiber networks. Residents and businesses in Haverfordwest, Abergavenny, Rhoose, Llantwit Major and St Athan, can now look forward to being connected with Fiber-to-the-Premises (FTTP) infrastructure with future-ready bandwidth expansion supported by WDM for the backhaul between the towns.

Application

Central office

Technology

Fiber optics

Solutions

Bandwidth expansion
(WDM backhaul)

Country

United Kingdom

Customer

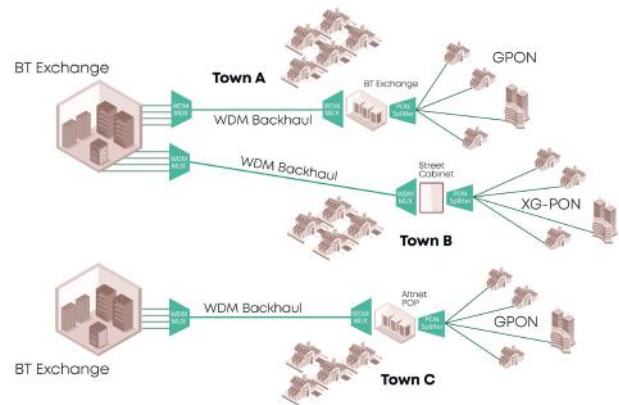
Ogi

Challenge

To support the roll out of their FTTP network, Ogi had to use existing fiber between towns, data centers and street cabinets. However, to reduce the reliance on established providers and provide an infrastructure that would support their future bandwidth, Ogi needed to build the right infrastructure to meet the technical and commercial challenges, not only for day one, but as the bandwidth needs grew. Ogi selected HUBER+SUHNER as its chosen supplier to provide an easy to deploy, single fiber working WDM solution, that could support multiples of 100Gbps in the future.

Solution

HUBER+SUHNER worked closely with Ogi to provide a single fiber working WDM solution that would make significant savings driven by the ability to rent only 1 rather than 2 fibers. This single fiber working solution not only meets their needs for the towns today, but for the future too with a solution that could easily be upgraded to support multiple 10Gbps and/or multiple 100Gbps capacity services between their Point Of Premises (POP). The modular solution provides 20 channels of up to 100 Gbps each in each direction, (a total of 40 channels or 2 Tbps in each direction) all over a single fiber. Ogi benefited from the new modular NCX solution from HUBER+SUHNER, which provides the ability to add amplification, dispersion compensation and added capacity, as the network grows. Alongside this, HUBER+SUHNER engineers provided a bespoke customer service whose technical knowledge made sure the network was strategically designed to work best for them. This augmented the engineering resources in the Ogi team, and ensured the network reaches its full potential for the investment being made.



Result

By choosing fiber that is more environmentally friendly than copper cable, not only will many South Wales towns now be able to benefit from an ISP who has sustainability at the core of what they do, but also a full fiber network-ready connectivity for the future. This growth in FTTP connectivity for Wales is an example of what is possible across the UK to increase FTTH penetration rates. By selecting a forward-looking supplier such as HUBER+SUHNER, Ogi were able to benefit from a future-ready, robust single fiber WDM backhaul solution to launch their FTTP services, whilst limiting costs.

More to explore

If you want to better understand how HUBER+SUHNER can support your specific FTTP network rollout needs, we can help give advice and offer the right solutions for you.

Please visit
www.hubersuhner.com/contacts

