

CommScope helps challenger ISP Telcom bring broadband to everyone

Scalable solutions bring cost-effective fibre to 50,000 homes in first rollout phase.



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Thom Seddon, CTO, Telcom Group, UK



Customer

- Telcom Group's rural internet service provider WeFibre
- Challenger working to make hyperfast internet available and affordable for all

Challenges

- Fast, large-scale rollout in complex rural areas
- Simplify installation so the limited number of available employees could focus on where they add the most value
- Continuity and homogeneity of design and deployment in the face of lead time challenges

- Requirement for a point-to-point optimized solution
- Solution that optimizes CapEx and OpEx
- Openreach compliance/PIA

Solutions

- NOVUX® HST hardened standard terminals
- TENIO® external fibre-optic splice closure
- Optitap optical terminal enclosure
- BUDI building entrance fibre boxes for MDU
- Fibre Cables

An intuitive, “first time right” solution

Telcom Group, established in 2014, operates three brands: Telcom provides hyperfast internet to commercial properties; ClearFibre delivers hyperfast internet to residential properties; and WeFibre provides low-cost hyperfast fibre connectivity to social housing and rural housing developments. Currently, WeFibre is bringing fibre to thousands of homes as “Phase 1” of an ambitious rollout.

“Successfully and cost-efficiently realizing rural connectivity requires a dynamic approach to build methodologies, without using a huge variety of products to overcome different challenges,” explains Thom Seddon, CTO, Telcom Group. “Some areas use long lengths of aerial cable, whereas others use duct cabling. However,

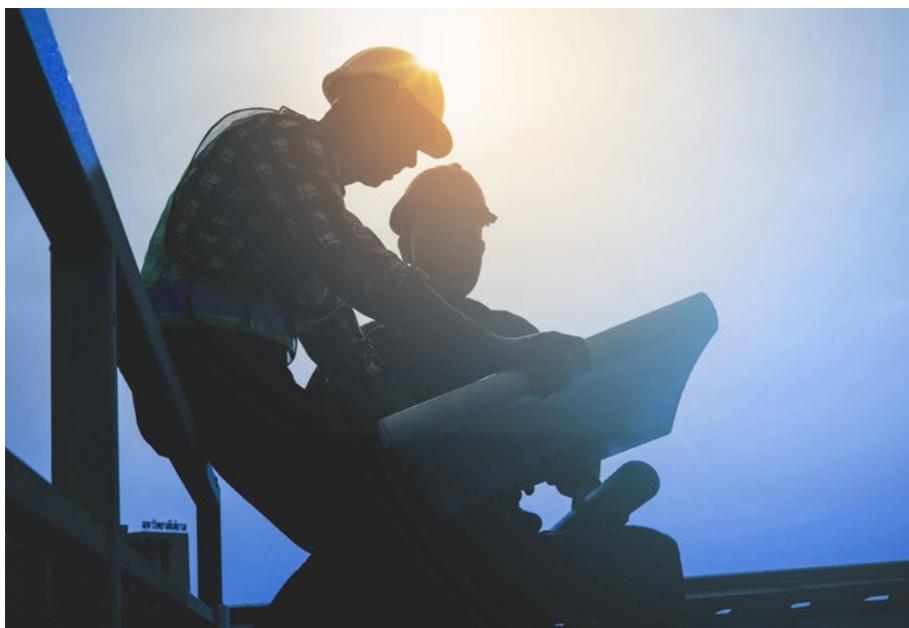
in some parts of the designated network route, there are no ducts, or ducts are very full or collapsed. We also have to ensure everything is compliant with Openreach requirements, as we're also using their PIA infrastructure. Everything has to work together seamlessly. Guidelines for records are strict, so product solutions also need to make compliance easier."

Making smart choices

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The need for a fully integrated end-to-end solution led to the decision to use a range of CommScope products, including fibre-optic closures, cabling and customer premises boxes. "We looked at multiple vendors and options, and it made sense to do everything with CommScope. The end-to-end portfolio is very broad, covering all available network architectures, and product availability is high. We can obtain everything we needed from one vendor. Consistent technology, terminology, purchasing processes and high availability make things much easier for us. Especially considering the total number of premises we aim to connect in the next few years."

Passcomm, with its substantial product and network knowledge, is acting as a trusted advisor, bringing ideas, products and best practices that have been successfully deployed across the UK AltNet marketplace. By working closely with CommScope field application engineers and product line managers, Passcomm is always up to date with new products, installation and deployment developments. "Their advice was essential to making



the best selections and combining these in a smart way, as this requires extensive knowledge of a vast portfolio and how products relate to real-world situations," adds Thom. "CommScope's TENIO products are also used in our metro builds. Our field teams have tried a wide variety of options. In their feedback, they consistently state that TENIO is very easy to use. Cable management is excellent, and it performs well in different use cases, whether you need very high core counts or lower core. That's really practical."

Accelerating planning and rollout

Telcom Group also decided to use hardened connectivity for all drops. This allows them to build out the network in an efficient way and is also far easier for field engineers to work with. CommScope's NOVUX portfolio for overhead as well as underground usage is making inventory management and installation easier. Says Thom: "Installation teams can carry a single set of cables, accessories and tools, for example. At first, we didn't even realize that we could 'carbon copy' overhead

and underground deployments. That was a big win for us, which accelerated our planning process quite a bit. Working with CommScope products also ensures we're always compliant with Openreach requirements."

Stuart Read, sales and marketing director, Passcomm Ltd, comments: "We offered a variety of options we knew would meet Telcom Group's requirements, but didn't push them in any direction—the final choices were theirs. The benefits of certain products were immediately clear, such as the universal drop for underground and overhead use, that can also span roads overhead. Using this meant fewer moving parts to worry about, less inventory to manage, and lower buy-in volumes, for example. Passcomm holds over £2M of CommScope stock in its UK warehouses. This makes it possible to best serve customers such as Telcom, ensuring our stock-holding can cope with their deployment rates now and in the future."

"The UK government expects the telco industry to deliver 80 percent coverage by 2025, to help realize the Department for Digital, Culture, Media and Sport's



ambitious targets: full-fibre broadband should be available to every home in the UK by 2033. By 2025, at least 85 percent of all premises should have gigabit broadband access. As a shortage of skilled people is a significant challenge to deploying networks at the rate required, the only way to meet the demands is by simplifying and accelerating network rollouts.”

A Telcom training centre and academy is part of the solution. Furthermore, thanks to simplification and reduced training requirements, trained staff can spend their time on aspects of the job where they add the most value. In this way, CommScope products help address the skills shortage and accelerate rollouts. The UK is also seeing deployment backlogs caused by massive demand spikes, supply chain issues and COVID. CommScope’s HST offering, with its reduced complexity and sharp lead times—partly thanks to manufacturing facilities in North Wales—helps avoid this. The net result is a more agile supply chain.

Telcom Groups also regularly referred to CommScope’s FTTH ePlanner tool. “From the outset,” says Thom, “we used this for planning, but also to develop a different

approach for sections that needed to be adapted. The newest, expanded version of the ePlanner is very useful. Whenever we encounter scenarios outside our normal build approach, it allows us to quickly reference our options. That makes us more efficient and helps us find more specific problem approaches.”

Looking ahead

“For Telcom Group, it’s vital to ensure commercial success in extremely low-density areas. Viability is partly based on how efficiently we can roll out and optimize this across different dimensions. That requires combining a degree of standardization and best practices with ample flexibility. CommScope helps us in this area, for example, by providing standardized connectivity that can be coupled with nodes that vary in density. Also, when field engineers switch between product sets, they can keep working in the same way.

“As a challenger ISP, it’s important to be working with the best. After all, we’re building infrastructure to serve communities for a very long period.”

Phase 1 of Telcom Group metro and rural networks: Facts and figures

Although the project is just beginning, figures from the first few weeks are promising.

- Homes connected: 4,605
- Marsden in West Yorkshire and Bellingham in Northumberland are live
- Kilometres of fibre used: 143.407

“Bellingham has always been one of the last places to receive new services, and the Parish Council has worked hard over the past 18 months to ensure you have access to one of the fastest full-fibre broadband networks in the UK at a fantastic price. It’s great to see our new network is ready to connect customers.”

**Cllr. Martin Dickson-Green,
Bellingham Parish Council**

How CommScope can help

Helping de-risk network investments, speeding up deployment and boosting quality

CommScope supports AltNets with optimized CapEx and OpEx integrated PON hardware, software, connectivity solutions, planning, expertise, and services specifically designed to reduce investment risk, shorten time to market and provide the highest standards of performance and reliability. A robust supply chain leverages multiple locations to provide a local manufacturing advantage to FTTH customers. CommScope's solutions for the AltNet market are based on years of experience in deploying networks worldwide, but above all on deep understanding of the booming UK market, experience gained through work with AltNets, and development of tailor-made solutions, such as:

- **NOVUX**, the industry's first modular FTTH ecosystem, offers 50 times more configurations than previously available, with 75 percent fewer components. Configurable, scalable, easy-to-use fibre closures and terminals are ideal for today's workforce.

- **The Prodigy universal small-form hardened connector system** provides solutions for 80 percent of installed hardened terminals—supporting interoperability and faster, more efficient fibre deployment.
- **FTTH ePlanner** allows AltNets to quickly identify the best topology—saving time in planning and creating a bill of materials. The topology planning tool guides users through the steps and decisions in the network planning process, looking at all topologies that can be used in the UK.
- **The CommScope cloud-to-edge PON portfolio** gives AltNets an edge by making it easy to deploy and scale next-gen networks for virtually any opportunity.

At CommScope, we see broadband for everyone as inevitable. We view challenges such as a shortage of skilled workers as opportunities to innovate, partner with the industry, and bring high-quality broadband to everyone across the UK. Would you like to find out what CommScope's suite of solutions, services and advice could mean for your network?

Get in touch today!



broadband for everyone

Broadband is so critical to society that it's becoming known as the fourth utility. For network operators, there has never been a better time to bring broadband to every community.

CommScope is committed to helping service providers build end-to-end FTTH and FTTX networks that enable broadband for everyone. [Learn more.](#)

CommScope pushes the boundaries of communications technology with game-changing ideas and ground-breaking discoveries that spark profound human achievement. We collaborate with our customers and partners to design, create and build the world's most advanced networks. It is our passion and commitment to identify the next opportunity and realize a better tomorrow. Discover more at commscope.com

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