COMMSCOPE®

CommScope supports E-Fiber's million-meter FttP rollout

Future-proof scalable closure helps bring cost-effective fiber to 40,000 premises

Customer

E-Fiber (95% owned by Arcus Infrastructure Partners, London)

Country

The Netherlands

Challenges

- Large-scale rollout in a combination of built-up and rural areas
- Need for a solution that simplifies rollout and optimizes CapEx and OpEx
- Requirement for a point-to-point-optimized solution

Solutions included

- POPs: MFPS 1HE 96LC
- Backbone: Tenio and FIST GCO2
- Cable: 96F micro cable and 2F uni-tube outdoor customer drop cable
- Access network: EDSA, OFDC-C12
- Customer premises: pre-fibered HFTP

Leen Gelderblom, senior project manager, E-Fiber

An intuitive, "first time right" solution

Local FttP operator E-Fiber is one of the major challengers on the Dutch FttP market, with more than 100K homes passed. Four years ago, the company decided to add 500,000 homes in rural areas and smaller cities over the course of four years. Part of this rollout is taking place in the Land van Cuijk region. It involves passing 40,000 addresses and includes 1 million meters of digging. From the earliest phases of the project, E-Fiber and CommScope worked closely together. The need for a fully integrated, end-to-end solution resulted in E-Fiber's decision to use a range of CommScope products, including fiber-optic panels, closures, cabling and customer premises boxes.

"This 2.5-year project is the biggest we've undertaken with our current contractor," explains Leen Gelderblom, senior project manager, E-Fiber. "A key challenge for this project is the fact that it spans five municipalities, posing specific challenges, such as digging near riverside locations, historical city centers, and dikes, as well as unannounced municipal works.

Bas Hermsen, sales director, CommScope (left) and Leen Gelderblom, senior project manager, E-Fiber

"This 2.5-year project is the biggest we've undertaken with our current contractor."

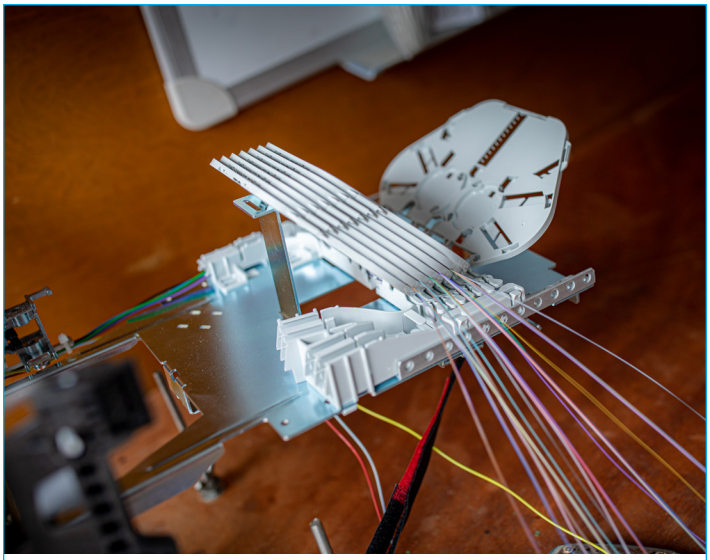
Leen Gelderblom

The complexity and scale of the project meant we needed a system that would be fast and easy to roll out and minimize inconvenience to resident, councils and local businesses.

"Using the right closures was particularly important to creating an easily scalable network. CommScope's EDSA closure, with its innovative gel cold sealing, offered exactly what we needed: an ideal solution for ducting drop cables in an end-to-end point-to-point network. You can extract 96 cables from a POP and feed the distribution point, with 48 customer drops per closure—ideal for achieving the required level of density. The gel technology not only offers great sealing but also avoids issues related to heat shrinking. After a short basic training, field installers can keep going indefinitely, which makes scaling up very easy and quick. This approach offered significant advantages during rollout as well as in the operations phase. Maintenance staff only needs to work with one type of product and connection concept.

"For our projects, especially rural deployments, it's vital that engineers can make the best topology decisions and discuss this with experts," adds Eric Vos, founder and CEO of E-Fiber. "It's also essential to have a detailed plan and bill of materials to ensure timely delivery and deployment. Working with a supplier that knows the challenges and can provide end-to-end solutions definitely helps. This approach allows us to bring all the social, economic and other benefits of fiber to remote areas.

"FIST is the industry's most deployed single circuit / single-element fiber closure and management solution, with a vast installed base, and guaranteed reliability" says Bas Hermsen, Sales Director, CommScope. "In the distribution part of the network, FIST closures have a proven history of some thirty years, protecting splice closure and fiber trays against the harshest conditions. Cable entries are reliably sealed, simply by being pushed together, without requiring specialized skills and tools. Cables can enter the closure at several points, making installations and upgrades in the field simple. After installation, closures can be easily re-opened and easily re-sealed. Individual fibers can be accessed at any time without touching other cables and compromising connections. There is no need to take apart and re-install the entire closure. Connecting or repairing individual customer connections is more efficient and downtime and complaints are reduced. For us, this is a great opportunity to deliver our end-to-end solutions through our channel partner Infraconcepts, who advised E-Fiber."



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Bas Hermsen,
sales director, CommScope

"What's more, the product meets the highest sealing standards, making sure that maintenance and repair interventions are kept to a minimum. Proven FIST and gel technology speeds up rollout, contributes to flexibility for future changes and upgrades, and supports TCO optimization. Installers everywhere are already familiar with the system, making rollout even easier."

No surprises, zero problems and failures

Making the project as future-proof as possible was paramount. Investment company Arcus Infrastructure Partners aims for the highest possible level of predictability. That means CapEx investments need to be reasonable and OpEx costs need to remain affordable and consistent for 25-30 years.

Says Leen Gelderblom, "Our contractor was given freedom to determine where to dig and build, but the network concept was rigidly defined, based on our tried-and-tested approach. They organized permits, materials, concepts, design, coordination with municipalities, permits and so on based on our design brief.

"We know that CommScope will be able to accommodate any changes or surprises. Our partner Infraconcepts also plays an important role in this. As far as the technical aspect of the schedule of requirements is concerned, Infraconcepts and E-Fiber have really unburdened us. During the COVID-19 lockdown, CommScope performed very well when it came to deliveries.

"Since we started working with CommScope materials four years ago we have experienced zero problems and zero failures. This project is currently nearing completion and has gone extremely well. As we have a proven method and solid financial backing and uptake, we can keep rolling out for years to come."

Would you like to find out what CommScope's suite of solutions, services and advice could mean for your network?

Get in touch today!

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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