Connecting the Country to the Rest of the Nation with Plug-and-Play.

When an independent telco in rural Kentucky wanted to upgrade to a fiber network, they chose the partner they’d relied on for 30 years: 3M.

The Challenge

Duo County Telephone was poised to re-evaluate its rural broadband infrastructure due to higher costs of using copper, specifically related to labor, maintenance and part-replacement costs. They needed a solution that would help reduce their operating expense budget, connection costs from the terminal to the side of a premises and total installation costs.

Factory-terminated solutions on both ends were avoided due to excess inventory of drops and excess slack storage. Connection costs from the terminal to the side of the premises were often too high. They needed easier access with a scalable solution and plug-and-play flexibility to make maintenance fast, easy and accessible.

To meet ongoing demand, Duo County Telephone needed a solution that could scale to the growth of the customer service area, while keeping in mind the budget requirements and the needs of the end-user as well as the technician.

Overview

Organization
Duo County Telephone

Profile
Duo County Telephone is an independent cooperative serving South Central Kentucky for more than 50 years. They offer a full range of communication services, including voice, broadband, cable television, LAN/WAN services, Fiber-to-the-Home (FTTH) and IPTV to extended rural areas. The cooperative also provides wireless phone and data services through a regional partnership.

Situation
Duo County Telephone needed a solution that could scale to the growth of the customer service area, while keeping in mind the budget requirements, and the needs of the end-user as well as the technician.

3M Solution
• 3M™ Fiber Dome Stubbed Terminal FDST 08 with 3M™ External Cable Assembly Module (ECAM) FD Factory Terminated Drop
• 3M™ SLiC™ Fiber Aerial Terminal Closures 530 for Factory Terminated Drop Termination
• 3M™ SLiC™ Fiber Aerial Terminal Closures 530 Internal Drop Termination for 3M™ External Cable Assembly Module (ECAM) FD Factory Terminated Fiber Drops

Results
3M worked closely with Duo County Telephone to deploy a fiber-based broadband solution that reduced operating costs and reduced connection costs while retaining scalability and flexibility in a system that keeps maintenance fast, easy and accessible.
“The solution from 3M enabled us to upgrade our network while reducing some operating expenses as well.”

Mark Henry,
Duo County Telephone
Vice President of Operations

“The solution from 3M enabled us to upgrade our network while reducing some operating expenses as well,” said Mark Henry, Duo County Telephone vice president of operations. “The 3M termination system gave us a scalable solution that enabled us to expand our fiber network for residential and small business customers.”

Duo County Telephone chose the 3M™ External Cable Assembly Module (ECAM) Internal Drop Termination System for its all-in-one approach that allows for both static and flexible installation with plug-and-play interoperability to reduce total cost of ownership. This system offers a complete product line of aerial, buried and underground applications that provide dynamic terminal and terminal closure solutions for each drop termination method: strand, pole, pedestal, wall-mount and handhole.

While other drop solutions are terminated outside of the terminal, creating potential problems in residential environments, 3M drops offer better protection and security inside the terminal. Drop interchangeability means service providers can easily migrate from one drop termination method to another for specific applications. Built-in drop cable entry terminations allow technicians to add and remove drops from the terminal or terminal closure without breaking drop seals of previously installed drops. It’s an accessible, easy to clean, plug-and-play solution. Snap it in and it’s done.

After several meetings, 3M offered samples for review. Duo County Telephone requested an aerial mounting bracket that met their specifications. 3M responded with a newly designed bracket in just two weeks—proving 3M’s commitment to providing customer-centric innovation.

The Results

Duo County Telephone saw significant savings in labor with the 3M solution. “I am delighted with the ease and speed with which the 3M solution has been deployed,” said Mark Henry. “Unit installations were kept to between two and three hours per unit, providing predictable installation windows for residents.”

3M provided easier access for technicians and engineers. Residential end-users now have broadband access for cable and Internet at speeds of 50 Mbps and higher. 3M also made it easy for Duo County technicians to replace damaged connectors on the terminal fan outside the stub tail, a feature that no other known competitor can offer today. Duo County can also equip the terminal with splitters to expand capacity for future-proofing.

“With a complete product line of aerial, buried and underground applications, the 3M termination system enables true plug-and-play capability for reduced installation and labor costs,” Mark Henry added. “It met all of our requirements.”

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The Bottom Line

With the 3M™ External Cable Assembly Module (ECAM) Internal Drop Termination System, 3M helped Duo County Telephone connect the country to the rest of the nation. Duo County Telephone now has a flexible and expandable system with plug-and-play capabilities that enabled them to deploy quickly and lay the groundwork for significant future savings.

To learn more about the 3M ECAM Internal Drop Termination System, visit 3M.com/Telecom.