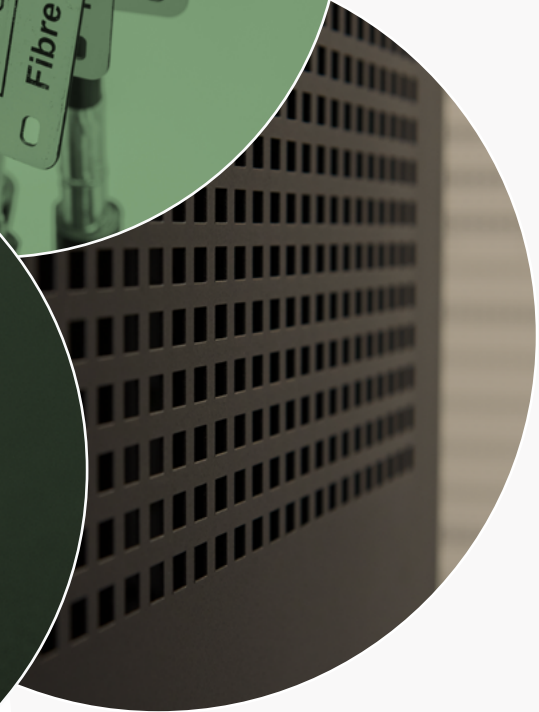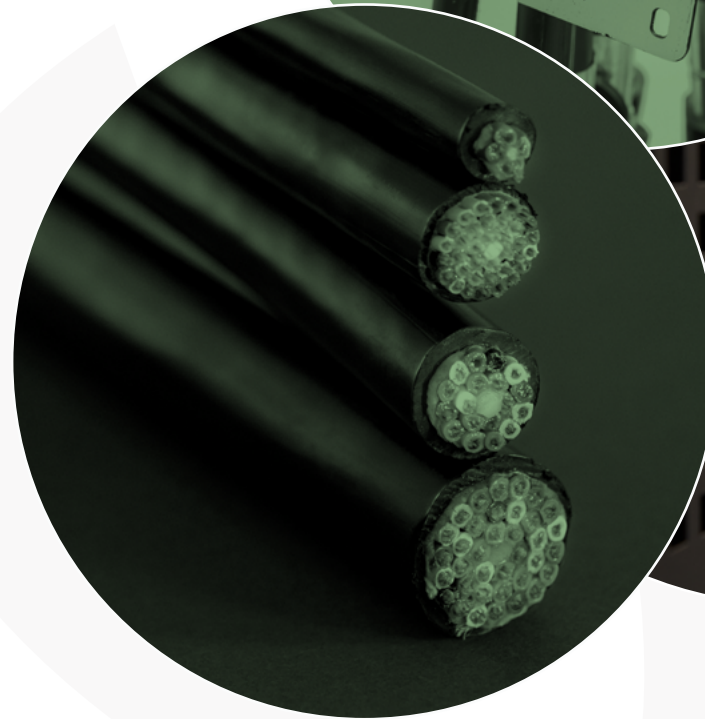**eu**networks

Case study

Optimising Network Connectivity for a European Internet Exchange with a scalable, dedicated network.

The Company

Our customer is a leading provider of interconnection and internet exchange services, facilitating seamless data exchange across Europe.

The company connects major data centres and internet hubs, ensuring high-speed, reliable, and secure communication for businesses. Serving a diverse range of industries, it supports the growing demand for efficient data transmission and connectivity, empowering enterprises to thrive in the digital age.

The Challenge

The customer's business model necessitates a complex web of connections between numerous data centres, as well as from these data centres to various points across their network, resulting in a multitude of individual connections, each requiring a separate cross-connect purchase from carriers.

However, each cross-connect represented an additional expense, building up in a substantial financial burden that threatened to impact the company's profitability and competitiveness. As the company continued to expand its services and client base, the cost associated with adding new cross-connections posed a significant challenge to sustainable growth.
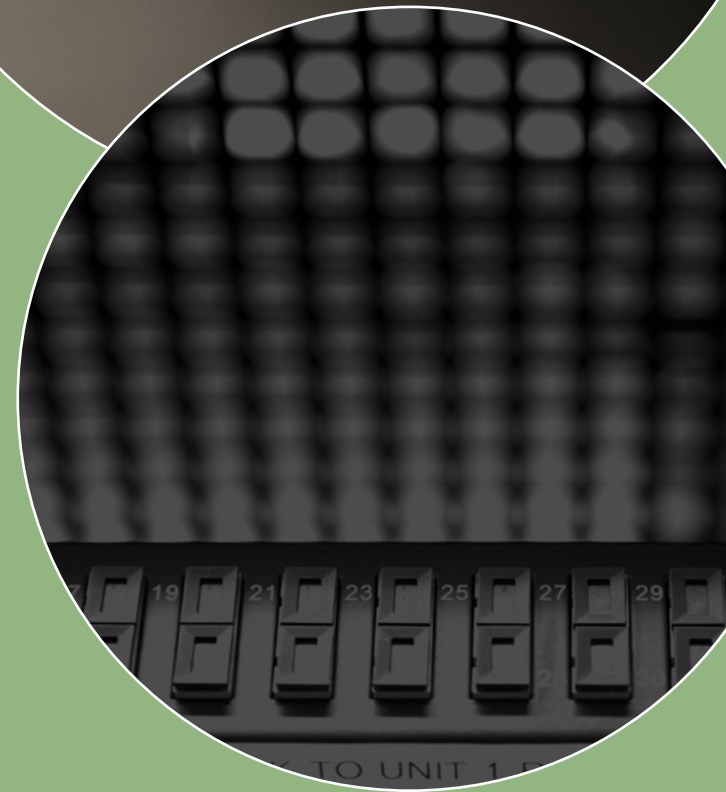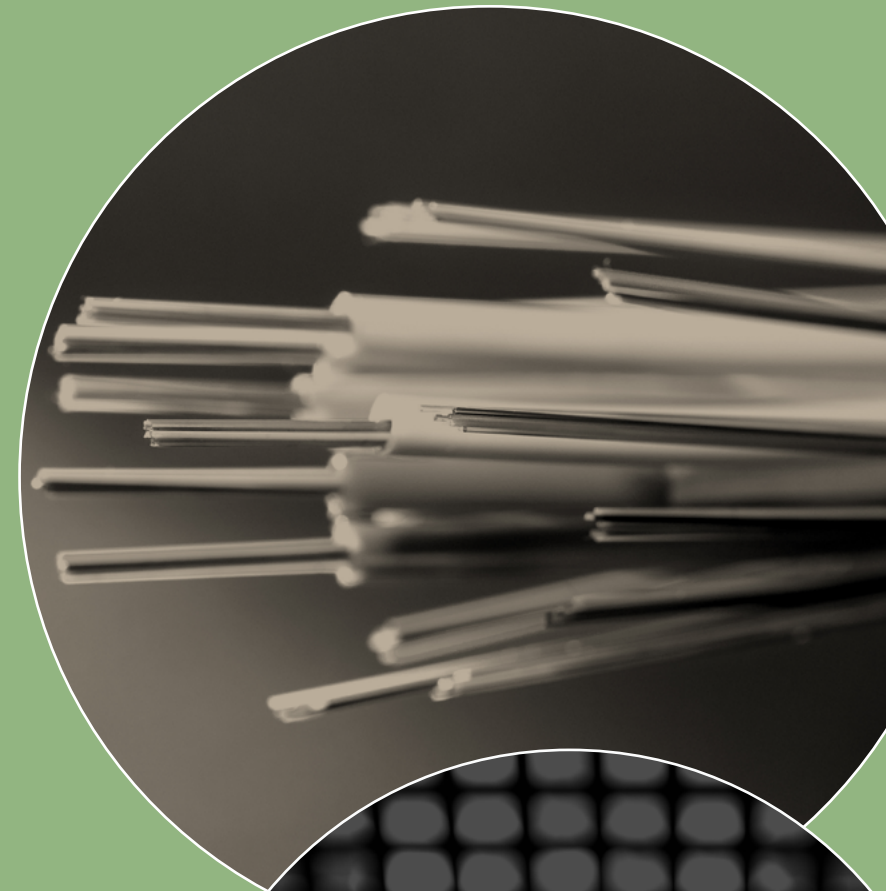
Additionally the company had to face the extra operational and administrative complexity coming from the increased number of cross-connects, which could negatively impact service agility. Not only did the company need to find an innovative solution to streamline its connectivity strategy, but also the challenge called for an approach that would significantly reduce expenses related to cross-connects, enhance operational efficiency, and maintain high-quality,reliable service.

The Solution

We have been the customer's main supplier, supporting them as their network requirements have become larger and more complex. Our experience with the customer, the quality and scale of our network, and our skilled technical teams made us the natural choice to support the evolution of their network requirements.

To address the challenges of numerous cross-connects, we designed and implemented a high-capacity fibre optic solution that offers superior cost-efficiency and adaptability. Our Bulk Fibre product directly addresses this challenge by consolidating connections and simplifying the network architecture. By replacing the multiple cross-connects with our Bulk FIbre solution, the customer significantly reduced their connectivity costs and operational complexity.

To optimise the implementation of our Bulk Fibre product, we used a 288-fibre cable. This high-capacity cable maximises duct capacity, providing extensive connectivity options within a single cable. The use of this 288-fibre cable not only reduces the number of physical connections needed but also optimises space utilisation in existing ducts, allowing for efficient scaling without additional infrastructure investments.

The Benefits

Cost Reduction and Operational Efficiency
The solution consists of the implementation of two GCO (Generic Closure Organizer) splice enclosures in strategic manholes outside data centres and direct cable connections to client racks streamlined their network topology. These high-capacity, weather-resistant enclosures served as centralised connection points for the company's extensive network.This solution directly addressed their primary challenge of high costs associated with purchasing cross-connects for every connection.

By consolidating connection points and simplifying the network architecture, the company not only cut down on immediate expenses but also reduced the operational complexity of managing multiple cross-connects, leading to long-term cost savings and improved operational efficiency.

One unified network
The new network design, featuring direct connections from GCO splice enclosures to client racks, resulted in reduced signal attenuation and improved overall network performance. By bypassing multiple connection points within data centres, the company could ensure more reliable and consistent connectivity for their clients.

This enhancement in network quality strengthened the company's position as a leading provider of interconnection and internet exchange services, allowing them to meet the growing demands for efficient data transmission in the digital age.

Improved Scalability and Flexibility
The implementation of the 288-fibre cable as part of our Bulk Fibre solution provides the customer with abundant connectivity options to meet current and future demands. This high-capacity cable allows for efficient network expansion without additional physical infrastructure, enabling cost-effective scaling and rapid deployment of new services.

By replacing numerous cross-connects with our Bulk Fibre solution and utilising a space-efficient 288-fibre cable which is solely dedicated to them , we have provided the customer with a streamlined, cost-effective, and future-proof connectivity solution that addresses their immediate challenges while strengthening their position in the fast-evolving landscape of internet exchange services.

Why euNetworks?

A history of delivering premium bandwidth infrastructure

Our heritage is in delivering the bandwidth requirements of the most demanding customers in the world, from hyperscalers, global carriers and digital service providers, to financial service providers, high frequency traders and exchanges.

A clear focus on managing critical networks

Our customers trust us and rely on our focus and expertise to deliver their core network infrastructure, the foundations on which they run and deploy the services for their users and customers. We understand the critical nature of our customer's networks and are dedicated in our management of them.

A unique & differentiated footprint

We're a pan-European bandwidth infrastructure specialist with a unique fibre network built for business-critical services. We're focused on rapidly delivering and managing that network for our customers.

With over 574 key data centres and data hubs connected with deep fibre networks in 18 cities as well as a highly differentiated long haul network that spans 46,400 route kilometres across 17 countries, euNetworks has multiple, diverse connectivity options in cities, across regions and throughout Europe. This delivers a seamless connectivity experience for our customers across our footprint.

To find out more about how we can help you with your critical network challenges, get in touch today.

eunetworks.com
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