Corning Carrier Newsletter
Europe, Middle East and Africa

Issue 3, 2016

ACCESS ALL AREAS

How to lower the cost of fibre rollouts

Please download the Cybermoor Case Study.
Download Case Study

Broadband has become a life-changing catalyst and compelling business enabler.
Although 97 percent of EU homes are covered by broadband internet, speeds vary.
Rural or low-density population areas often have lower speeds or no access at all, creating the so-called digital divide.

Innovative business models have encouraged organisations to get involved in fibre to the home (FTTH), from traditional telecom operators to major utility companies, municipalities, and even rural community organisations.

Cybermoor Case Study
In the UK, one such example is Cybermoor. Operating at a fraction of the scle of a major FTTH deployment, its village-sized scheme needed just as much reliability and quality for its subscribers. Without access to any specialised splicing skills and facing numerous planning issues (including ancient cobbled streets and buildings), pre-connectorised solutions from Corning were the ideal choice.

The latest reports indicate that the EU is targeting ambitious speeds for households, and telecom companies are being encouraged to build new, faster fibre broadband networks to speed up internet connections.

While estimates for costs vary, 115 to 270 billion euros is needed to make ultrafast broadband available to all European citizens.

However this happens, lowering the cost of deployment and operation will help encourage investment in broadband roll-out and decrease funding thresholds.

Let's take a look at what can be done to reduce these costs …

Access to alternative physical infrastructures such as sharing utility ducts can reduce costs without having to dig up roads. Using the latest micro cables allows non-disruptive, modular increments of fibre capacity within confined ducts to reduce civil costs and speed up deployment.

Aerial deployment of fibre optic cabling using existing telephone poles or pole shares with electricity distribution in rural areas. Solutions must protect against environmental factors to provide reliable connectivity.

Enabling CAPEX deferment for service take-up. Install-as-you-grow solutions enable best-in-class methods for accelerating customer coverage with minimal capital investment. Pre-connectorised modular solutions allow connection ports and optical splitters to be added speedily on an as-needed' basis.

Reducing the need for skilled labour and increasing speed of deployment. Innovative solutions eliminating time consuming tasks like job setup, cable access, and splicing, and allowing modular and fast deployment can reduce installation time (and associated costs) by 50 percent or more.

Please download the Alma Case Study
Download Case Study

Minimising field-testing and time pressures in outside, often inhospitable environments. With pre-connectorised solutions, the complex, precision-testing processes occur in a controlled factory environment, changing the way cables and connections are tested in the field.

Extending reach by utilising the latest fibre technology combining the benefits of very low attenuation and improved macrobend performance.

Together, the above solutions help to achieve maximum coverage and roll-out of superfast broadband.

For more information download our Alma case study on the right side or visit our website.

PRODUCT NEWS

Looking for reliable and proven components in your network? Read more about our OptiTap connector, FlexNAP system, and PasMAX system and learn what these innovations can do for you.

Ensuring reliable FTTH connections with hardened connectivity

In fibre to the home (FTTH) deployments, every component is critical, especially the hardened connector. It must protect against extremes of temperature, moisture, and humidity. Connector reliability is crucial as connections make or break a network.

View our **OptiTap**® **connector brochure** to discover the value of our hardened connectors, which often exceed rigorous outside plant reliability protocols. Corning conducts extensive approval testing to ensure every operator gets a product they can depend on for years to come.
OptiTap® connectors on pre-connectorised subscriber drop cables enable speedy local customer connections with increased efficiency and cost savings as customer uptake of FTTH services grows.

View our OptiTap Connector brochure.
Download Brochure

Watch our OptiTap connector video.
Watch Video

Watch our animated video for a closer look at the reasons our OptiTap connector has established itself as the industry standard.

Faster FTTH roll-out with FlexNAP™ pre-terminated systems

Up to five times faster than traditional field installations, the FlexNAP system provides a cost-effective way of deploying optical fibre in outside plant distribution networks. It utilises standard optical fibre cables upon which network access points are pre-installed at specified locations.
The cable and network access points are tested and shipped as a complete distribution system. The increased speed of network deployment, along with the reliability of factory testing, offers less installation complexity, 80 percent fewer

splices, reduced labour and faster service roll-out.

Visit our website for more information on the [FlexNAP system](#).

More flexibility and less disruption with the PasMAX™ system

As much as operators want to ensure reliability in the outside plant environment, a secure central office solution is also relevant for network performance. Today's unprecedented demand for secure, high performance fibre-based services calls for a fibre management solution putting flexibility, link integrity, and protection at the heart of an operator's access or delivery network infrastructure.

Designed for switch centres, headends, or points of presence deployment, our PasMAX system helps operators maximise reliability while optimising OpEx. It does this through a host of smart features maximising accessibility while minimising movement of fibres, cables, and patch cords. This ensures the fibre links always remain protected, even as network engineers operate the system around the clock in response to the latest demands. PasMAX benefits include:

Download our PasMAX system data sheet.
[Download Data Sheet](#)

- **Better OpEx:** Faster and easier to build, install, and manage
- **Greater protection:** Single circuit management fibre routing
- **Easier access:** Integrated patch cord management system
- **Flexible deployment:** Multiple connectivity options
- **Space saving:** Compared to other single-circuit systems
- **Scalability:** From single cabinets to rows of 100,000+ ports

Now operators can respond to tomorrow's changing application and bandwidth requirements more quickly and efficiently than ever before, without disrupting traffic or compromising existing connections.

For more information, download our **PasMAX system data sheet** on the right side.

FOCUS ON...Building Access Terminal

The building access terminal (BAT) is a wall-mountable building distribution point that supports high-capacity cabling and delivers high-speed communications to users within a building. The product was awarded a special mention for outstanding product design from the German Design Awards 2017.

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"Corning is delighted to receive the mention, which honours the commitment of our product engineers, from the highly esteemed, international jury", mentioned Jan Ziegler when handed over the award (Marketing Manager).
"This is a logically structured and well-organised distribution system", justified the jury.
The product's technology represents an evolution in communications within buildings, marking a departure from congested ducts full of copper cables and the need to provide power to network devices.
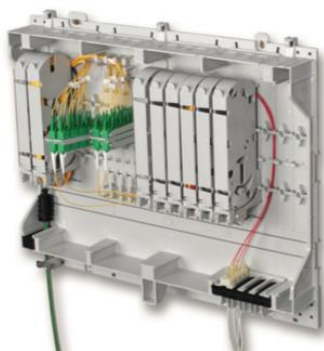
The BAT is a wall-mountable building distribution point that supports high-capacity cabling infrastructures to deliver high-speed communications to users within a building.

This single housing can serve a multitude of purposes, including the deployment of fibre-based Gigabit passive opptical LANs (POL) within enterprises, as well as the delivery of FTTH services to customers in multidwelling buildings (MDUs).

Design quality is about continuously pleasing the product users. The BAT provides highly flexible and customised solutions for MDU deployments:

Its modularity and flexibility takes into account the varying requirements of different sized multi-storey buildings.

The wall-mountable BAT provides a clean solution to address building aesthetics. Its slim, shallow design and rounded housing edges give it an unobtrusive appearance.
It can be installed and worked on quickly and easily, with minimal disruption to businesses and residents.

How did the BAT solve our customers' problems?

Find out below:

Download our case study "Clearly Defined by Design"

Download Case Study

Download our case study "Customisation to Achieve Network Design Goals"

Download Case Study

Download our case study "Last Minute Design Change Made Easy"

Download Case Study

Download our case study "Product Use Case - For Distributors & Integrators

Download Case Study

For more information about the BAT, visit our website.

CONNECTED CONTINENTS

The EU Commission recently adopted a set of initiatives placing the EU at the forefront of connectivity. Find out what some operators are doing to increase both coverage and speed.

Fibre news snippets from Europe

On 14th September, 2016, the EU Commission adopted a set of initiatives placing the EU at the forefront of connectivity.

By 2025 all schools, transport hubs, main providers of public services, and digitally intensive enterprises should have internet connections with speeds of 1 Gigabit per second. All European households should have access to download speeds of 100 Mbps, which can be upgraded to 1 Gigabit per second.

Many operators are busy with projects to increase both coverage and speed:

FRANCE
Orange France is improving fixed broadband services for 2.5 million homes by the end of 2019, while planning extensive 4G and LTE upgrades. Next year, operator SFR will roll out 1 Gbps fibre-based services in two suburbs of Lyon.

GERMANY and ITALY
Underserved areas in Germany, called white spots, have been allocated money to support high-speed infrastructure by the government. The total fund stands at €4 billion ($4.4 billion), which ministers hope will support the development of a Gigabit society throughout the country. The Italian government has pledged the same in Italy, which has received European Commission approval.

POLAND
The latest report from national regulator UKE details the doubling of Polish FTTH subscribers in 2014/2015 to 310,000. Leading operator Orange Polska believes it has now reached one million homes in 26 cities with its fibre-optic broadband infrastructure, and plans to extend coverage to 33 more cities by the end of 2016. The operator's $555 million investment aims to reach a total of 3.5 million premises within the next three years.

CORNING IN THE NEWS

EDGE8 is the industry's first modular, tip-to-tip optical cabling system for the data centre to feature a base-8 cabling design. The solution was again recognized for its outstanding design and performance.

Top awards for innovative data centre cabling

Data centres use advanced optical cabling solutions

Our EDGE8™ Solution recently received "Data Centre Cabling Product of the Year" award at the 2016 Data Centre Solutions Awards in London, United Kingdom, and the top prize for "IT and Network Infrastructures" at the German Data Centre Awards 2016 (Deutschen Rechenzentrumspreis), in Darmstadt, Germany.

German Data Centre Awards 2016 award finalists

Launched last year, EDGE8 is the industry's first modular, tip-to-tip optical cabling system for the data centre to feature an 8-fibre (base-8) cabling design that maximises per-rack-unit density for better network scalability and improved link performance.

Extensive discussions with all of the major transceiver, switch, server, and storage vendors led us to conclude that a base-8 solution would provide the best return on investment for 40 to 400G applications – transceiver independent without costly and disruptive upgrades.

Driven by increasing adoption of cloud computing and a growing demand for streaming video, data centres and SANs are migrating to faster transmission speeds to find and send data back to consumers as quickly as possible. The simple, flexible migration path to 40, 100, and even 400 gigabits per second that our EDGE8 solution enables has given data centre operators peace of mind that their networks are ready for tomorrow's transmission speeds.

These awards are another indication that our forward-looking, innovative approach is delivering tremendous value in the industry. Global adoption and industry awards during this first year validate our commitment to innovate infrastructures with favourable total costs of ownership for customers.