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Carrier Networks
Newsletter

CORNING

Content

Access All Areas

How traditional cable TV operators are pursuing RFoG opportunities

Cable TV operators still leveraging their initial infrastructure investments can look back on a successful long-term business model. Like the real estate developers of city skyscrapers, high returns have come only after decades of payback from major upfront costs.

The development of FTTH services using radio frequency over glass (RFoG) technology is becoming an increasingly viable strategy for these operators as they look to repeat the same trick. Just like the skyscrapers that carry on getting taller and better to satisfy the demands of business, retail and residential tenants, rich media telecommunications services demand an infrastructure capable of projecting forward into the next 20 to 30 years. With the huge leaps in deployment speed, simplicity and cost-effectiveness we now see with fibre, if the question is whether to improve existing cable infrastructure, or embrace new deep fibre deployments, then the answer is more and more obvious everyday.

Cable operators have long understood the real estate investment model that requires the diligent high-quality design, engineering and stewardship of a critical asset – the network – in order to safeguard a long-term annuity. These operators also innately understand, and have successfully harnessed, the demand for high-bandwidth services. Indeed, with FTTH still not enjoying mass-market availability through Europe, Middle East, Russia and Africa, it is mostly likely that the highest bandwidth demand exists almost exclusively among the subscribers of cable operators.

The biggest risk to the success of a long-term investment model is the failure of the asset to last the distance. This is where preconnectorised solutions from Corning deliver unparalleled value, enabling the network to sustain the requirements of rapid project construction and low-skill install, yet deliver reliability and performance way beyond its projected lifetime.

Connected Continents

Fibre news snippets from across EMEA

UK

A parliament committee has recommended that independent fibre infrastructure providers be allowed to fill in the gaps left by BT. Politicians are concerned about missed targets for superfast broadband for 90 percent of rural areas.

NETHERLANDS

Testing for a new transatlantic 100 Gbps link for research and education networks are proceeding successfully. The project - ANA-100G – includes exchange points in New York and Amsterdam.

ITALY

€200m will be spent on new broadband and ultra broadband incentives for individual Italians, according to government plans. Meanwhile, mini-trench fibre laying and other innovations will net the government €5bn in savings.

QATAR

Ooredoo is investing more than QR1bn ($274m) to develop its nationwide fibre optic network, and aims to connect all homes to services by the end of 2014. The roll-out is reputed to be one of the world's fastest.

SAUDI ARABIA

Mobily is linking more than 150 government institutions with fibre, and aims to cover more than 1m homes with FTTH by the end of 2014. STC, meanwhile, has announced 600,000 FTTH connections and counting.

IVORY COAST

New projections forecast the country's ambitious $210m, 6,700km fibre optic project, which started development last year, will eventually Internet-enable 30 percent of Ivorians by 2018, up from just 2 percent now.

KENYA

Proposed law changes could force Kenyan property developers to recognise fibre access points as essential infrastructure, like water and electricity. Legislators are examining similar plans for new highway construction.

RUSSIA

According to independent estimates, Russia either had or could soon overtake the U.S. in fibre connections. Both stand at around 20m homes passed, but a host of Russian operators are running ahead with deployments of 100 Mbps services.

Product News

nClosure® Splice Housing for Copper Telecommunication Cable Networks

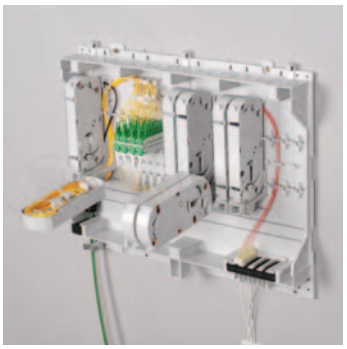
The nClosure® Splice Housing has been designed to provide the maximum protection for splices with a minimum level of installation effort. It can be installed in five minutes and opening/closing/reopening does not require any special tooling, heat shrinking or the consumables commonly

associated with mechanical closures such as sealing tapes or cords.

Building Access Terminal (BAT)

The BAT is a wall-mounted housing that acts as a termination point for outside plant access cable, as well as a clearly separated building distribution module for FTTH applications.

A range of features, including flippable and twistable trays that allow for easier access and better handling, enable



maximum flexibility for splicing, splitting and patching applications.

FTTA Hardened Interconnect Solution

The fibre-to-the-antenna (FTTA) hardened interconnect solution maximises deployment success by using hardened components that offer increased robustness over traditional methods. Ideal for congested installations, the preconnectorised assemblies allow for installs with minimal fibre experience/ training, while the solution's

streamlined components eliminate the need for a fibre transition housing at the top of the tower.

True Lock Hardline Connectors

The new True Lock Hardline Connector range from Corning features an innovative locking mechanism that prevents the ferrule from turning when tightening the connector. Other unique design features enable safe, simple and successful installations every time, requiring a significant reduction in tightening torque.

Focus on...

OptiSheath® MultiPort Splitter Stubless Terminal

Splitters are a lot like pens; there always seems to be plenty of cheap ones lying around, which typically do an OK job for most of the time.

Of course, for the right price, an infinite number of incrementally specialised components are available to suit an infinite number of deployment scenarios. But life isn't like that – and neither are FTTx rollouts. The sums don't add up if Splitter A will live its existence in the controlled environment of a brand new city-based comms room; while Splitter Z contends with life down a hole in an exposed Arctic tundra. High quality can always be found for an artisan product; but for a business case to work, carriers need to find high quality at a mass-production scale.

Designed for use in outside plant fibre access networks, the innovative OptiSheath® MultiPort Splitter Stubless Terminal provides fast, easy subscriber connections and splitter functionality in one low-profile housing.

By enabling incremental subscriber connections, service deployment costs are deferred to better match revenue streams. Splitter functionality reduces the distribution cable fibre count requirement, lowering initial cost.

The terminal features OptiTap® Single-Fibre Connector ports for faster customer drop terminations with lower installation costs. The terminal's reliability and flexibility make it the ideal choice for network access point terminals in all fibre access networks and fibre-to-the-x (FTTx) deployments.

The ability to place the OptiSheath MultiPort Splitter Stubless Terminal in a rugged, modular footprint reduces the complexity of network planning and the number of part numbers required in inventory.

The terminal is available in 4-port (1x4 splitter) and 8-port (1x8 splitter) configurations to reduce overall distribution cable fibre counts. Factory installed and tested, each terminal assembly benefits from Corning quality assurance and meets the highest applicable IEC standards.

Three-minute interview

FTTx engineers work fast with Corning technology, and so do our interviewers! In each issue, we invite a key industry executive to answer questions about real operator challenges and opportunities, in just three minutes.

First in the hot seat is Corning's own Tadhg Leonard, Vice President Product Line Management Global Solutions.

Q: What challenges do operators face today?

A: Historically, residential broadband requirements placed a heavy emphasis on download speed to support applications like IPTV. With consumers today at least as likely to upload content, there is greater emphasis on both upstream and downstream speeds. In the mobile arena, consumers have also become more discerning, with requirements for greater speed, lower latency and faster response times – as well as great coverage. Finally, the growth of cloud applications places additional demands on the network as customers' experience of these services crucially depends on the performance of the supporting transport network.

So, how much bandwidth is enough? How can operators future-proof their networks while optimising their investments? Operators must significantly increase their optical network deployment, particularly in the access network. Vectoring + VDSL, FTTB and FTTH are options to be considered, but one thing is clear: more and deeper fibre deployment is required to meet the high-bandwidth needs of today and tomorrow.

Q: Has FTTH now won the next-generation broadband debate in EMEA?

A: In some places, this is definitely the case. However, broadband deployments involve complex decisions, often compounded by considerations as to the kind of copper access network available. Depending on loop lengths, quality and maintenance levels, it may be viable for certain operators to consider VDSL networks. Elsewhere, operators are deploying FTTH to differentiate themselves by offering bandwidth and network performance well in excess of what copper-based broadband can offer.

FTTH has unequivocally won the broadband debate in greenfield access network deployments. Almost all operators now choose to deploy FTTH for new greenfield sites.

Continued overleaf...

Q: Why are Russia and the Middle East such hot spots for FTTH?

A: These areas share a combination of market factors that drive their adoption of FTTH.

1) Operators and, in many cases, national governments, have set out agendas that target Gigabit levels of network performance – which FTTH is best placed to deliver.
2) In Russia and many Middle Eastern states we see major shortcomings in the extent and quality of existing access networks – presenting a compelling greenfield opportunity for FTTH network builders. In the Middle East particularly, many cities are rapidly expanding.
3) Finally, access to capital funds is rarely an obstacle. For example, many of the sovereign funds in the Middle East have capital to invest. All can expect to enjoy a positive return on FTTH.

Q: Where is future cabling innovation heading; what kinds of advances are emerging?

A: Almost all operators today have either eliminated or significantly downsized their in-house network deployment capability, which in turn has created major growth in the use of subcontract labour. The implications for cabling and connectivity innovation are clear. We must help operators achieve the same or greater level of network quality and performance while being less dependent on the training or quality of the installer.

Some of the key innovations Corning is delivering today include:

- A comprehensive range of preconnectorised Plug & Play™ Solutions
- Smaller diameter cables for better packing density and higher duct utilisation
- Fast access cables making it easier and safer to open and terminate outside plant cables
- Bend-insensitive, ultra-low-loss fibre innovations for easier install and higher performance
- Simple connectors delivering faster field-installable termination

Upcoming Events

Find Corning at the following upcoming events:

3/10/13 **SCTE Balkan Broadband Conference and Exhibition**
Zagreb, Croatia
thescte.eu

07/10/13 **Iraq Telecoms Conference**
Istanbul, Turkey
iraqtelecoms.com

12/11/13 **AfricaCom**
Cape Town, South Africa
africa.comworldseries.com

27/11/13 **FTTH Council MENA Conference**
Marrakech, Morocco
ftthcouncilmena.org

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Each issue, we look behind the news reports to explore a new reality for the FTTx industry.

Taken from The Queensland Wombat

'Dare to dream' when changing careers, is the advice from newbie Internet cabling installer Jason Le Droit. Having spent 11 years as an experimental volcanologist, anxious Jason had gotten used to living on his nerves, even before a freak accident involving 130 tonnes of molten lava, six kegs of lager and a koala, curtailed his hopes of achieving a professorship and left him all but unemployable.

"I'd got really down, you know, after my careers advisor took me to one side and told me my job options were extremely limited," recalls the 34 year old from Brisbane, whose friends teasingly call: Shakie Jakie. "I had to find a role that didn't need a steady hand."

In fact, it was one of these friends who saw the job advert for a Cabling Installer with new superfast FTTH broadband provider Dinkum Tel. "I can't hold a can of Cola for more than 30 seconds without making it explode, but connecting up homes onto the network? That's easy, mate."

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