

Publication: Brainstorm
Date: 01st February 2016



Fibre forges ahead

FTTH made great inroads in 2015, with more of the same to be expected this year.

by Ilva Pieterse

L

argely available for exclusive business centres and elite gated communities until recently, fibre developments in 2015 showed both the technology and the players to be serious contenders in the broadband industry. But why only now?

Simon Butler, Vox Telecom's senior product manager for carrier and connectivity, believes much of it boils down to the consumer demand for increasingly richer online entertainment.

"A few niche operators have taken advantage of this, with players such





“Fibre enables the realisation of things we’ve only ever spoken about.”

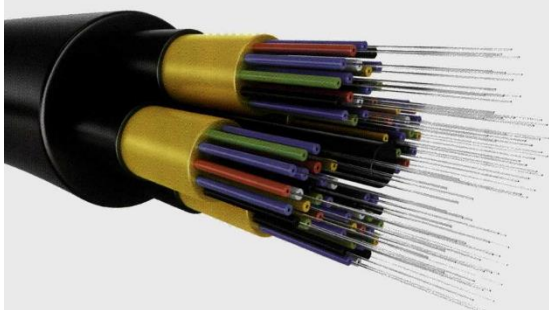
Simon Butler, Vox Telecom

as Vumatel being one of the biggest catalysts for fibre adoption in the consumer space. Off the back of some of its early successes, Vumatel has seen greater investment and continues to deliver on an aggressive rollout strategy,” he says.

Aggression appears to be the name of the game, as was clearly seen last year with some of the near-frantic land grab demonstrations for the country’s key metropolitan suburbs across South Africa.

AlwaysOn’s MD Hayden Lamberti points out how this healthy competition in the market means consumers now have the power to make their own decisions and are not restricted to a monopolistic market. They are benefitting from both a fibre provider/carrier point of view, and a service provider point of view.

“The fibre carriers that provide a true open access model, which gives the consumer a lot of choice, are generally favoured in the industry,” he says.



FTTH Myths

By Abz van der Merwe, MD of Frogfoot Networks

As with any media-hyped technology, the facts have a tendency to become skewed. Here are the top five FTTH myths to emerge recently.

Myth 1: You don’t need fibre. Wireless or copper is just as good.

Imagine for a moment that you have all the frequency spectrum in the world available to you to connect to the net (under lab conditions, no messy interference issues here). Now multiply that by the number of fibre strands in a cable. That’s a lot of capacity. Can’t touch that, copper and wireless!

Myth 2: You’ll never use all that bandwidth.

Heard of Moore’s law? Well, here’s one you may not have heard of: Nielsen’s Law of internet bandwidth states that, ‘high-end users’ connection speed grows by 50 percent per year’. Give it time. We have a few suggestions.

Myth 3: FTTH is too expensive for the person in the street.

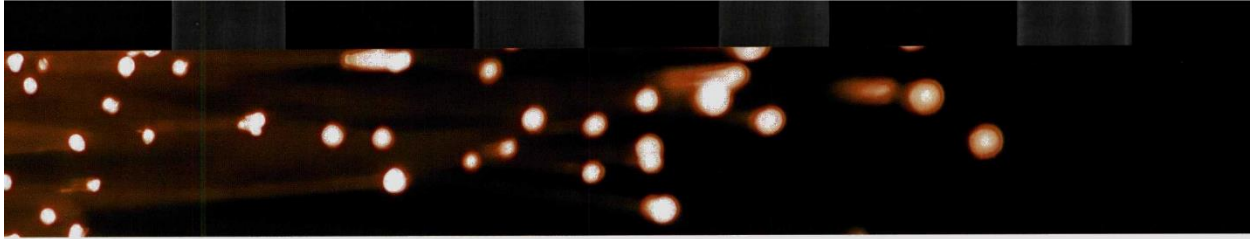
ISPs are offering fibre broadband packages for as little as R429; fibre broadband for less than R500 a month. There are people paying more than that for DSL.

Myth 4: There are more important things to attend to in SA telecoms.

The World Bank concluded that there is a direct correlation between broadband penetration and economic growth. Fibre in the last mile is enabling world-class broadband in SA. What could be more important?

Myth 5: Open access is just marketing hype.

South African subscribers need choice and a competitive market to keep pricing in check. South African ISPs have been wanting reasonably priced high-speed access links and backhaul for their customers for years. IP Connect has been a constant source of frustration for many. True wholesale Open Access fibre networks, well managed and reasonably priced, can make the world of difference to SA telecoms.



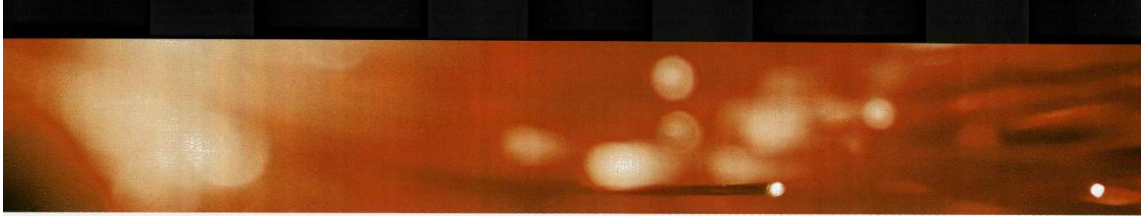
DFA, while traditionally specialising in the wholesaling of dark fibre infrastructure, has also decided to add a focus on the FTTH space by providing both the physical and layer-2 portion on an open access model, says Butler.

Adds Hugh Sonn, executive: product management and strategy at DFA, who has effectively been laying down fibre since 2007: "We saw Telkom and others adjust their ADSL pricing in 2015, since FTTH has become more prominent."

With regard to specific targets, Telkom has stated it plans to have one million homes covered by its network by the end of 2018, and approximately 140 000 by the end of 2016, Butler continues.

"Vumatel is targeting a further 200 000 homes, Frogfoot is aiming for 100 000, and a further 40 000 made up by other smaller providers," he says. "Combined, we could see approximately half a million homes with access to a fibre network by the end of this year." ►





“FTTH has been an investment challenge throughout the world.”

Marius Olivier, XDSL

It's important, however, to draw a clear distinction between home passed (those homes that are available to connect to a network) and homes that are actually connected. “We expect this to be anywhere between 35 and 50 percent,” Butler says.

The targets being set by the infrastructure providers are aggressive, and the more rapid deployment of the network and seemingly increased interest in funding will mean potentially reaching those goals with relative ease.

Spoilt for so much choice, should customers take advantage of the various short-term contracts available, or are longer-term contracts more beneficial? Both appear to have compelling arguments.

Metrofibre Networkx, an open access network provider offering both trench and aerial fibre, lauds the benefits of short- ▶

A big step up from copper

Source: FTTH Council Africa

Fibre has significant benefits and due to much lower attenuation and interference, optical fibre has large advantages over existing copper wire in long-distance and high-demand applications. Here are some of the top benefits of fibre, according to FTTH Council Africa.

- 1 Fibre is less expensive over time:** With no high-voltage electrical transmitters needed, fibre can help save your service provider, and you, money.
- 2 Fibre is greener:** Fibre is also more durable than copper. The raw materials to make fibre are plentiful (since fibre is glass, which is made from sand), whereas copper supplies are dwindling. Say goodbye to copper mining.
- 3 Fibre is thinner:** More fibres can be bundled together in the same space as a copper cable.
- 4 Fibre is clearer:** Fibre won't lose the signal the way copper does. And because light signals don't interfere with other fibres in the same cable, you get clearer conversations. Fibre-optic cables are safe from lightning strikes or electrical interference.
- 5 In most countries, fibre also increases the value of your property, and since fibre is considered an asset, it also makes your community a more desirable location.** Fibre allows us to turn our homes into smart-homes and it has the capacity to offer us triple play services. With a fibre connection, you can download a movie in a matter of seconds, manage your home remotely and have video surveillance, to name a few benefits.

er-term contracts for its partners and customers. According to the company's head of FTTH business development, Jacques de Villiers, Microfibre Networkx does not lock its customers into long-winded contracts, which most regard to be a plus point.

Marius Olivier, head of commercial business at fibre solutions company XDSL, states that although shorter-term contracts are now available for its consumer customers, hardware investments make for a compelling case in favour of longer-term contracts. "We are now seeing month-to-month contracts, six- and 12-month contracts, as well as 24-month contracts. However, long-term contracts do offer the benefit of the inclusion of hardware investment such as customer premises equipment (CPE)," he says.

Conflicting strategies

No project would be complete without its share of challenges, and last year was no exception for the FTTH industry. The biggest issues seem to have been centred on conflicting strategies between the various players, and meeting customer demand.

According to Olivier, different carriers have different strategies regarding where they plan to extend their fibre footprint. "For example, some



The players

Some of the notable players in the FTTH industry include:

- X Atec
- X DFA
- X Fibreco
- X Fibrehoods
- X Frogfoot
- X Greencom
- X ICTGlobe
- X Internet Solutions
- X LinkAfrica
- X MetroFibre Networkx
- X MTN
- X Neotel
- X Seacom
- X Smart Village
- X Telkom
- X Tesuco
- X Vodacom
- X Vox Telecom
- X Vumatel

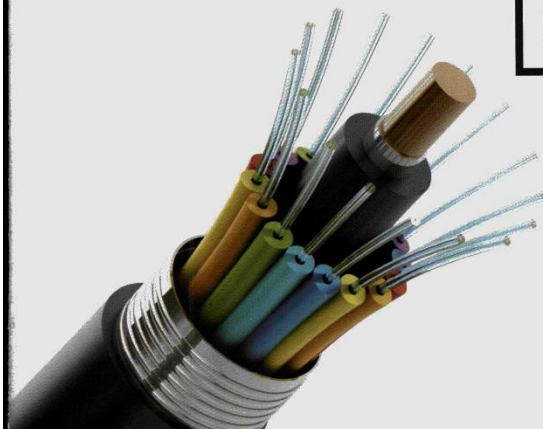
"The fibre carriers that provide a true open access model, which gives the consumer a lot of choice, are generally favoured in the industry."

Hayden Lamberti, AlwaysOn

carriers have a large footprint but focus on small pockets within the metropolitan areas – also known as the spotted dog effect. Some focus on supplying fibre to gated communities such as housing estates and business parks, whereas others focus on municipal areas and communities that feature a high income (where affordability is a key issue with FTTH). In addition, some infrastructure providers run fibre past the home whereby the fibre still needs to be connected to the individual home. Others link the fibre from the street to the individual home, making access far easier."

As the demand for FTTH is being created and more suburbs are being lit up, infrastructure providers have had to roll out faster in areas with the highest demand with less disruption to the end-user, according to Butler. "Previously concentrated in central Gauteng, the demand and opportunities further afield will mean that infrastructure providers will need to roll out even quicker."

He also believes consumer education (or lack thereof) is currently a bone of contention for the industry. "While fibre is by no means a new technology, it is more freely



“We saw Telkom and others adjust their ADSL pricing in 2015, since FTTH has become more prominent.”

Hugh Sonn, DFA

available to end-users for the first time, and there is a growing need to educate the market about its capabilities.”

Sonn points out that the cost of fibre infrastructure remains high, and a struggling economy means that prices to consumers can only decrease up to a point.

“The truth is, smaller operators are struggling with funding, and larger operators are bundling services to make offerings more attractive and cost-effective.”

He believes those who invest in the infrastructure need to take a longer-term view for their investment returns. “Various players in the market are targeting the more affluent areas in an attempt to mitigate some of the capital risks,” he says.

According to Olivier, South Africa is not alone in its FTTH hang-ups. “FTTH has been an investment challenge throughout the world. It provides a long-term return on investment (ROI) and in South Africa, this is an even bigger challenge due to all the legacy investment such as copper in the ground.”

However, on a more positive note, Butler believes the power of fibre lies not only in its high speed and reliable connectivity, but because it enables the realisation of things we’ve only ever spoken about.

“The Internet of Things, a world of ‘smart’ everything devices and the potential of an on-demand generation have never been more possible since the introduction of fibre,” he concludes. ■

