COMMUNICATIONS DAY

New GPON challenger emerges to compete with NBN

Another alternative GPON fibre provider has emerged with ambitious plans to offer wholesale services it says will be significantly superior than the NBN's. Sydney-based Fiber Corp is backed by veteran food industry businessman and horse racing identity Nicholas Moraitis and will look to deploy fibre infrastructure in new high-rise residential developments and for commercial customers.

EXCLUSIVE

As well as running one of the biggest food wholesalers in the country, Moraitis (pictured) is well known in horse racing circles, having previously owned Melbourne Cup winner Might and Power and been a director of the Sydney Turf Club.

For the newly formed broadband business he has brought in Sam Scoutas as MD. Scoutas was one of the founders of Moraitis Communications – an ICT services business that partners with Telstra – three years ago. His CIO is Joel Clarke, who has previously designed fibre networks for a number of property developments.

Fiber Corp will look to provide fibre services starting early next year at speeds ranging from 200Mbps up to 10Gbps. It has just inked a deal with US access vendor Calix, which will provide standards-based GPON and NG-PON2 gear for the new venture.

As well as offering fibre-based broadband, the company will look to provide smart home and building automation services to both residential customers and property developers.

"The combination of Fiber Corp and Calix technology means Australian residents and businesses in metropolitan areas will have the access to technology that, if market demands, can power broadband up to 100x faster than the fastest speed offered by NBN Co," Scoutas said.

Fiber Corp will be one of a number of companies that are promising to offer alternative fixed broadband services that compete with NBN. As previously reported in CommsDay, Melbourne company DGtek is looking to offer GPON-based fibre ser-

vices, while TPG-owned FTTB Wholesale is already offering fibre-to-the-basement broadband to retail RSPs across more than 1,500 buildings in mainland state capital cities.

Precise details of the Fiber Corp model are still under wraps, but Scoutas said the company would partner with Australian developers across all Australian capital cities and metropolitan areas to bring new apartment developments into the broadband era. It will also partner with selected RSPs to underpin its broadband expansion.

He said Fiber Corp had developed a solution that will offer multiple building networks to be enabled via overlay on its fibre optic backbone. Its services will include internet, voice, IP intercom, IP CCTV, access control and smart home automation.
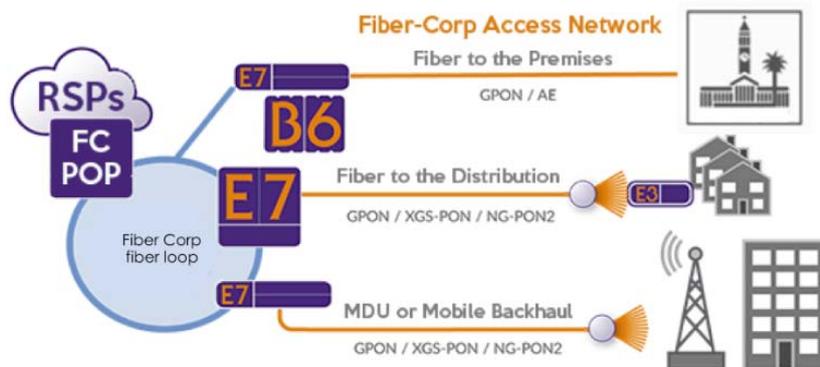
"Fiber Corp is changing the culture of how developers are designing their buildings and cities with cost effective access to cutting edge technology," Scoutas said.

"For the end user this will not just mean access to high-speed internet at least twice the speed of the NBN, but also buildings that have smart home and building automation as standard, that have high quality IP CCTV, access control and IP intercoms as standard inclusions."

Calix VP for international markets Joseph Haddad said that next-generation PON services such as those proposed by Fiber Corp were disrupting markets in a number of countries. "By focusing on multi-dwelling unit and commercial deployments and delivering the fastest broadband speeds available anywhere, Fiber Corp is well positioned to differentiate itself in the market, rapidly introduce new services, and build market share," Haddad suggested.

Optical Solutions Australia, a long-time Calix channel partner, has also been crucial to providing Fiber Corp with the necessary technical and commercial support for launch, Haddad noted.

Geoff Long

Residential users to get satellite priority over Qantas

Residential users of NBN's Sky Muster satellite will be given priority over Qantas' proposed satellite-based inflight Wi-Fi service, according to NBN CEO Bill Morrow. Giving evidence at a Senate Estimates hearing, Morrow said the Qantas service would not be guaranteed bandwidth when it is needed for broadband services on the ground.

A number of rural groups including NSW Farmers have questioned the deal to provide Qantas with capacity for the service when some residential users are struggling with data quotas. However, Morrow defended the arrangement, which he said would offset the high-cost of providing services in remote areas.

He said that satellite was the most expensive access technology, costing about $8,000 per premise to provide. As a result, the airline deal was a "favourable thing for the nation" and a good use of an existing taxpayer funded asset.

Morrow told senators that the Qantas service would only use idle capacity and would not have a set allocation of bandwidth. "Our intent is that the priority services [are] for the ground-based homes and businesses that are targeted with satellite," he told the hearing. "If they are using all of the capacity and if a plane flies through that beam, then a plane doesn't get any sort of internet connectivity. If, however, there is available and idle capacity, then the plane can download or upload depending."

Earlier this year Qantas announced that it would begin in-flight trials of Wi-Fi services in late 2016, with plans to launch full services on domestic flights from early 2017. It will work with US satellite company Viasat to utilise satellite capacity from NBN to offer the service.

Qantas CEO Alan Joyce said at the time that the goal of bringing high-speed Wi-Fi to the domestic aviation market had been an ambition for a long time and also noted that it would be offered free of charge. "The sheer size of the Australian landmass creates some significant challenges for inflight connectivity but the recent launch of NBN's satellite has opened up new opportunities that we plan to take advantage of with ViaSat's help," he said.

Meanwhile, Morrow highlighted that recent teething problems with the SkyMuster service had mostly been sorted out, with service levels back within an acceptable range. He also told the Estimates hearing that communities on the west coast of Tasmania had been successful in lobbying efforts to move from a satellite-based NBN service to fibre. They are expected to have FTTN connections some time in 2018.

Geoff Long

NEXTDC plans to retain ownership of new facilities in Brisbane, Melbourne, Sydney

Data centre operator NEXTDC has told shareholders that it intends to retain the underlying properties associated with its planned new facilities in Brisbane, Melbourne and Sydney once they are developed. It differs from its previous model, where it sold the underlying properties and then leased them back.

Speaking to shareholders at the company's AGM, NEXTDC CEO Craig Scroggie said the new strategy increased its control over the assets and was consistent with the increasing scale and operating leverage of its business activities.

"We are confident that the ongoing demand from these markets we know so well, together with our return expectations, warrants this next phase of capital investment,"

Scroggie said.

Late last year NEXTDC announced that it will develop two new data centres in Brisbane and Melbourne, adding up to 31MW of capacity to its national network. It has now acquired a site in Tullamarine for the construction of M2, and also acquired a site for the construction of B2 in Brisbane's Fortitude Valley. Scroggie said that development was now underway and practical completion for the new data centres is scheduled for June next year.

It has also since announced plans to develop a second data centre in Sydney following a new customer contract that took its S1 facility to 82% utilisation. Scroggie said the company is currently undertaking detailed due diligence on preferred sites for the new facility, which will have an expected target capacity of approximately 30MW. It expects practical completion of S2 in the first half of FY18.

In the 2016 financial year, the company reported its first full-year statutory net profit since forming in 2010. It saw revenue grow 52% to nearly A$93 million, with a 20% increase in contracted utilisation to over 26 megawatts.

Scroggie also noted a strong start to FY17, with revenues forecast in the range of A$115 million to A$122 million, up 24% to 31% from FY16. Capital expenditure for existing facilities will be from A$80 million to A$100 million; for B2 and M2 from A$120 million to A$140 million; and for S2 from between A$60 million to A$100 million.

Geoff Long

PaaS cloud comms firm Twilio to invest in Australian growth

Cloud communications platform Twilio is investing in Australia to take on traditional telco vendors like Cisco, aiming to broaden its offering in-market and expand on a customer base that already includes notable foundation clients like ING Bank.

Headquartered in San Francisco, Twilio enables software functionality to make and receive phone calls, and send and receive SMSs, via web service application programming interfaces. The firm launched services in Australia back in 2013; global product development head Patrick Malatack, in Sydney to catch up with customers and present at the StartCon startup conference, told CommsDay that many Australians had used the firm's services even if they hadn't heard of the brand.

"If you've ever ridden in an Uber and called the driver, that's Twilio, we're orchestrating that communication – or if you've ever used Airtasker... we're providing a layer of communications infrastructure in the background," he said. "Here in Australia, we've [also] partnered with ING bank, globally, to deliver their customer support experience; when you chat with a support rep, that's Twilio powering that."

"You can reach any phone number in the world on our cloud platform today, and what we've been doing over the years is rolling out more local country capability as we've continued to evolve the product – adding things like toll-free numbers in-region,

support for mobile numbers as we have in Australia, continuing to expand the offering."

Malatack describes Twilio as doing for communications roughly what Amazon Web Services has done for compute (Twilio itself is powered by AWS, and uses that firm's localised infrastructure). The company sells direct to developers within client firms, capitalising on a trend whereby developers are being given increasing control over compute and comms platform budgets, and is going head to head against established telco hardware vendors. "The biggest competition we face is the legacy way of doing communications; companies like Cisco and Avaya that have been providing communications infrastructure by selling you a box that you would rack," he said.

Telcos, on the other hand, are partners or potential partners. "We're making telecommunications infrastructure programmable, and similarly with how the telcos would partner with Avaya or Cisco – they would sell their connectivity plus the box of one of their legacy communications vendors – we view carriers in the same way," said Malatack. "They're partners, and we work with many of the operators around the world to deliver our services."

"We're spending aggressively here in Australia, I'm out here learning from some of our customers... and [we're] really investing in the region and expanding our offerings here in Australia."

Petroc Wilton

TD-LTE group refocuses on finding new 5G revenue streams for carriers

The mobile app explosion facilitated by 3G and 4G networks has largely relegated operators to simply providing 'dumb pipes', exactly as they'd feared. And the shift to 5G will only make sense for carriers if it opens new markets and revenue opportunities.

That's the message from the consortium of major international carriers making up the Global TD-LTE Initiative which, having declared victory on its original mission of TD- and FD-LTE integration, has now set its sights on finding those new 5G markets.

Earlier this year, the GTI – which counts major TDD operators such as Optus, China Mobile, Bharti Airtel and Softbank amongst its members – had declared that with the integration of TD and FD-LTE largely accomplished, it would focus on 5G. Now it has specified what form that focus will take, via chair Craig Ehrlich's keynote at Huawei's Mobile Broadband Forum in Tokyo.

"I'm a technology investor... and I'm constantly meeting people who say 'invest in us because we want to disintermediate the mobile industry, we either want to just use
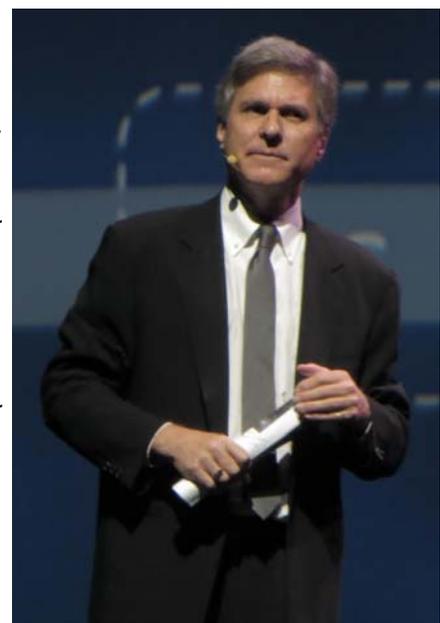
their network or we want to somehow get around paying for anything.' If you look at 3G and 4G... applications, and some of the big companies that have created these applications, the mobile industry has been just that pipe that we feared.," he said.

"The transition to 5G only makes sense if we're able to create new markets. We need to find a way for our industry, for operators, to have a bigger piece of the pie. If 5G does not focus on that, then we're just buying a lot of equipment and talking about a lot of hype."

While acknowledging the importance of collaboration with other industries, Ehrlich warned that "there are so many people who want to take our business model away from us. So it's critical that we move very, very fast." The GTI's own efforts will be centred around several key initiatives, including facilitating a cross-industry ecosystem and helping to push sub-6GHz end-to-end 5G systems; and around the 5G Joint Innovation Lab run by China Mobile, with which it is a partner.

"That lab, which is open to all, is the cornerstone of GTI's research, and GTI's exploration of these new business models, and working with new industries," said Ehrlich. "What we will be focusing on is the spectrum, the technology and the commercial decisions – and most importantly, how we find industries, enterprises that will work with us? And we do have some muscle, when you talk about the kinds of companies that are pushing forward at GTI, who will work with the industries, the verticals and say 'how do we build business models that will actually create revenue for both of us?'

Petroc Wilton was in Tokyo as a guest of Huawei

Internet Society calls for tighter customer data protection

Despite the growing proliferation of high-profile data breaches, customer data is still not part of the security discussion of many organisations – resulting in eroding levels of trust on the internet, according to the 2016 Global Internet Report from the Internet Society. "One of the key questions raised by this report is why are organisations doing so little to protect their customers' data?" said Internet Society fellow and author of the report Michael Kende. "Everyone knows that data security is a major issue for both consumers and businesses, yet companies are not doing everything they could to prevent breaches."

While the report reiterates the industry's calls for tighter security measures and the need to follow best practices – patching software for starters – it also advocates a multiprong approach for incentivising organisations to improve how they collect, use, store and ultimately retire their customers' data.

According to Kende, regulation such as mandatory breach notifications – active in markets such as the US and Australia – only goes so far since there are incidences of organisations failing to close vulnerabilities even following high profile breaches. Heavier fines, such as the Europe Commissions proposal to fine companies up to 4% of their annual revenue in the case of data breaches, would be one incentive for organisa-

tions.

Another approach would be to increase the liability of organisations towards their customers.

"Users don't get enough attention," Kende said. "In the US, users can be compensated for direct costs, but the long term vulnerabilities, identity theft, the financial costs and other aspects are not addressed."

Beyond making organisations more responsible and liable for breaches, the report also highlights some practical measures that could help companies safeguard customer data.

One simple approach is to collect and store only "what is absolutely necessary" and encrypt the data that is kept in data repositories.

Kende explained that in the US, social security numbers represent a major identity theft risk for users but are often required for identity verification and stored. While there is no replacement for the initial use of a user's social security number for identification, subsequently assigning users with a unique customer identifier could eliminate the need to permanently store social security numbers.

"If you don't store it, the risks go down tremendously," Kende said. "Companies should have a holistic view and step back and think, 'if there is a breach, what are they going to get, what are they going to be able to do with it, and what are the impacts on my customers?' rather than saying, 'storage is cheap, let's get whatever we can'." Along the same lines, organisations should destroy customer data when it is no longer in use.

Tony Chan

Singtel CTO retirement triggers management reshuffle

Singtel has announced a reshuffling of its top management in light of the retirement of its Group CTO Tay Soo Meng after nearly 50 years with the company. Tay will maintain an advisory role at Singtel, but his position will be filled by 20-year Singtel veteran Mark Chong starting 1 April 2017.

In moving to his new post, Chong will relinquish his current role as CEO International of the Group. Previously, Chong also held roles as EVP of networks for Singtel Singapore and COO of Singtel's Thai affiliate AIS.

In turn, Singtel newcomer Arthur Lang will take on the role of CEO International. Lang, who joins Singtel from CapitaLand Limited where he was Group CFO, will be responsible for the growth of Singtel's regional associates across India, Indonesia, the Philippines and Thailand.

"Mark has made significant contributions as CEO International. Given his understanding of business and technology, we are looking to him to further extend our position in technology," said Singtel Group CEO Chua Sock Koong. "Arthur, with his international business and finance experience, is a strong addition to our management team, as we continue to drive transformation at Singtel and push the company to the

next level."

Both new appointees, together with Singtel CEO for Group Digital Life Samba Natarajan, will join Singtel's Management Committee.

<div align="right">Tony Chan</div>

OPTUS ANNOUNCES CLOSURE DATE FOR 2G NETWORK

Optus has notified users that it is closing its 2G mobile network from 1 April, 2017. After this date users will not be able to use 2G devices on its network. So-called 3G single band (2100MHz) devices that also use the 2G network in certain locations will also lose mobile service in these areas when the 2G mobile network closes. The Optus 2G network was first launched in 1993.

HKT BUILDING HK-KOWLOON SUBSEA LINK

Hong Kong Telecom has announced a project to build an intra-city subsea cable linking Hong Kong Island and Kowloon. The Ultra Express Link is direct path across the city's Victoria Harbour between the city's new datacentre hub inside the Tseung Kwan O Industrial Estate in Kowloon and Chai Wan, an industrial area also housing several datacentres. Both locations are also in the vicinity of landing stations for international cable systems. HKT declined to reveal any technical details to the project, citing commercial sensitivity, but said UEL would provide lower latency than existing fibre routes and represent further diversity to the city's backbone infrastructure.

EX-ERICSSON EXEC TURNS OVER CLAIMED EVIDENCE OF BRIBERY

An ex-employee of Ericsson has reportedly been getting ready to hand over documents with evidence that the company used bribery to get contracts between 1998 and 2001. According to Swedish media reports the documents, from former Ericsson executive Liss-Olof Nenzell, showed Ericsson making massive payments via Zurich to undisclosed recipients around the world. The documents reportedly contained instructions on how to make the payments and the diagrams of the payment system components. The biggest payment made via the system equalled US$150 million and was sent to bank accounts in Malaysia, the report said. Payments were also allegedly made to Poland and Costa Rica. Ericsson, which is already under investigation for corruption in China and Greece, denied all the allegations, pointing to the use of commercial agents in international markets during that period.

ON THIS DAY 10 YEARS AGO: FROM THE COMMSDAY 2006 ARCHIVES

Telstra identified India and Malaysia as expansion markets for its operations, launching negotiations in both countries to achieve a level playing field with existing players... pioneering Australian IPT carrier ReelTime Media launched the first major local and legal online movie download and burn service in conjunction with Universal Pictures Australasia... Integral Energy struck a strategic business alliance with AAPT including joint marketing activities, and customer programs targeting the SME sector.