COMMUNICATIONS DAY

mmWave spectrum winners offered instalment plan to encourage 5G builds

Communications minister Paul Fletcher has directed the Australian Communications and Media Authority to allow successful bidders in next year's 26GHz auction to pay off their spectrum in instalments over five years.

Minister Fletcher is positioning the move as pro-investment, freeing up capital for faster 5G network builds.

"In light of the unprecedented economic circumstances, I have directed ACMA to provide an instalment payment option in the 26GHz auction to reduce the upfront capital costs and release capital that bidders can direct towards investments to build Australia's 5G networks and stimulate the wider Australian economy," the minister said in a statement overnight.

The federal government also revealed yesterday that the auction, for two and a half gigahertz of high-band spectrum, would be held in April of next year, sliding back slightly from a previous schedule of late March.

The outstanding spectrum access charges will be subject to interest equal to the government's projected cost of borrowing over the forward estimates. This effectively means that each of the five instalments will be priced at 20.32% of the total.

Five percent of the outstanding charges will also be required to be secured by a bank guarantee.

The direction does not remove the option for successful bidders to pay the spectrum access charge upfront, prior to the issue of the licence, if that is their preference.

An explanatory memorandum to the direction, signed by the minister on Monday, said: "The short range and early stage nature of mmWave spectrum technologies will require licence holders to make significant up-front investments to utilise spectrum in the band. In light of the unprecedented economic circumstances, reducing the upfront capital costs required for spectrum licences in this band will release capital that bidders can direct towards investments to build Australia's 5G networks and stimulate the wider Australian economy."

It continued: "This will promote the government's Communications Policy Objectives for the allocation of the 26GHz band released in October 2019 which include supporting the deployment of 5G technologies, promoting competitive market outcomes for the long-term benefit of consumers and encouraging investment in infrastructure, including in regional Australia."

It is not unprecedented for spectrum charges to be payable in instalments. For ex-

ample, the 2017 700MHz spectrum auction, won by VHA and TPG, allowed for three payments over three years. But the general policy since 2018 has been for upfront payments as per the recommendation of that year's spectrum pricing review. The five year instalment plan is, by historical standards, generous and will come as a surprise to potential bidders, none of whom asked for it in a consultation process held last year.

Grahame Lynch

Telstra to get $328m to finish NSW school fibre network

Telstra has secured a $328m contract from the NSW government to connect the last of the state's public schools to a dedicated fibre network and upgrade the entire network to support a significant speed boost.

Under the project, Telstra will connect the final 12 schools to the school fibre network the company started deploying for the NSW government in 2009. The company was awarded an initial $280m contract to deploy a more than 4,500km fibre network statewide.

Telstra Enterprise group executive Michael Ebeid said once the final 12 schools have been connected, the company will have rolled out more than 5,200km of fibre for the project, making it one of the largest fibre networks in the world.

" We know that digital inclusion, particularly for students, is a lead indicator for future employment opportunities. That's why we're thrilled to be working with the NSW Department of Education to ensure all students, regardless of where they live, have access to the amazing learning opportunities that quality, high speed connectivity brings," he said.

"This extensive fibre optic backbone also has the potential to be the foundation of broader benefits to the community in future."

In addition, the project will involve upgrading the entire network to allow an average speed increase of more than ten-fold for all schools.

A Telstra spokesperson told CommsDay that the details of the upgrade will vary by school, with some locations just requiring some network reconfiguration, with others requiring replacement hardware.

Telstra is also nearing completion of an $80m project to deploy fibre to more than 99% of South Australian public schools.

The deals mark some of the latest examples of state governments circumventing the NBN and deploying fibre networks of their own to government-owned places.

Dylan Bushell-Embling

Verizon partners with Nokia to build private LTE networks in Australia & globally

Verizon is partnering Nokia to launch an international private 5G platform for global enterprises in Australia, the Asia-Pacific and Europe.

Businesses can use the platform to deploy an industrial grade dedicated 5G network on their premises, with automation enablers that will allow for application deployment through a web-based interface. Verizon also announced new mobile edge com-

LAST CHANCE TO BOOK: TODAY!

COMMSDAY SUMMIT 2020

October 26-27 2020 **Hybrid event:** Fullerton Hotel Sydney & viewable online

Confirmed speakers include

Communications & Arts Minister Paul Fletcher

ACMA deputy chair Creina Chapman

TPG Telecom CEO Inaki Berroeta

NBN CEO Stephen Rue

Telstra CFO Vicki Brady
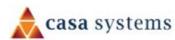
Optus MD Business Chris Mitchell

MNF Group CEO Rene Sugo

Vocus COO Ellie Sweeney

Shadow comms minster Michelle Rowland

Ericsson ANZ MD Emilio Romeo

Casa Systems SVP access devices Steve Collins

Cisco director, IT ANZ Julie Canepa

Telstra group general counsel Lyndall Stoyles

Vocus GM gov't & strategic projects Michael Ackland

ACCAN CEO Teresa Corbin

Comms Alliance CEO John Stanton

Swoop CEO Alex West

AMTA CEO Chris Althaus

Optus MD Networks Lambo Kanagaratnam

Nokia Oceania head Anna Wills

CommsDay Summit returns this month in both a physical manifestation at the Fullerton Hotel and an online format for those who cannot attend in person. As before, we will feature a full two-day programme of speakers addressing the business, policy and technology challenges for telcos. Plus the Edison Awards and CommsDay Hall of Fame as lunchtime events.

We are doing everything to make this year's Summit COVID-safe. We're doubling the room size and capping numbers to enable physical distancing. No touch registration process. Plated food & refreshments such as coffee delivered to table to avoid queuing. Constant cleaning of surfaces. Multiple sanitiser stations. No hand shaking. We're back in business in the safest way.

ABOUT THE CONFERENCE VENUE

The Fullerton Hotel is the new name for the Westin Hotel in Martin Place which has been the mainstay venue for the CommsDay Summit over the past few years. This time we are adapting the venue to confirm to the new normal of social distancing: doubling the space and placing hard limits on attendee numbers to ensure complete safety for all delegates and speakers.

COMMSDAY SUMMIT 2020
Final program
MC: Steve Cannane (ABC)

Revised dates: October 26-27 2020 | **Hybrid event:** Fullerton Hotel Sydney & viewable online

MONDAY OCTOBER 26

MORNING KEYNOTES
9.00 NBN Co CEO Stephen Rue
9.25 Vocus chief operating officer Ellie Sweeney
9.50 Ericsson ANZ MD Emilio Romeo
10.15 MNF Group CEO & co-founder Rene Sugo

10.40 Break

PLENARY
11.00 Telstra chief financial officer Vicki Brady
11.20 Cisco director, information technology ANZ Julie Canepa NEW
11.40 CommScope VP, Product Line Management, Broadband Home Solutions Ken Haase
"The Evolution of Fixed Wireless Access: From Rural to Mainstream"
12.00 Optus managing director, networks Lambo Kanagaratnam
12.20 Casa Systems SVP access devices Steve Collins
12.40 Nokia head of Oceania Anna Wills

1.00 Lunch and Edison Awards winners

TECHNOLOGY DEEP DIVE
2.00 Ciena VP, portfolio engineering, Blue Planet Kaliem Andersen
"Adapting to the new network pressure"
2.20 DGIT CEO Greg Tilton
2.40 Maser Alpha Wireless director of engineering Peter Liversidge
"Deployment Solutions for 5G Fixed Wireless Access"
3.00 ADTRAN regional chief technology officer APAC Anthony Camillieri
3.20 Boston Consulting Group managing director & partner Michael Schniering with Telstra Consumer & Small Business executive, value based management Sandy Cameron

3.40 Break

REGULATORY & POLICY FOCUS
4.00 Communications Alliance CEO John Stanton
4.20 Australian Mobile Telecommunications Association CEO Chris Althaus
4.40 ACCAN CEO Teresa Corbin
5.00 Close for day

TUESDAY OCTOBER 27

MORNING KEYNOTES
9am TPG CEO Inaki Berroeta
9.25 Federal Communications Minister Paul Fletcher (by video from Parliament)
9.50 Australian Communications and Media Authority deputy chair Creina Chapman NEW
10.15 Shadow communications minister Michelle Rowland (by video from Parliament)

10.40 Break

PLENARY
11.00 Vocus GM, government and strategic programs Michael Ackland
11.20 Telstra Group Executive Sustainability, External Affairs & Legal Lyndall Stoyles NEW
11.40 Swoop CEO Alex West
12.00 Optus MD business Chris Mitchell
12.20 TPG head of wholesale Dan Lloyd
12.40 RTI Cables' Dave Pearson

1.00 Lunch and CommsDay Hall of Fame inductees

AFTERNOON SESSION
2.00 Lightning seven minute talks with Vocus, Adtran, Dgit, MNF, RTI
2.40 Telco Together exec director Renee Bowker

3:00 Break

3.20 Deloitte Touche Tohmatsu partners Pete Corbett and Kate Huggins
"Digital consumer trends"
3.40 Delta Partners analyst Zia Bhadiar
"The 5G mmwave opportunity for Australia"
4.00 Close

pute services with Microsoft Azure.

Verizon Enterprise Solutions VP Asia Pacific Robert Le Busque told CommsDay: "What we're announcing today is a capability where we can go and work directly with an enterprise customer in partnership with Nokia and turn up a private 5G deployment for their campus or their facility and help them to realise that vision and that technology."

Le Busque said 5G adoption was taking place rapidly across Asia Pacific with spectrum availability now in place for private LTE in Japan, South Korea, Singapore and in Australia very soon.

He confirmed Verizon had been discussing private LTE networks with Australian customers for a number of months and expects uptake will accelerate faster than some other global regions. "Australia tends to be early adopters of new technologies; there tends to be a willingness to take technology such as private 5G and adopt and apply it here - [there] is a more agile mindset," he said. "[In the US] we saw uptake and maturity of rollout, much faster than we anticipated. As soon as they understood the capability and they understood how it could then integrate into their core fixed corporate networks, we saw strong adoption.

Le Busque said enterprises are looking closely at private 5G because it provides a long investment lifecycle, has standardised upgrade paths, is intrinsically more secure and offers the ability to prioritise and manage traffic in a far more dynamic and a far more discreet way. He said private 5G networks are not standalone networks but instead are integrated into an enterprise's corporate architecture, meaning carriers are well placed to manage these nascent networks.

MEC AND PRIVATE 5G: In the US, Verizon also joined forces with Microsoft to combine the telco's on-site 5G Edge network integrated with Azure edge services, following a similar deal with AWS.

Verizon was an early mover with 5G MEC, which provides both an IT service environment and cloud-computing capabilities at the mobile edge of its network, within the radio access network. The telco's mobile edge computing platform, which it is offering with private 5G, is designed to enable developers to build low-latency applications for mobile end-users and wireless edge devices.

Enterprises will be able to use edge computing to process their data locally, avoiding backhaul costs, while using 5G for high-speed wireless connections, typically using protected spectrum.

The telco's MEC service called Edge is available in Atlanta, Boston, New York, San Francisco Bay Area and Washington, DC - and is launching in further US cities before the end of 2020.

Le Busque told CommsDay MEC applications will come to the ANZ market despite the lower density of potential users, mainly because they will help companies overcome the "tyranny of distance" by reducing latency when combined with private LTE deployments.

Verizon said it will explore opportunities to co-innovate with Microsoft to deliver new value to industries ranging from manufacturing to healthcare.

Last week in the US, Verizon announced it would integrate its 5G MEC capabilities with Cisco's Sports and Entertainment portfolio to offer sports and entertainment ven-

ues connected and location analytics in real-time allowing them to manage crowd flows and meet contactless physical access and social distancing guidelines.

Verizon's 5G Ultra Wideband mmWave service is now available in 55 US cities and its 5G nationwide service is available to more than 200 million people in more than 1,800 cities around the US. The telco said it enables throughput at least 25 times faster than today's 4G networks.

NOKIA ALSO NABS AT&T: Nokia received another boost when AT&T announced it would offer the vendor's Digital Automation Cloud and Modular Private Wireless platforms to businesses in the US which are building private networks using Citizens Broadband Radio Service spectrum. AT&T's on-premises edge portfolio, which already includes 5G-capable AT&T Multi-Access Edge Computing, is expanding to offer these additional private cellular solutions with Nokia.

Appledore Research partner and principal analyst Grant Lenahan said: "Considering the majority of industrial site deployments will be based on private wireless, it's prudent for communication service providers like AT&T to leverage Nokia's proven private wireless solutions and vertical experience in the near future."

<div align="right">Simon Dux</div>

NBN Co management hit 95% of short term maximum incentive

NBN's top executives have received 95% of their short term maximum incentive after overachieving on all their key targets in the 2020 financial year. This compared to 76% in 2019 and 52% in 2018.

NBN Co's annual report, released yesterday, said that NBN Co "significantly overachieved" in premises RTC, premises active and EBITDA before subscriber costs, delivered an on-target and improving trend in NBN co -controlled metrics of customer experience, and saw decline in TIO complaints and achieved the highest ever level of customer satisfaction. "The board accordingly arrived at a figure of 95% of maximum for the short-term incentives for key management personnel," the annual report said.

This saw CEO Stephen Rue's overall compensation increase by $530,000 to $3.149m. Chief customer officer Brad Whitcomb saw a $155,000 rise to $1.402m and Paul Tyler, the now departed head of business, a $92,000 rise to $1.358m.

Chief financial officer Philip Knox earned $1.313m, chief network officer Kathryn Dyer $1.192m and new strategy officer Will Irving $1.004m, reflecting the fact he only joined the company a quarter of the way through the reporting period.

NBN board directors received total compensation of $124,304 and chair Ziggy Switkowski $247,933.

The increased compensation was criticised by shadow communications minister Michelle Rowland yesterday who said that NBN had revised down its targets making the incentives easier to achieve.

<div align="right">Grahame Lynch</div>

Optus adds AWS to its cloud offerings

Optus has announced a new partnership with AWS that will see the operator establish a dedicated business unit to help customers build new applications on the AWS cloud.

Under the agreement, Optus will offer customers a range of cloud services such as VMWare Cloud and SAP on AWS, and the dedicated business unit will provide migration support for workloads to help ensure a smooth transition to the cloud.

To pave the way for the new arrangement, Optus plans to provide training in AWS cloud skills for around 2,000 employees through the newly-launched Optus Cloud Academy.

The new academy will train Optus staff with skills across cloud, IoT, data and analytics, security, 5G, and edge computing through a mix of formal training courses, tailored immersion days, hackathons, and game days. The academy will seek to achieve more than 600 AWS accreditations over the next three years.

Optus Business managing director Chris Mitchell said the new arrangement forms part of Optus' ambition to become a leading supplier of integrated cloud solutions in Australia.

"This collaboration significantly boosts Optus' cloud offering and provides an elevated experience for our customers," he said.

"As businesses rapidly migrate from legacy infrastructures to the cloud, the combined power of AWS' leading cloud services and Optus' network and connectivity capabilities will deliver a world-class, scalable solution to help customers to future-proof their business, and remain competitive."

Optus is already an AWS Advanced Consulting Partner. The company also has cloud partnerships with Microsoft, NextDC, Dell EMC, HPE, Nutanix, Pure Storage, Cisco and VMWare.

Mitchell will be sharing more details of Optus' cloud strategy in his CommsDay Summit speech on 27 October.

Dylan Bushell-Embling

TPG's 10 Gig Adelaide project hits 1000 building milestone

TPG Telecom rolled out a further 82 kilometres of cable and eight 10G core sites as part of its project with Adelaide's local council to deliver high-speed connectivity to businesses in the South Australian capital.

TPG and the City of Adelaide yesterday announced that the rollout had reached its target of connecting 1000 buildings, hooking up registered charity The Light Cultural Foundation.

"The initial thousand buildings was an agreement that we came to with the City of Adelaide," TPG general manager enterprise and government Nick Pachos told CommsDay.

However, the telco is well-placed to expand the network's footprint as needed: "Now that the underlying enterprise fabric is in place the ability to expand is there, and it really is on an on-demand basis."

The City in 2018 announced it had selected TPG as its official network provider for the project.

"The landmark project – the first of its kind in Australia – represents a significant strategic commitment by the City of Adelaide to provide our city businesses with world-class digital infrastructure that will help create jobs and boost our economy," said Lord Mayor Sandy Verschoor.

"The network is a great asset for local business – as hundreds have already discovered – and is a compelling factor to attract business from interstate or from around the globe."

"We have hundreds of customers that are already signed up with businesses in a range of different industries," Pachos told CommsDay. "Whether it be research, ecommerce, medical, software, engineering, education, and a whole range of other industries."

In some cases, customers are seeking to migrate large amounts of data to public cloud or perform massive file transfers with "LAN speeds on a WAN," he said, while others are mainly after TPG's $399 1Gbps service that includes unlimited internet.

The partnership with the City has drawn interest from other regions in Australia, the TPG executive said.

"We've had a number of conversations with different councils," Pachos said. The partnership model used for the Adelaide rollout did several things:

"By partnering with the council it has allowed us to get access to the buildings and for us to provide highly competitive, large throughput services to the constituents, to the companies that are residing there," Pachos said.

"In the case of Adelaide, it was all about economic development for the city and overcoming any premium that businesses may have needed to pay — as you know, a lot of the internet comes into New South Wales and has to get shipped down to the likes of Adelaide."

Pachos said the rollout helped overcome a "commercial barrier" for businesses in Adelaide, "ensuring that a business setting up in the Adelaide CBD has access to infrastructure that is like any main city in New South Wales and Queensland or Victoria, so they're not actually disadvantaged."

Because the council helped fund the build, TPG has been able to price "very aggressively," he said, "which actually gives the businesses in those areas a competitive edge."

<div align="right">Rohan Pearce</div>

Telco people anchor gov't cyber advisory group

Telstra chief executive Andy Penn will chair the new Industry Advisory Committee formed to support the Federal Government's implementation of the 2020 Cyber Security Strategy.

Penn will be joined on the panel by a range of high-profile figures from the telco, including Macquarie Telecom CEO David Tudehope, Superloop founder and FibreSense chair Bevan Slattery and NBN Co's chief security officer, Darren Kane. AUCloud chair Cathie Reid has been appointed IAC deputy chair.

Also joining the committee are Northrop Gruman Australia CEO Chris Deeble, PwC trust and risk business leader Corinne Best, NAB group executive technology and enterprise operations Patrick Wright, Cyber Security CRC CEO Rachael Falk and Professor Stephen Smith, chair of the advisory board, University of Western Australia Public

Policy Institute.

"The committee brings a wealth of experience from both the public and private sector that will build on the success of the Industry Advisory Panel and ensure industry will continue playing a vital formative role in shaping the delivery of actions set out in the strategy," said Home Affairs minister Peter Dutton.

Penn chaired the Industry Advisory Panel, and Kane and Deeble were also members. "The strategy has been shaped by 60 key recommendations provided by the IAP during its development," Penn said.

"The recommendations, built around the five key pillars of deterrence, prevention, detection, resilience and investment, were focussed on striking a balance between increasing cyber defences while promoting the development of a digital economy and countering threats to the economy, safety, sovereignty and national security."

Among the recommendations included by the IAP in its report were the appointment of "an industry advisory panel to advise the government on cybersecurity on an ongoing basis, including on the implementation of the 2020 Cyber Security Strategy."

"The panel should work with the accountable government agency or department responsible for implementing the strategy, while reporting to the Minister for Home Affairs," the report recommended.

<div align="right">Rohan Pearce</div>

Digital platforms to disrupt monetisation of disinformation

Digital platforms will commit to disrupting efforts to monetise disinformation on their platforms through advertising and other means as part of a package of measures contained in a draft industry-developed code.

Digital Industry Group Inc. (DIGI) — whose members include online heavyweights Google, Facebook, Twitter and Verizon Media — developed the draft in response to a December 2019 request by the Federal Government.

The development of such a code formed part of the government's response to the work of the Australian Competition and Consumer Commission's Digital Platforms Inquiry. In its response to the inquiry, the government said it would "ask the major digital platforms to develop a voluntary code (or codes) of conduct for disinformation and news quality," with the Australian Communications and Media Authority to have oversight of the code. ACMA would "report to government on the adequacy of platforms' measures and the broader impacts of disinformation."

The draft opt-in code released by DIGI commits its signatories to implementing "policies, processes and technologies which aim to reduce the risk that users of their services and products will be exposed to disinformation."

The definition of disinformation is based on one used by the European Union. Disinformation "does not include misleading advertising, reporting errors, satire and parody, or clearly identified partisan news and commentary," the draft code states.

Disinformation is "inauthentic behaviour" by users of a digital platform that propagates content "for the purpose of economic gain or to mislead or deceive the public" that "may cause harm" but is not otherwise unlawful.

Inauthentic behaviour includes "spam and other forms of deceptive behaviours including via automated systems which encourages users of digital platforms to propa-

gate content which may cause harm."

The scope is platforms that deliver "user-generated content" or search engine results.

The draft states that the particular measures taken by signatories will depend on the context, and particular platform but could include content takedowns, flagging or demoting content, suspending or disabling accounts, fact checking, highlighting the source of content and algorithmic review of content or accounts.

Within six months' of the code commencing, the signatories will establish a mechanism for lodging complaints about compliance with it, with DIGI tasked with administering the code's operation.

Rohan Pearce

Toyota chooses Telstra to bring connected-car connectivity to Australia

Toyota Motor Corporation Australia in collaboration with Japanese telecommunications operator KDDI Australia, has chosen Telstra to be its national connectivity provider to introduce connected-car capabilities later this year.

The partnership means select Toyota vehicles introduced to Australia will feature 4G mobile connectivity enabling new safety and security services.

The ecosystem the cars will use builds on a global communications platform to support vehicle connectivity, announced by Toyota Motor Corporation and KDDI Corporation in 2016.

Toyota Australia's VP sales and marketing Sean Hanley said the introduction of connected vehicles is a vital step towards achieving the company's vision of mobility for all. "Cars are the ultimate mobility device, so this connected technology will enable us to provide new, convenient and personalised experiences to our customers while delivering on our commitment of continual improvement to safety."

KDDI Australia's managing director Jun Miura said: "We are thrilled to see what our global communications platform and the Telstra network can bring to the connected car market in Australia."

Telstra's global IoT solutions executive Gerhard Loots said: "What's really exciting is how connected vehicle technology will not only make driving easier for Australians, but also make it safer."

For Toyota's global connected car project, KDDI provides Global Communications Platform combined with the connectivity in each country by teaming up with local carriers. Last year AT&T was named Toyota's partner for North America and some of the features introduced in that market provide some insight as to what Australia may see.

These included: wi-fi hotspots so owners of select Toyota and Lexus vehicles can stream, browse and share entertainment among multiple smartphones and tablets from the open road; unlimited data plans offered by AT&T for eligible vehicles; and

connected services like remote startup or heating/AC, destination assist and remote diagnosis.

<div align="right">Staff writer</div>

I Squared buys GTT unit for US$2.1bn

Miami-based private equity fund I Squared Capital has reached an agreement with GTT Communications to purchase its infrastructure unit for US$2.1 billion. The deal consists of GTT's "business and activities of providing pan-European, North American, subsea and trans-Atlantic fibre network and datacentre infrastructure services."

Specifically, the deal will include the legacy assets of Hibernia, Interoute and KPN International, which GTT acquired in 2017, 2018 and 2019 respectively for a total of US$2.54 billion. As such, I Squared will be gaining a 103,000-kilometre fibre network with over 400 points of presence spanning 31 metro areas and interconnecting 103 cities across Europe and North America and three transatlantic subsea cables, including GTT Express (formerly Hibernia Express), as well as fourteen Tier 3 datacentre and over 100 colocation facilities and the business unit delivering services over those assets.

"Now more than ever, digital infrastructure is an essential asset class as societies across the globe rely heavily on high-speed digital bandwidth," said I Squared Capital MD Gautam Bhandari. "This acquisition builds upon I Squared Capital's overarching global digital infrastructure strategy and experience with complex carve-outs to expand the reach of our platforms across Asia, Europe and North America."

In Asia, I Squared Capital's portfolio includes HGC Communications, formerly Hutchison Global Communications, the international unit of Hong Kong-based operator Hutchison Telecom. I Squared also holds a telecoms towers business, Lightstorm Telecom Ventures in India.

GTT interim CEO Ernie Ortega added the deal will enable greater investment for the assets involved in the deal while enabling the communications provider to focus on its "capex light business module" and cloud networking business.

The acquisition is expected to close, subject to regulatory approvals and contingencies included in the agreement, during the first half of 2021. According to publicly available information, I Squared Capital has some US$13 billion of assets under management, including two Global Infrastructure Funds (I and II) that raised US$3 billion and US$7 billion in 2015 and 2018 respectively.

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

BAYNTON STEPS DOWN FROM SUPERLOOP BOARD

Superloop non-executive director Greg Baynton will leave the company's board in November. "Greg has been a valued member of the board and made a considerable contribution to the company, especially in its listing on the ASX in 2015 and as chair of the audit committee from that time until March 2020," Superloop chair Bevan Slattery said.

Name	Current Price($)	Day Change (%)
Telstra Corp Ltd	2.800	-1.75
Spark New Zealand Ltd	4.380	-0.45
TPG Telecom Ltd Ordinary Shar…	7.370	0.00
Nextdc Ltd	13.850	1.10
Chorus Ltd	7.960	-1.12
Megaport Ltd	16.790	0.84
Vocus Group Ltd	3.760	1.62
Hutchison Telecommunications …	0.135	3.85
Macquarie Telecom Group Ltd	49.160	2.01
Uniti Group Ltd Ordinary Shares	1.255	0.00
OptiComm Ltd Ordinary Shares	6.750	0.75
MNF Group Ltd	4.900	2.08
Superloop Ltd	0.900	3.45
Over the Wire Holdings Ltd	4.540	-0.22
Amaysim Australia Ltd	0.680	-1.45
Spirit Technology Solutions Ltd …	0.370	-2.63
5G Networks Ltd Ordinary Shar…	1.740	1.16
Field Solutions Holdings Ltd	0.040	0.00
Vonex Ltd	0.165	0.00
CommsChoice Group Ltd	0.095	-5.00
Aussie Broadband Ltd Ordinary …	1.960	2.08

About Communications Day (including the Line of NZ)

JOB OF THE DAY

Iperium is looking for a senior network engineer in Sydney.

Reporting to the reporting to the Network Operations Manager, the position will be responsible for maintaining the core network, carrier interconnects, customer last mile services, broadband aggregation, peering and IP Transit border routers, maintaining and enhancing DDoS mitigation strategies and platforms, acting as the technical escalation point for internal and external stakeholders, and working with internal teams to make sure that all training, support and technical documentation is provided.

A minimum of 8 years' experience working in a telecommunications or carrier environment is required.

10 YEARS AGO TODAY IN COMMSDAY

Telstra has wasted no time in backing the federal government's move to reintroduce a bill aimed at structural separation of the telco and the regulatory reform of the broader industry.

Shadow communications minister Malcolm Turnbull has issued a guarded initial response to the reworked Competition and Consumer Safeguards Bill - but pledged unrelenting opposition to provisions that could see Telstra's wireless spectrum access used as leverage to force separation.

One of the world's major business and operational support platform vendors, Amdocs, expressed dismay and puzzlement at not even making NBN Co's OSS/BSS shortlist to supply the National Broadband Network.