COMMUNICATIONS DAY

23 November 2017 | Daily intelligence for the telecom C-suite | ISSUE 5513

Macquarie Telecom reveals why it wants Bulletproof

Macquarie Telecom's proposed $17.9 million acquisition of Bulletproof Networks will streamline its entry into the public cloud market and allow it to immediately tap into demand for Amazon and Azure services, according to Macquarie Cloud Services group exec James Mystakidis. He told CommsDay that Bulletproof's private cloud technologies and platforms also aligned well with those of Macquarie, giving it a potential integration advantage should the move go ahead.

Despite the obvious advantages for Macquarie, however, Mystakidis (right) revealed that it was Bulletproof that had initiated the initial acquisition talks some five months ago. He said both companies' boards had held talks on a regular basis since then, with the proposal accelerating when Bulletproof CEO and co-founder Anthony Woodward agreed to facilitate a share purchase of just over 16% in the company.

As previously reported in CommsDay, Macquarie Telecom made an off-market bid to acquire the group through its wholly-owned subsidiary Macquarie Cloud Services. The offer price of $0.11 per share values Bulletproof's share capital at approximately $17.9 million, representing a 64.2% premium to the closing price of Bulletproof shares on 17 November.

Despite Bulletproof initiating the acquisition talks, the company has not yet formally indicated whether it will accept the bid. It issued a statement saying that with regard to the involvement of Woodward in the offer, Bulletproof has established an independent subcommittee of the board – which comprises all of the directors of Bulletproof other than Woodward and David Paterson, who is on sick leave – to evaluate the offer and manage potential conflicts of interest.

The committee has appointed a legal advisor to assist it in its evaluation of the offer, and if the offer proceeds intends to appoint an independent expert to assess it. However, the committee has also advised shareholders to take no action until it has had the opportunity to evaluate the offer.

WIN-WIN? According to Mystakidis, the proposed acquisition would represent a good fit for both companies.

Great discounts on 2018 events for CommsDay readers

COMMSDAY SUMMIT 2018

April 9 & 10 2018
Westin Hotel, Sydney
Two days of conference
inclusive of catered lunches

Australia's premier telecommunications conference returns with two days of industry leaders covering off impending developments across technology, the marketplace and policy & regulation. We are offering over 30% off for early birds: just **$877+GST**

COMMSDAY ANNUAL DINNER 2018
For Australia's telecommunications professionals

April 9 2018, 7pm-10pm
Westin Hotel, Sydney
Featuring the release of the 2018
CommsDay Industry Pulse

The pre-eminent networking opportunity for speakers and attendees of the annual CommsDay Summit. Book now to avoid disappointment as this one always sells out way before the night. **$227+GST for single registration, $1997+GST for table of ten**

AUSTRALASIA SATELLITE FORUM

May 22 & 23 2018
Westin Hotel, Sydney
Two days of conference
inclusive of catered lunches

The Southern Hemisphere's premier communications satellite industry event returns with an international speaker line-up and dedicated sessions for Defence and the Pacific Islands. We are offering over 30% off for early birds: just **$877+GST**

May 24 2018, 7pm-10pm
Westin Hotel, Sydney

CommsDay's annual telecom industry award series returns. Book now to avoid disappointment as this sells quickly.
$257+GST for single registration,
$2297+GST for table of ten

REGISTER AT
https://www.commsday.com/2017/11/20/5589/

“Their board and our board have had very regular dialogue to get to where we are today,” he told CommsDay. “They have some very talented staff that we respect and we see them being a part of our business into the future. This is about growth and we see that together we bring a very strong balance sheet that they would be able to leverage, and right now that's something they don't have.”

“Ultimately we have a very strong service culture – we have one of the best net promoter scores in the world at +81, which for a cloud services business is very strong – and we think that we bring a lot of stability and great service to their customers, so their customer segment has got a lot to look forward to.

Mystakidis noted that the two companies had been competitors for some time and Macquarie's cloud services team understood their business well. While Bulletproof's cloud business is complementary, the part that Macquarie stands to gain is the public cloud business, both the consulting arm and managed services.

“Over the last three years we've been very successful around our hybrid IT story and the market numbers speak volumes to that. And we feel that by including public cloud capability it completes our hybrid IT story for our customers and the marketplace. So that's something that's very attractive,” he said.

He also noted that buying Bulletproof's public cloud capabilities would provide a quicker market entry than developing the capabilities in-house. “I think they've got good momentum there, they've got $15 to $20 million worth of public cloud and services revenue. There's a lot of scale and momentum there that would take us some time to establish a similar sort of scale,” Mystakidis said.

On the private cloud side, both companies use similar technologies based on VMware. “We are the largest VMware partner in Australia, so that's a strong fit for us,” he said.

The Macquarie offer is conditional, including that Macquarie achieve at least 90% acceptances and no material adverse change in the business conditions or financial prospects of Bulletproof. The full terms and conditions of the offer are expected to be dispatched to Bulletproof shareholders in early December.

Geoff Long

Asian innovation fund tips S$70 million into MyRepublic

NBN RSP challenger MyRepublic, which has also already been active for some time in markets outside Australia including Singapore and New Zealand, has scored a S$70 million (A$68m) investment from Singapore-founded global financial services player Makara Capital.

The funding is the first investment made through Makara’s S$1 billion Makara Innovation Fund, focused on “taking IP-strong businesses global.”

“The MIF recognises MyRepublic as an industry trailblazer that has broken global industry records for turning EBITDA positive within two years of entering each new market. This has never been done before by any other company in the telecommunications space. MyRepublic is currently operating in Singapore, Indonesia, Australia and New Zealand," said the firm in a media statement.

"MyRepublic's unique lean operating model positions it at the vanguard of the telecommunications sector's digital transformation in one of the most exciting growth regions of the world. The Fund's investment capital aims to enable the company's growth ambitions, with a focus on IP management and monetisation, scaling and expansion," said Makara Capital investments director Kelvin Tan.

PARTNER: "In addition to providing growth-stage capital, MIF has proven to be a valuable partner that recognises MyRepublic as an industry trailblazer, reinventing the economics of telecommunications. We have a deep appreciation of MIF's differentiated investment approach, and share its vision for scaling up dynamic enterprises and supporting internationalisation," said MyRepublic CEO Malcolm Rodrigues.

"We have been developing our proprietary cloud platform for the past five years, which has enabled us to deploy a single operational platform across countries and break industry records by turning EBITDA-positive within two years of entering each new market. The investment will supercharge the platform's development, support our aggressive growth path to expand our regional footprint within a record-breaking timeframe and deliver an even wider range of services."

Petroc Wilton

Gov't opens priority locations round for black spots program

Communications minister Mitch Fifield has kicked off the tender process for the latest round of the mobile black spot program, which will see $60 million of federal funding combined with carrier investment and state and local government contributions to expand coverage in 106 priority locations. Vodafone hopes to participate, while Optus has said it will review the opportunity – as will Telstra, which will today launch the 250th site it has built under the program so far.

The previous two rounds of the program have seen well over 300 new or improved basestations built, with a federal commitment of $160 million; those, along with normal commercial expansion of carrier networks, have already addressed 19 of the 125 priority locations that were originally flagged during the 2016 federal election campaign. Telstra, Vodafone and Optus are expected to complete the total of 765 basestations funded so far under the program, plus the 106 remaining priority sites in this latest round, by the end of 2018.

Fifield said that the federal government's commitment of $220 million to the program so far had attracted "a total funding pool worth more than $650 million, including co-contributions from state governments, mobile network operators and third party organisations."

Optus said that it would continue to look at various co-funding opportunities "such as those provided by participating in the mobile black spots program priority round."

“Mobile competition and choice in regional communities remains a priority for Optus which is evidenced by our commitment to invest $1 billion to bring 500 new mobile towers to regional Australia by mid-2018,” it added

Telstra also said that it would review each location proposed in the priority round “and decide how we can best maximise coverage for Australians in regional remote areas.” The firm has won the bulk of site tenders in the program so far; indeed, it noted that it was building basestations in 577 locations through the first and second rounds, “more than double all of our competitors combined.” CommsDay understands that CEO Andy Penn will today open the 250th such site in Winton, Queensland.

Vodafone, which is currently rolling out 74 sites under the black spots program, said that it was a strong supporter of the initiative’s fundamental principles and added that “we hope to be able to participate in the latest round.” The telco, which has been knocked back in its efforts to get mobile domestic roaming declared, also highlighted the final recommendation of the Australian Competition and Consumer Commission in the recent draft report from its telecommunications sector market study. This suggested that “implementing open access requirements for [programs like the black spots initiative] will deliver greater benefits to competition and consumers.”

“The ACCC has noted that previous rounds do not appear to have sufficiently taken competition into account and has recommended subsidised sites include open roaming obligations to deliver increased benefits to consumers,” commented chief strategy officer Dan Lloyd. “We assume that government will be implementing the ACCC’s recommendation to ensure the best value for taxpayer subsidies.”

The black spots program to date has not been without its share of controversy and contention. As previously revealed in CommsDay, for example, shadow regional comms minister Stephen Jones has noted that Telstra has received the largest share of subsidies under the program and has called on government counterpart Fiona Nash to set a “clear prioritisation of objectives” for the initiative going forwards; to bring in open-access requirements for publicly funded sites; and to use more evidence-based site selection.

Petroc Wilton

Telstra rated highly as digital innovation leader in physical retail: Globaldata

With Amazon due to launch locally any day now in Australia, telcos are capitalising on the application of digital smarts to the world of physical retail to help them achieve digital transformation. And Telstra is already a world leader in retail innovation according to Globaldata London-based analyst Andreas Olah.

“Telstra offers various digital retail solutions that are more advanced than offerings by many other major telcos,” Olah told CommsDay. “These include Wi-Fi hotspots for stores, machine-to-machine communication for Internet of Things devices, and point-of -sales solutions. Telstra's own flagship stores in Melbourne and Sydney provide the best examples for a connected retail environment that focuses on customer experience through technology, including interactive kiosks and tablets."

However, the world leader in telco-enhanced retail is BT, according to Olah. "Many retail decision-makers have visited BT's concept store at its innovation centres around the world. While we are not aware of a retailer applying all the technologies that are possible as part of the concept, some retailers got encouraged to try out parts of it, such as interactive digital signage, RFID tags or near field communications readers that connect to customers' mobile phones."

Telstra store in Sydney

"BT's concept store has helped the telco to lift its image among retailers and showcases its capabilities in retail-specific areas that go well beyond a telco's traditional network and communications solutions. While digital retail is still a niche area for BT, it provides major opportunities over the next few years that competing telcos are expected to target more aggressively. BT is in a favourable position by introducing a holistic concept at this early stage, which also helps it to become more relevant outside the UK in global markets from the US to Japan," Olah added.

Most telcos, however, are still just differentiating on fixed line broadband and phone service and slowly adding analytics, IoT connected devices, and security.

"Telcos still need to shrug off their traditional fixed-line image and build out retail expertise by hiring skilled consultants, developers and data scientists," Olah said. In doing so they do risk getting into key partners' territory and face a head-on clash with systems integrators when competing for digital leadership in retail.

But the skill sets of telcos place them in a strong position to help them serve the needs of today's retail market. "Millennial shoppers tend to prefer using digital channels while visiting physical stores, such as browsing products on their mobile phone that should be linked to local information about the store inventory and special offers. It is important that different channels such as online, mobile and brick-and-mortar are seamlessly integrated, and that they can be combined as customers wish, e.g. by choosing click-and-collect or home delivery from stores. Retailers need to create a store experience that is efficient and entertaining, which may involve augmented or virtual reality tools, in-store cafes and mobile point-of-sales for checkout from anywhere in the store," Olah said.

"While some retailers have strong IT expertise in-house or are tied into long contracts with their technology suppliers, others could benefit from their telco's digital and vertical-focused expertise, and may be surprised by how innovative these previously state-owned utilities have become."

Grahame Lynch

NBN Co pushes on with connected infrastructure trial

NBN Co is poised to kick off a technical trial of its non-premises Ethernet bitstream service for smart transport infrastructure, an offering that could ultimately open up a new stream of revenue for the national network builder via connectivity to a specific subset of Internet of Things devices.

The firm started seeking expressions of interest from service providers for the technical trial back in January this year; the testing will start from next Monday and run for up to 17 weeks, conducted in ready for service FTTN and FTTP areas within New South Wales, Victoria and/or Queensland. Participating service providers will have to lock in agreements with transport authority endusers, allowing NBN to extend its network to specified sites.

According to NBN Co, "the technical trial is intended to field-test the technical feasibility of supplying the NEBS to nonpremises end-point locations at transport infrastructure sites to enable service providers to supply telecommunications services in connection with transport infrastructure such as traffic lights." The firm has reportedly already run other trials to establish whether its Ethernet service is fit for this particular purpose.

With NBN Co's business case finely balanced around its target rate of return, any potential additional revenue sources would be a welcome boost for the company. And, as previously reported by CommsDay, smart city lobby group the Australian Smart Communities Association has been calling since earlier this year to have non-premises connections explicitly recognised in NBN policy. However, since the inception of the project in 2009, attempts to expand the scope of NBN beyond its core mandate have often generated strong opposition either in public or behind the scenes.

Petroc Wilton

NextDC aims to hold on to strategic stake in "landlord" APDC

National data centre provider NextDC is unlikely to relinquish its shareholding in Asia Pacific Data Centre group, according to NextDC chairman Douglas Flynn. Speaking at the company's annual general meeting in Sydney, he said it was important to keep a significant stake in its key landlord.

NextDC had been locked in a battle for control of APDC with property investment group 360 Capital. APDC owns the properties that house NextDC's Sydney, Melbourne and Perth datacentres.

360 Capital advised that its unconditional all-cash offer of $1.95 per security lapsed earlier this week, leaving it with a 67.31% interest in APDC. However, Flynn told NextDC shareholders that it was important that it keep its own 29.2% stake in APDC.

In late July NextDC had proposed an unconditional, all-cash, off-market takeover offer of $1.87. Flynn said its aim was to own a greater proportion of the properties in which it operates.

“The Board believes the interests of NextDC are well served by holding a significant interest in its main landlord and now owns 29.2% of the securities in APDC, acquired at a weighted average price of $1.81,” he told shareholders.

APDC will today hold its own AGM, with two 360 Capital nominated directors expected to be appointed to the board. The current board of APDC has also indicated it will resign shortly after the AGM. It is also proposed that two independent directors will be appointed.

NEXTDC STRONG START TO FY18: Meanwhile, NextDC CEO Craig Scroggie told shareholders that the company had made a strong start to FY18.

“FY18 is a pivotal year for the company as we grow the national footprint to a projected capacity of 126MW across Australia with the introduction of B2, M2 and S2. In addition to these new developments, it is also operationally a significant year where we have undertaken a core systems and technology platforms replacement that will support the company’s growth into the future,” Scroggie said.

He also confirmed earlier guidance from August. This includes revenues in the range of $146 million to $154 million, up 18% to 25% from $123.6 million achieved in FY17.

EBITDA is expected to increase from $49 million in FY17 to the range of $56 million to $61 million in FY18, reflecting growth of between 14% and 25%, and capital expenditure is forecast at between $220 million to $240 million.

Geoff Long

OPTUS ENLISTS KEVIN PIETERSEN FOR STREAMING AD CAMPAIGN

Optus has enlisted former international cricketer Kevin Pietersen to promote its mobile streaming options for live cricket this season. In an amusing new commercial, Pietersen combines with a number of current Australian cricketers to show a prototype of a hands-free cricket device for watching the cricket. However, the main aim is to promote streaming of matches that are data-free on Optus plans. Optus signed a deal in 2015 with Cricket Australia for mobile streaming rights and also has content on its Optus Sports broadband packages. Optus head of TV and content, Corin Dimopoulos, said customers wanted to be able to access sport and entertainment when on the go without using their data. “Optus customers on eligible post paid mobile plans can stream this summer’s cricket live and data free via the Cricket Australia Live app,” she said.

AT&T launches dNOS push to support SDN, white box hardware

AT&T has issued an official call to the industry to develop what it describes as a 'disaggregated network operating system' in order to support open software-based network infrastructure that operates on open hardware platforms, or so-called white box routers.

The telco put out a new white paper to detail its vision for dNOS, which will separate the network operating system from underlying router hardware and define application programming interfaces that will open up the whole architecture to new management features and applications developers.

According to AT&T Labs 'Domain 2.0' architecture and design SVP Chris Rice, the white paper is intended to be a "conversational starter." "We want to get hardware and software makers, open source developers, telecom companies, standards bodies and others to others to start thinking about how we can all push this concept forward," Rice said.

AT&T has made no secret of its desire to transition its network to software-enabled systems and has a goal to have 75% of its network running via software by 2020. By the end of this year, AT&T expects 55% of its systems will be software driven.

At the same time, AT&T has already been testing white box solutions from multiple vendors and has come out with its own universal customer premise equipment called Flexware, which it developed and sourced directly from original equipment manufacturers.

In its latest strategy, however, AT&T goes beyond its own infrastructure and is calling for an industry wide program to standardise on an open network operating system, similar to its effort in the management and network orchestration space with the Open Network Automation Platform.

Part of AT&T's reasoning is that new technologies such as Intel's DPDK, YANG models and new silicon advancements from Broadcom have "created a robust ecosystem of networking applications and building blocks that should be used to create an industry-standard NOS." On the other side of the coin, AT&T asserts that such a NOS is necessary for service providers to keep up with demand.

"Data traffic is surging and new customer networking applications (e.g., SD-WAN VPN, IoT networking, and movement of applications into the Cloud) are taking off," AT&T said. "A new approach is needed for router platform development and procurement."

Under AT&T's proposal, dNOS will consists of three main components: a control plane, a data plane and a base operating system layer.

What AT&T describes is not exactly new, since software-defined networking projects such as Openflow already detailed the disaggregation of the control plane with the data plane on routing systems. Even the disaggregation of the OS from the hardware is not a new idea; vendors such as Juniper have already virtualised their OS and made it available for running third party hardware platforms.

However, AT&T's proposal goes a step further than previous efforts in that it calls for a completely new, industry-standard OS platform that can run on any hardware, i.e. white box routers. Presumably, this OS would effectively replace the proprietary OS platforms from traditional vendors.

More importantly, AT&T is clearly taking an open source approach to dNOS, which could distant traditional solutions from the value chain.

"As the effort matures, AT&T will evolve its router-platform sourcing process to give preference to dNOS vendors whose products (or committed product-roadmap) are based on using this platform," AT&T said. To that end, the company added that it had some 100,000 IP/MPLS routers in its network that potentially need replacing with the new systems.

Tony Chan

Mobile roaming, VoIP/VoLTE to drive growth in wholesale telecoms: BICS

A new report compiled by international wholesale telco BICS has identified roaming mobile data, along with voice-of-IP and voice-over-LTE, as key drivers for growth in the sector. In the inaugural BICS report, the Brussels-based operator forecasted strong appetite for mobile data roaming traffic, which is expected to more than triple from 368.7Petabytes in 2017, to some 1,228PB by 2020.

"The past two years has seen a sharp rise in the number of operators offering LTE roaming services, with growth areas identified in Africa, Asia and South America, and tier two and three operators launching LTE roaming services for the first time in a number of countries," BICS said, adding that "the introduction of 'all-you-can-eat' unlimited roaming data plans by operators in the US – and increasingly elsewhere – coupled with the EU's roaming regulation, will further drive data usage by mobile roamers on a global scale."

Even with the expected growth of roaming traffic, the report identified plenty of potential growth in the space. According to the report, nearly half (43.9%) of international roamers are still 'silent' when it came to data usage, a figure that is expected to decline between 17% to 50% by 2020 depending on the region.

Meanwhile, the report found that traditional voice is migrating to new platforms, namely voice-over-IP and voice-over-LTE.

"While traditional voice is declining and is expected to have reached its tipping point this year, VoIPX traffic is expected to increase by 22% [in 2017]," BICS said. "The coming years will also see a surge in international VoLTE traffic, which is expected to grow by a compounded annual growth rate of 99.3% over the next four years."

The Internet of Things was also identified as a key growth contributor going forward, at least for the number of connections.

"IoT devices are set to surpass mobile phones as the largest category of connected devices by 2018," the report said. "However, to successfully realise the full potential of the IoT, mobile networks need to transform to give enterprises the flexibility and autonomy needed to manage the rapidly expanding IoT ecosystem."

In addition to areas of potential growth, the report also warned of continual threats from fraud. Drawing data from its own system and FraudGuard solution, BICS said it managed to prevent US$340 million in wholesale exposure and blocked some 38.1 million fraud attempt calls last year.

Tony Chan

HUAWEI SUPPLIES 35B VDSL, GFAST TO PLDT

Huawei will supply PLDT in the Philippines with SuperVector and Gfast networks. SuperVector is the Huawei brand name for its version of 35B VDSL, which provide bandwidth of up to 300 Mbit/s. PLDT plans to provide 5 million users with bandwidth of at least 100 Mbps and offer 800 Mbps services in over 100 high-value buildings by 2018.

PHILIPPINES INVITES CHINA TO BECOME THIRD CARRIER

Philippines president Rodrigo Duterte has reportedly extended an invitation to Chinese companies to enter its telecoms sector. According to local reports, the offer was made during a meeting between Duterte and Chinese premier Li Keqiang and included the "privilege" to set up a new telecoms operator to compete with the country's duopoly of PLDT and Globe Telecom.

BROADBAND FORUM WANTS TO DROP THE DOT IN G.FAST

The Broadband Forum said it wants the industry and the media to drop the 'dot' in G.fast and use just Gfast for branding the copper-based last mile access technology. The reason, according to the Broadband Forum, is the existing G.fast moniker has "several critical technical issues with Google and Twitter, where breaking Gfast up with the dot doesn't work."

AT&T FAVOURED TO WIN DOJ CASE

Analysts believe AT&T is likely to beat the Department of Justice's lawsuit over its deal to acquire Time Warner. "After reviewing DOJ's lawsuit against AT&T-Time Warner and watching AT&T's press conference, we still see a settlement as possible and, failing that, we believe AT&T would prevail in court," Cowen's research team wrote. "DOJ always bears the burden in court. But here we believe it will face a higher-than-normal burden because it needs to explain its departure from longstanding clearance of vertical transactions."

OVERNIGHT TELECOM STOCK PRICES (ASX)

Companies	Code	Last	$ +/-	Bid	Offer	Open	High	Low	Volume
Telstra	TLS	3.480	0.000	3.470	3.490	3.490	3.490	3.460	15,325,693
TPG	TPM	5.750	-0.040	5.750	5.760	5.800	5.820	5.735	1,057,193
Vocus	VOC	3.000	-0.040	2.990	3.000	3.040	3.040	2.960	1,930,554
Spark	SPK	3.240	-0.050	3.240	3.250	3.270	3.280	3.230	1,234,928
Chorus	CNU	3.730	-0.080	3.730	3.740	3.790	3.790	3.710	1,029,730
Hutchison Australia	HTA	0.063	0.000	0.064	0.065	0.000	0.000	0.000	0
Amaysim	AYS	1.925	-0.050	1.925	1.940	1.990	1.990	1.925	338,295
Macquarie Telecom	MAQ	14.430	0.330	14.350	14.430	14.250	14.500	14.250	2,475
MyNetFone Group	MNF	6.100	0.030	6.080	6.120	6.080	6.150	6.050	175,983
Megaport	MP1	2.510	0.060	2.490	2.530	2.490	2.510	2.460	87,191
Superloop	SLC	2.510	0.010	2.510	2.530	2.490	2.540	2.480	283,437
Over The Wire	OTW	2.620	0.070	2.620	2.650	2.610	2.650	2.610	23,816
Netcomm Wireless	NTC	1.310	0.100	1.310	1.320	1.210	1.310	1.210	404,285
Vita	VTG	1.165	0.020	1.165	1.190	1.155	1.195	1.140	688,955
Inabox	IAB	0.410	0.010	0.405	0.425	0.405	0.425	0.405	15,300
Spirit Telecom	ST1	0.150	0.000	0.145	0.150	0.150	0.150	0.150	133,567
NextDC	NXT	5.530	0.120	5.520	5.530	5.440	5.545	5.370	1,033,299
Speedcast	SDA	4.910	-0.060	4.900	4.920	5.010	5.050	4.900	1,512,764

2007: TEN YEARS AGO IN COMMSDAY

A new report from Pipe Networks revealed that its proposed PPC1 Sydney-Guam cable could support up to six fibre pairs, allowing for proposed links to the Gold Coast and Papua New Guinea as well as a potential branch to New Zealand... Telstra and Alcatel-Lucent defended their soft-switch installation and migration program, bidding to dispel continued speculation over technical difficulties and delays... People Telecom chair Barry Stanton described the firm's previous fiscal year results as "disappointing," underscoring the need for a company-wide transformation program to boost profits.

About Communications Day (including the Line of NZ)

Communications Day is the telecommunications news authority of Australia and New Zealand. Published daily since July 1994, CommsDay is expertly written and edited by a team of industry writers with a combined 80 years experience in technology reporting across Australia, NZ, Asia, the United States and Europe. CommsDay is available by subscription only and read by 10,000 industry executives as well as policymakers and parliamentarians every week day.

PUBLISHED BY DECISIVE PUBLISHING
Mail: PO Box A191 Sydney South NSW 1235 AUSTRALIA.
Fax: +612 9261 5434 Website: www.commsday.com

Contacting CommsDay
Group Editorial Director: Petroc Wilton, petroc@commsdaymail.com, +61 2 9261 5436
Senior Editor: Geoff Long, Geoff@commsdaymail.com
Editor at large: Tony Chan, tony@commsdaymail.com
Columnist: Kevin Morgan, kevinlmorgan@bigpond.com

CEO: Grahame Lynch, Grahamelynch@commsdaymail.com +61 41575 6208

Subscription renewal inquiries: Linda Salameh, linda@commsdaymail.com
New subscriptions, advertising and event bookings: Dhwani Mathur, dhwani@commsdaymail.com
CommsDay Summit/Congress/Edisons sponsorship: Veronica Kennedy-Good, veronica@mindsharecomms.com.au
Satellite Forum sponsorship: Kevin French, kfrench@talksatellite.com

DOLLAR REFERENCES IN THIS PUBLICATION ARE TO AUSTRALIAN DOLLARS UNLESS OTHERWISE INDICATED. WE RFERENCE DOLLARS AS AUSTRALIAN IN ARTICLES DEALING WITH MULTINATIONAL OR MULTICURRENCY TOPICS.