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NBN's aggregated POI fix for smaller ISPs seen as too little, too late

NBN has finally put a timeline on plans to create an access aggregation solution for smaller RSPs who cannot afford to access all 121 POPs.

NBN CEO Bill Morrow told the Australian Financial Review yesterday that he proposed to offer a fix on the issue within six to nine months.

Morrow told a National Press Club meeting in September last year that smaller RSPs had identified about 40 POPs that were too expensive to serve without using wholesale aggregation from providers such as Telstra, Optus and Vocus. Tasmania, the Northern Territory and far north Queensland are apparently considered to have the greatest cost disadvantages. He didn't specifically commit to an NBN product at the time and hinted that the solution may come in the form of a partnership.

However, industry consultant John Lindsay said any move as late as the second half of next year was a case of "turning up to the fire after it has burnt out with an empty bucket with a hole in it."

Plans flagged last year for NBN to offer a metro-based state-wide POP product drew ire from the large wholesale providers, given they had made major infrastructure investments to service all 121 POPs. In a major ruling in 2010, the ACCC decided to mandate the 121 POP structure in order to promote wholesale competition. Three years later, it estimated there were at least three backhaul providers at 94% of POIs.

CommsDay understands that the ACCC undertook limited consultation with smaller RSPs late last year on the desirability of an aggregated POI option but there has been no official word on the outcome on this. And although there is now backhaul competition at all POIs, this is mostly controlled by the big four carriers who dominate the downstream retail market.

However the ACCC told CommsDay as recently as November 30 last year that it was happy with the development of NBN backhaul competition and saw no reason to disrupt existing POI investments, which would impose its own costs.

NBN's latest product roadmap makes no specific mention of a POI aggregation product but it does describe a "POI redundancy" product scheduled for introduction in the second half of next calendar year. NBN has provided very little detail on the

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COMMSDAY MELBOURNE CONGRESS - 2016

Chair Renee Bowker of TelcoTogether

Day 1 Tuesday 4 October

- 9.00 Australian Competition and Consumer Commission chairman Rod Sims
- 9.25 Symbio Networks CEO Rene Sugo
- 9.50 Telstra group director, corporate affairs Tony Warren
- 10.15 Cisco Head of Architecture, SP Cloud and Software Rada Stanic
- 10.40 Refreshment break

- 11.15 Macquarie Telecom national executive, industry & policy and OzHub chair Matt Healy
- 11.40 Equinix director Market Development, Asia Pacific Gareth Bridges on realising revenue growth with an Interconnection-First strategy'
- 12.05 New Street Research senior telecommunications analyst Ian Martin
- 12.30 Nokia Oceania head of mobile networks Mark Barnett

- 12.55 Lunch

2 NEXT GENERATION TELECOM STREAM

- 2.00 Ciena Senior Director, Blue Planet Division Abel Tong
- 2.20 TBA
- 2.40 Ericsson head of portfolio management, PA Cloud Systems Jonathon H. King on digital industrialisation and powering the network economy
- 3.00 FutureSumo's Skeeve Stevens
- 3.15 Mellanox ANZ country manager Sudarshan Ramachandra on 100GE and beyond
- 3.30 Break
- 4.00 **PANEL: HOW TELCOS CAN ENABLE THE INTERNET OF THINGS**

Telcos are an essential part of the IoT foodchain in terms of connectivity. But is existing fixed and mobile infrastructure fit for purpose or are new topologies combining current tech with dedicated platforms such as SigFox, LoRA and others necessary for IoT success? Does IoT offer sufficient economic incentive to encourage telco investment? How can telcos work with device, application and other providers to ensure IoT success? What legal and regulatory hurdles stand in the way? Panelists include Nokia Oceania CTO-Warren Lemmens, Cisco dir, engineering service provider, APJ Chia Tan, Optus Business IoT practice lead Anthony Stewart and KPMG national IoT leader Piers

Hogarth-Scott

- 5.00 Day 1 closing keynote: How To Save The NBN with iMediate Consulting's Robert James
- 5.30 Drinks
- 6.30 Close

Day 2 Wednesday 5 October

- 9.00 Federal minister for regional communications Fiona Nash
- 9.25 Shadow communications minister Michelle Rowland
- 9.50 Optus vice president corporate and regulatory affairs David Epstein
- 10.15 NBN chief engineering officer Peter Ryan
- 10.40 Refreshment break

- 11.15 Australian Communications and Media Authority acting chairman Richard Bean
- 11.40 Vodafone Australia chief strategy officer Dan Lloyd
- 12.05 Ruckus Wireless head of engineering, ANZ David White
- 12.30 Cyient Sr. Vice President - Communications BU & President - Asia-Pacific Sanjay Krishnaa
- 12.55 Lunch

2 REGULATORY AND POLICY STREAM

- 2.00 Australian Communications Consumer Action Network CEO Teresa Corbin
- 2.20 Coutts Communications managing director Professor Reg Coutts on USO reform
- 2.40 Comms Alliance director of program management Christiane Gillespie-Jones
- 3 Break

3.20 PANEL: GOING SUPERFAST AGAINST THE NBN

A number of telcos have decided to resist the "natural monopoly" of the NBN and offer high speed broadband over their own infrastructure. This panel looks at the various business models that may succeed against the NBN as well the regulatory settings that distort the playing field. What will the ACCC to change the superfast regulatory regime, if anything? And what can the NBN do to discourage competitive bypass and attract back custom from the renegades. Panelists include Thomson Geer's Tony Dooley, Opti-comm's Phil Smith and dgTek's David Klizhov.

- 4.00 Close

product except to say it will provide the “capability to access the NBN network from alternate POI site/infrastructure. Redundant POI Access for network to network interface to enable additional redundancy options and higher availability.” Such a product could easily be adapted to allow central access to remote POPs. NBN has been approached for comment.

NBN would likely offer the service as a “value-add” with an additional transit fee component, thus evading the ACCC 121 POP mandate placed on it. But Lindsay questioned whether the product would be attractive to smaller RSPs. “NBN fixing this will cost their customers more than the current CVC charge which is pointless because they still can't compete with Telstra, TPG and Optus. The real problem now in 2016 is that CVC is insanely expensive and most RSPs are constraining bandwidth to within an inch of being unusable,” he claimed.

NBN yesterday issued research conducted by Evolve Research which it said showed its service was more highly valued by regional customers when migrating from legacy broadband options. The survey found that regional customers had greater productivity gains when signing to the NBN than their metropolitan counterparts.

However, the survey also found that regional customers spend less time using broadband than metro users.

NBN estimates that about 29% of the Australian population base can be considered as regional or remote in terms of location. Latest uptake figures from NBN suggest activation rates are considerably lower on the rural wireless and satellite parts of the network than on the fibre and copper enabled metro and regional parts.

Grahame Lynch

Telstra head of global industries flags Australian opp from IoT; NSW government onboard

Telstra head of global industries David Keenan has joined a growing number of senior commentators in highlighting the Internet of Things as a key opportunity for Australia on the world stage. Meanwhile, New South Wales minister for innovation and better regulation Victor Dominello says he's trying to push the IoT at state government level – casting it as a key plank of a wider digital transformation strategy.

Both Keenan and Dominello spoke at an industry partner summit hosted by Cyient in Sydney. Keenan (right) noted that some of the concepts of the IoT – connected sensors embedded in various devices – had been extant for some time in industrial communications.



“What’s changing, I think currently, is the business models – to enable it to be moved from effectively a factory environment, a controlled environment, a singular environment, across into a multi-tenanted environment. We’re talking about sensors going out at A\$5,” he said. “There’s a change also about how these things connect. What you needed historically [was] a Siemens drive [connected] to a

Siemens sensor in a factory environment; now you can have anybody's device [linked to] anybody's sensor remotely... and that data could be held anywhere in the world, and driven back into the network."

"[This] means that Australia will be able to play in that global world; remoteness will not be a challenge."

Keenan's comments come just days after Huawei global board director Chen Lifang told CommsDay that Australia could be a leader in the IoT, with the firm's Australian chair John Lord adding that state governments had shown particular interest.

Keenan also forecast that within half a decade, customers would "absolutely" expect total ubiquity of communications technology – something that Telstra would have to plan for. "If you're not thinking five, ten years ahead, you're just going to be out of business," he said. "We're finding that customers' expectation is that ubiquitous communications is going to be everywhere. That's not exactly commercial reality but, in five years, that'll be the absolute expectation: seamless communication, wherever you are, whatever you're doing."

DOMINELLO EMBRACES IOT: Meanwhile, Dominello also put strong emphasis on the IoT, in context of a broader address where he cast data collection as first of several key pillars for digital transformation – even if the use case for the harvested data was not yet immediately apparent.

"I am doing my very best to embrace the IoT inside of government, sensors and the like, because the very first thing in the data sequence is to get more information," he said. "Don't ask me what we're going to do with it – I don't know sometimes! Agencies ask me 'what do you need this for?' And I say 'don't worry your pretty little head – because I don't know, and you don't know. But somebody much smarter than you and I will work it out... let's not argue about why, let's just get the information.'"

Petroc Wilton

Waverley Council, Skyfii partner for free Bondi Wi-Fi

Waverley Council will provide free Wi-Fi connectivity to more than 2.2 million visitors as well as residents in the Bondi area in time for summer, through the guest Wi-Fi and data analytics service provided by Australian software tech company Skyfii.

Following a guest Wi-Fi trial with Skyfii that the firm's CEO Wayne Arthur said had elicited an "incredible" response, the council will turn on free access in areas including all of Bondi Beach and Park, Tamarama Beach, and Bronte Beach.

"Typically councils can use guest Wi-Fi to support local businesses by promoting bespoke advertisements and offers to users. It can also be used to, for example, identify peak times for beach goers and allocate lifesaving personnel accordingly," added Arthur.

It's the first deal for Skyfii in the council and municipality sector, but the firm is aggressively going after further business in the space – a big opportunity for growth, with

more than 560 councils across the country.

“As councils seek to enhance the level of services they provide to constituents and visitors, this kind of technology can provide real time data to assist councils to better design and manage public spaces,” said Arthur. “We’re hoping to work with more councils across the country to help them experience these benefits.”

Petroc Wilton

Rocket Lab completes “world-first” private orbital launch complex

New Zealand space startup Rocket Lab has officially opened its first orbital launch site on the Mahia Peninsula on the North Island’s east coast, billed as the world's first private orbital launch complex. Economic development minister Steven Joyce said the milestone would be a catalyst for other space-related activity in New Zealand, adding that a new NZ Space Agency is being set up to drive the sector.

Speaking at the Rocket Lab Launch Complex 1, Joyce congratulated Rocket Lab CEO and founder Peter Beck and his team. “It is their innovation and perseverance that has made this day possible. I’m looking forward to the first launches from Mahia expected later this year, with more to come next year when Rocket Lab launches with commercial payloads,” the minister said.



Facilities at Launch Complex 1 include a vehicle processing hangar where the vehicle will be prepared for launch as well as a 50 tonne launch platform. The platform will tilt forward to lift the rocket to a vertical position prior to launch.

According to Rocket Lab, satellites launched from the complex will be used to provide services including optimised crop monitoring, improved weather reporting, internet from space, natural disaster prediction, up-to-date maritime data and search and rescue services.

The company is currently working through the qualification of the first stage of the Electron rocket and will look to begin the test flight phase once qualification and

launch licencing are complete.

Joyce said that Rocket Lab will be a catalyst for other space-related activity in New Zealand. “Space activity is pervasive in our lives, to such an extent we are no longer aware that our internet, our decision-making around energy and resource management, our marine surveillance to name only a tiny fraction, all rely on what we are doing in space,” he said.

The NZ Space Agency will manage the country's space regulatory regime and will be located within the Ministry of Business, Innovation and Employment. “The new agency has been very busy not only supporting Rocket Lab to navigate the regulatory environment, but also putting in place the foundations for an internationally credible, competitive and well-connected New Zealand-based space industry,” Joyce said.

The Outer Space and High Altitude Activities Bill was introduced to The House on 19 September and is scheduled to become law by mid-2017. Joyce said it will enable the development of a space industry in New Zealand, and ensure its safe, secure and responsible operation.

Earlier this month the government and Rocket Lab signed a contract authorising the company's space activities from New Zealand. The contract is an interim measure to allow Rocket Lab to commence launching rockets before the bill comes into force next year. According to Joyce, the contract is consistent with the draft bill and once the bill becomes law, Rocket Lab will transition to the new regime and the government can choose to terminate the contract.

Rocket Lab has also recently signed a deal with government-owned airspace controller Airways New Zealand, which will provide it with air traffic services for rocket launches from its launch site.

Rocket Lab plans to deliver commercial payloads into space with up to 100 launches per year.

Geoff Long

Telcos top complaint generator among New Zealand consumers

Telecommunication providers continue to generate the highest levels of complaints among New Zealand consumers, according to the Commerce Commission's latest Consumer Issues Report. The 459 complaints recorded represented around 9% of all Fair Trading Act complaints.

FTA complaints about telecommunications providers was up 20% from 2014 and double 2013 levels (from 234 to 459).

According to the report, Spark was the most complained about trader in 2015 (140), and Vodafone the second most complained about (133), with complaints about charges generating a third of related complaints against both telecommunications providers. The commission said that Spark was named in the majority of complaints about charges, and Vodafone was named in the majority of complaints about inaccurate invoicing.

“Complaint levels to the Commission indicate that differences in the number and type of connections provided by telecommunications providers may have influenced the types of complaints received about them. For example, Spark, which has a higher landline market share, had more complaints about contract termination fees. Vodafone, which has more mobile customers, attracted more mobile-specific complaints (particularly about confusion over mobile plans),” the report noted.

It also identified termination fees as a new theme in 2015 complaints. Consumers made 104 complaints about electricity providers’ and telecommunications providers’ termination practices. Complaints were about the perceived introduction of termination fees without disclosure to consumers, or about having service terminated prior to the agreed termination date despite being charged for the whole notice period.

The New Zealand Telecommunications Forum pointed out that with 7.4 million connections it is not surprising that the report shows the telecommunications industry among the higher complained about industries. “As the report indicates, consumers have a growing reliance on being connected. The rapid uptake of smartphones has also driven higher demand for increased data, which the industry has responded to,” the TCF said.

“The industry goes to considerable length to resolve consumer complaints directly, and this year, TCF members have been recruiting additional call centre staff to assist with this process. There has also been a considerable amount of work amongst TCF members to improve the UFB installation process to ensure that having this service connected is as easy for the consumer as possible,” the industry body noted.

This is the second year that the Commerce Commission has made the report findings public. Commission chairman Mark Berry said the report is primarily an internal planning tool for the commission to help it understand the consumer environment and prioritise efforts where it will have the greatest impact for consumers and more meaning for businesses.

Geoff Long

SD-WAN to extend corporate WAN market

A new start up out of Silicon Valley is offering corporations globally the ability to expand and extend their wide area networks with a new software defined architecture and the public internet.

According to VeloCloud VP marketing Mike Wood, the software defined WAN approach could change the way corporations build their internal networks. VeloCloud’s offering allows corporations to build an overlay network on top of their existing corporate network, and to extend that network with additional links using a variety of connectivity solutions, including basic broadband connections.



The company has already signed up 300 customers on its solution, which features a software defined networking component deployed at customer sites, as

well as a global, multi-tenant cloud-based infrastructure to connect together customer sites and customers to cloud service providers like Amazon. In Australia, VeloCloud is working with a reseller partner called Coevolve.

While he doesn't expect businesses to rip out their private networks and replace it all with public broadband links, Wood points to VeloCloud's ability to tap into those broadband subscriptions as a key benefit. With VeloCloud's SD-WAN architecture, a node running on commoditised x86 hardware can be deployed at the end of broadband connections to turn that public internet link into a private link on a corporate WAN.

There is the obvious cost savings element of using a regular PC server and broadband link versus expensive customer premise equipment and private networks on MPLS, but the benefits of SD-WAN offers much more when it comes to manageability and even flexibility and performance, Wood said.

"What Velocloud does is we have the ability to literally create this overlay network in a zerotouch deployment model. In other words, you don't need IT staff at the branch office location to wire the network up, you don't need IT staff at the branch office to troubleshoot the network, you can do it all centrally," Wood said. "Secondarily, we have the ability to pull in multiple links - they can be private MPLS links, they might be public links like broadband internet, and we can steer applications between those links at very low level."

According to Wood, corporations not only get the ability to integrate new sites into their WAN from anywhere with an internet connection - regardless of technology (cellular, satellite, fixed wireless, microwave), but also to supplement existing sites that might need more capacity for new applications like video and unified communications.

"They can now add a broadband connection to an existing branch office and use both their existing private network and the broadband link as a single network," he said. "This allows corporations to architect their networks to match their cost and quality requirements with much greater flexibility. For example, they can still run their core corporate applications on their existing MPLS line, but add a broadband connection to support a new video conferencing systems."

INTERNET QOS: At the same time, the software-driven component of SD-WAN also means it can now prioritise applications on the overlay network. While corporate sites with a broadband connection will still have to risk the service level agreements of basic broadband, VeloCloud's software allows network managers to apply some level of quality of service.

"We have the ability to deliver quality of service, over the internet, the ability to perform packet loss remediation, general remediation, and literally repair links, not the entire link, but at a surgical, application by application basis."

Beyond the corporate WAN, VeloCloud also brings to the table its global network of gateways into all the major cloud platforms, including Amazon, Microsoft Azure and Equinix.

"We extend the network into the cloud via VeloCloud gateway that we distribute

around the globe, in a multitenant, highly available, architecture, giving them assured application performance, bringing management to cloud applications,” Wood said.

Tony Chan

3GPP completes V2X standard proposal

The 3GPP has completed the initial technical specification for a new standard for so-called vehicle-to-everything cellular systems. The organisation’s radio access network group completed the work on the V2X standard this month at a meeting in New Orleans and expects to include the new specifications in Release 14 of the 3GPP specification expected by March 2017.

“As part of the expansion of the LTE platform to new services, and to keep track with the increasing needs of the automotive industry, 3GPP is developing functionality to provide enhancements specifically for vehicular communications – both in terms of direct communication (between vehicles, vehicle to pedestrian and vehicle to infrastructure) and for cellular communications with networks,” wrote 3GPP RAN chairman Dino Flore.

The new specification is optimised for vehicular use cases with support for high speeds (up to 250 kilometres per hour) and high-density environments with thousands of nodes. Specifically, the standard enables two configurations, both using a dedicated carrier for V2X communications. Also, in both cases GNSS is used for time synchronisation.

Tony Chan

Mobile phone sales, website traffic struggling to find growth

Two high growth areas of the digital universe have reached and passed their peak growth cycle, according to separate reports looking at the global sales of mobile phones and the amount of consumer traffic to websites.

New data from CCS Insight forecasts a 1.3% decline for total mobile phone sales for 2016, from the peak of 2 billion units sold last year. The good news for mobile phone makers is the increased popularity of smartphones, which is projected to grow 4.1% in sales in 2016 to 1.42 billion units. During 2016, smartphones will account for nearly three-quarters of all phone sales, growing to 90% by 2020, the researchers said.

In the constricting market, smaller brands will be facing margin pressure, particularly with project price hikes on components, account to CCS Insight director Marina Koytcheva.

“Companies without the scale advantages of manufacturers such as Samsung, Apple or Huawei will find it much harder to make money,” Koytcheva said. “This is the first time we have seen component price rises for years. Phone makers with low volumes will find it almost impossible to turn a profit in these conditions without raising the prices of their products.”

PEAK WEB: Another metric that has peaked in the digital world is website traffic for companies looking to do business online. In a three-year study of North American traffic to web sites, Adobe found that organic traffic growth has all but disappeared,

Based on aggregated data from the Adobe Marketing Cloud, the firm found website traffic to sites inside its infrastructure has stalled, registering a negligible increase of 0.1% over the past 42 months. According to the data, six out of ten sites saw traffic growth on average by 1.1% each month, but nearly four out of ten sites saw traffic decline at a higher rate by 1.3%.

“The days of organic website traffic growth are reaching an end,” said Adobe Digital Insights principal analyst Tamara Gaffney.

Tony Chan

Nokia testing drone-based smart city system in Europe

Nokia has set up a testing facility dedicated to drone-based smart city systems in Europe. The location near the Twente Airport, near Enschede in the Netherlands, will initially support the development of a drone-based traffic management system, but is designed to serve as a general platform for testing the operations of unmanned aerial vehicles near urban areas, people, manned aircraft, other drones and so on.

Under the memorandum of understanding with local government agencies, Nokia will design and deliver the infrastructure to test and develop the Nokia UAV traffic management solution through real-life simulations and commercial demonstrations, including flight automation, no-fly zone control and beyond-visual-line-of-sight capabilities. “UAVs are rapidly becoming commonplace tools in many industries, enhancing safety, security, inspection, maintenance and many other activities. However, it is critical that they function faultlessly and safely in complex, real-world environments,” said Nokia head of advanced mobile networks solutions Thorsten Robrecht. “This requires more than just a smart drone, but a system of intelligent traffic control that is thoroughly tested and fully developed. Nokia is the only communications vendor currently building such a system and we are working with regulators to achieve the necessary standardisation.”

According to Nokia, the UAV smart city solution leverages a selection of its technologies, including LTE and 5G networking, mobile edge computing for ‘extreme low-latency and ultra reliability’ and Nokia AirFrame datacentre platform.

Specifically, Nokia has developed a modem for the drone-based traffic management solution, which integrates a LTE modem, global positioning satellite transceiver and other telemetry modules. The firm has also developed a smartphone app for drone operators with real-time flight permissions and no-fly zone information, as well as information on local regulatory rules.

Tony Chan

VOCUS SUBSEA CABLE ASPIRATIONS VERY MUCH ALIVE

Despite this week's report in the Australian Financial Review, Vocus is still pushing ahead with its aspirations to build a West Coast submarine cable. The firm says it is looking to take advantage of a team of experienced specialists in the field at Nextgen, who have already been working on the Australia-Singapore Cable project, with its pending acquisition of the latter firm. While CommsDay understands that, as per the AFR, Raj Jayawardena has left the company, he was not intended to lead the underwater cable project as reported but was simply part of the relevant team – with the project still on track. Similarly, while the AFR had reported that Jayawardena had left “along with about 20 other Vocus employees who were made redundant in the past three weeks,” CommsDay understands that Jayawardena was the only departure from the cable team; while the M2 side of the Vocus business restructured its Hobart contact centre months previously, resulting in some job losses, these were not connected to the cable project.

TE SUBCOM CABLESHIP RESCUES FISHERMEN ON ARABIAN SEA

TE SubCom's C.S. Dependable has rescued 14 fishermen in the Arabian Sea off the Maharashtra Coast near Mumbai, India. The fishermen were found without lifeboats or other floatation devices and no radio. The cables ship came across the sailors clinging to floating debris or treading water while on route between work sites. The survivors were brought to the Indian Coast Guard, which then rescued another survivor and recovered a deceased fisherman.

CALIX CHALKS UP TWO WINS IN SE ASIA

Calix announced it has won two customers for its fibre access solutions in Southeast Asia. The two customers are both cable operators – Cemerland Multimedia in Indonesia and Converge ICT in the Philippines – that have tapped Calix's Gigabit passive optical network solution to transform portions of their networks to fibre.

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

Internode partnered with South Australian regional council Coorong to deliver a hybrid broadband solution based on ADSL2+ and solar-powered microwave towers... Bruce Akhurst, CEO of Telstra's Sensis division, was ranked as the company's highest performing senior executive for the previous fiscal year under its new short term incentive scheme... Telstra legal counsel Danny Kotlowitz launched a stunning attack on the US Trade Representative's attempts to advocate for liberal telecom laws in Australia.