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ICMS development stays in NZ

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Asia Global Crossing sale gets the nod

The proposed purchase of Asia Global Crossing by a new company to be formed by China Netcom, Newbridge Capital and Softbank Asia Infrastructure Fund has been approved by the US Bankruptcy Court and the transaction is expected to close at the end of March.

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Who's driving the broadband market?

The question "How will the spread of broadband services change the service provider's business model?" formed the title of this month's Span meeting, and a panel of senior execs from the broadband industry was on hand to present their views and some answers, following a bit of crystal ball-gazing presentation from Internet industry veteran and Telstra's chief Internet scientist, Geoff Huston.

9 food for thought

No firm base

The latest OECD report on broadband access is long on opinion and short on analysis. Its fundamental message is at odds with the facts in Australia and it provides no firm basis for our policy work.

10 for the record

The week in retrospect

Almost 60 submissions to the Government's enquiry into the structural separation of Telstra went up on the web just before went to press, but one from the National Competition Council, presided over by possible future ACCC chairman, Grant Samuel, which quoted Samuel purporting to advocating structural separation of Telstra's infrastructure and retail arms made front page news.

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InovaTech, a Sydney company which has developed technology to deliver broadband communications over powerlines, claims to have signed a major deal with a foreign government, which will see its equipment manufactured overseas by a joint venture company and rolled out large scale.

InovaTech CEO, Ronald Watts, told *Exchange* "It's one of the top 12 countries in the world and we've signed an exclusive deal with the government at the highest level."

Watts declined to provide any other details but said that the InovaTech equipment would be manufactured in the country through a joint venture with InovaTech and other partners, and the overseas government was facilitating this with land grants and tax concessions. "An announcement will be made in a foreign capital in the next couple of months," he said.

According to its web site "InovaTech presently has operations in the US, the Philippines, Hong Kong, New Zealand and Australia. Its major research and development facility is located in Sydney while its principal customer focus is in north and south Asia." According to the Population Reference Bureau, the Philippines was the 13th largest country in the world by population in 2002.

In addition to this contract, Watts told *Exchange* "We have also signed licencing agreements in South Africa with options for a couple of other territories one of which is a large European country."

In addition to providing broadband communications, InovaTech's technology is claimed to incorporate power monitoring and power control technology which will enable utilities to tariff power usage according to time of day and smooth out demand peaks by restricting usage. According to Watts, this is hugely attractive because spot prices for electricity can vary in price 200 fold.

InovaTech, a four year old company, started out developing power control and monitoring technology particularly for Asian markets, where theft is a major problem, accounting for 25-30 percent of power consumed in some countries. According to Watts, InovaTech's technology will also support prepayment for power usage, another major attraction for power companies in Asia.

The technology is also being touted as attractive for providing telecommunications services in countries with minimal communications infrastructure.

Signs point to the Philippines

According to the web site of a Global Trade Group Limited, an international broker of goods and services, with offices in London, Boston, Ft Lauderdale and Manila which lists InovaTech as one of its strategic partners,

"Initial market research indicates that InovaTech's CATS technology has almost universal applicability. Approximately 3.85 billion people throughout the world are connected to electrical energy systems for their basic power needs. However, the vast majority of these people have no access to even basic telephone service. For example, in such countries as Philippines, Vietnam, and India, the nation has a high level of basic electrical distribution but 90 percent of the people in most areas have no phones in their homes. With its low cost and easily installable solutions, the prospective market for CATS and its innovative method of establishing telephone and broadband services is vast today, and is expanding at a geometric rate."

Dick Smith to sell Primus prepaid net access

Primus Telecom has announced a deal under which its prepaid Internet access kits will be sold through 500 Dick Smith and Tandy Electronics stores. The prepaid kits range from 15 hours of access to 12 months unlimited usage. The kits are distributed across Australia by Quadtel and are already available from Coles, Myer, Harvey Norman, Grace Brothers, Electronics Boutique, Officeworks, Target, David Jones, Australia Post (Qld & NSW), Bing Lee, Domayne, Shell and some news agencies and service stations.

D-link launches sub-\$1000 videophone

D-Link has introduced the i2eye DVC-1000 VideoPhone, a broadband appliance designed to connect directly to a standard television set and broadband connection to stream video-enabled phone calls across the Internet. It will sell for less than \$900 and is being targeted at individuals and small businesses with the claim that it is "comparable in quality and features to videophones used by large corporations and costing thousands of dollars". The product conforms to the H.323 protocol for videostreaming over the Internet allowing it to connect to other devices based on the same protocol, including Web-based videoconferencing applications such as Microsoft NetMeeting.

Bypassing costly fixed-to-mobile calls

A Gold Coast company, Powertec, has introduced a service which exploits the cheap rates offered between mobile phones on the same corporate account to reduce the costs of call diversions to mobiles for small businesses. (For example, Optus charges 10 cents for the first five minutes with no flagfall fee for a call between mobiles on the same business account). Many small/home business operators routinely divert their incoming calls to their mobile phones, but have to pay the high fixed-to-mobile rates for these calls. Powertec's product/service uses a diverter to answer the incoming call and feed it into an Ericsson fixed GSM phone (a product released by Ericsson late last year) which then calls the specified mobile phone. The product can also be used for outgoing calls from the office to a mobile, converting these fixed-to-mobile calls to mobile-to-mobile calls. Powertec will sell

Almost a year ago Watts told *Exchange* that InovaTech had signed agreements with major power utilities in Australia for field trials of its technology. He said this week that those had been completed successfully, adding "there has been nothing to indicate we cannot get the performance we claim." He declined to name the utilities involved.

InovaTech's technology relies on optic fibre run along powerlines to the cross arm in the reticulation network which typically, in Australia, serves three homes. A unit mounted on the cross arm converts the optic signal to one carried on the powerline into the home to CPE units which can be plugged into any powerpoint. These have an ethernet, USB and analogue telephone interface and support voice over IP.

Deep fibre essential

Each cross arm unit has a throughput of 25Mbps, or about 7Mbps per household. However Watts said that its next generation chipset, expected to be available in August, would boost capacity by 50 percent.

In volume Watts said the cross arm units would cost about \$1800 each, and the CPE about \$250 each. He claimed to have written quotes of \$3 per metre for suitable fibre which would be installed by wrapping it around the wire between power poles and said installation costs should be about \$9 per metre.

This would provide communication between user and electricity substation, from there, Watts said that many utilities had installed fibre in their networks, or in metropolitan areas there was generally carriers' fibre available.

In Watts' view demand for high quality video will drive the demand for capacity in access networks to a level that can only be met by deep penetration of fibre into the network. "MPEG-4 will give you reasonable quality video at 1.2Mbps, but if you want a large screen display, that goes up to about six or seven megabits. The only thing that will sustain this will be deep fibre. And the cost of that is not as bad as people think. Most is in the last 20 metres, I've seen estimates that this accounts for 70 percent of the total."

Telstra target for multimedia payphones

Internet kiosk developer, WebPoint, has become the Australian reseller of Marconi's Neptune 800 multimedia payphone, with Telstra firmly in its sights as the prime target customer.

Webpoint's managing director, Ian Hales, told *Exchange* that the company was "looking for a serious player who wants to install up to 200 units immediately".

He acknowledged that Telstra was the only organisation to fit the bill and while WebPoint does not yet have any contract, Hales said the company was in discussion with Telstra, adding: "We have had a relationship with Telstra for five years and we have developed Internet kiosk solutions for some of Telstra's major corporate clients for Internet and intranet access".

WebPoint is a privately owned Australian company founded in 1997 which claims to have over 1,000 public Internet access machines installed with a broad range of clients that includes Telstra, American Express, NRMA, Lion Nathan, St George Bank and GE Capital.

The Marconi Neptune 800 combines the functions of a standard payphone with an Internet access terminal. It has a touchscreen and full qwerty keyboard, can accept payment from coins, smart cards and credit cards, and is ruggedised for installation in unsupervised locations. It was developed by Marconi in conjunction with BT which last year committed to rolling out 28,000 of the units over the next seven years. Over 1000 are currently installed and the number is scheduled to reach 2,000 by April.

the hardware complete but is also an Optus mobile reseller and will provide the equipment at no charge to customers who port their mobiles to Optus.

Fund raising via Internet access

Australian ISP, AccessOnly, has launched an Internet access service, myschoolSP.com.au, which returns \$2.00 per month to the schools when parents sign up to use its service. Standard dialup plans are \$13.95 per month, with no time limits or download limits. A school or other group, is issued with a referral number and receives the \$2 per month for anyone signing up with that referral number and maintaining a paid up account. Access is available for a local call fee via an 019 number within AccessOnly's coverage area.

Juniper finds role in PWLANs

Juniper Networks has identified an application for its SDX-300 Service Deployment System with public WLAN operators, providing a centralised means of managing user authentication and access rather than the distributed solution adopted by many current PWLAN operators.

According to Kevin Dillon, Juniper's director of portfolio marketing "The current approach to building PWLANs, which requires underpowered and feature-constrained CPU-based gateways to be deployed, configured, and managed at each and every hotspot, restricts the service to basic Internet connectivity. This significantly impacts profitability, and - as demand scales to hundreds and thousands of hot spots - it is operationally prohibitive to locate complex user and service management functions at every hotspot."

According to Yankee Group senior analyst, Sarah Kim, "Juniper Networks is unique in its ability to offer this network-based PWLAN solution at the service provider edge... In contrast to others, this approach eliminates a requirement for gateways at each hotspot by centralising the intelligence at the service provider location."

Juniper claims that "The E-series enables PWLAN providers to offer additional differentiated services such as guaranteed bandwidth, virtual private networks, QoS, added security, and controlled access to premium content. The SDX-300 provides simple web-based login via service portals customised for specific users and

According to Paul Butcher, managing director of Marconi Australasia "Potential installations will include hotels, train stations and sporting venues – all of which can benefit from revenue channels including on-selling sponsored content channels, as well as provision of high-speed Internet access, e-mail and short-messaging services and voice."

A hotspot in a payphone

Hales said that the Neptune unit was suitable for installation in regional and rural locations, as well as urban streets and high traffic centres such as airports and shopping malls. It can be connected into the network using two way satellite Internet as well as DSL or ISDN. WebPoint is already bundling two way satellite access with its Internet kiosks for Telstra Country Wide, he said.

In future the payphones could incorporate a public wireless LAN access point enabling anyone with a suitably equipped PDA or laptop to access the Internet from anywhere near the payphone. Hales said this was already under development for the next release of the product.

Hales also suggested that ISPs, and carriers, could use the multimedia payphones in strategic locations as a marketing tool to promote their broadband access services. Such could also be Telstra's intention. Seeing broadband Internet access in operation can be a powerful means of convincing dialup customers to upgrade.

Telstra's first multimedia phone foray

Telstra has previously signalled its desire to rollout a substantial number of Internet enabled public payphones and flagged a range of possible applications. Its first attempt, using an in-house designed product, was abandoned and the last of what were to be thousands of units was removed some time ago from the Qantas terminal at Sydney Airport.

Telstra unveiled its home-grown multimedia payphone in late 1997 saying it would have 5000 installed around the country in time for the Sydney Olympics. The unit incorporated a touch screen, smartcard reader for Telstra's payphone cards, and graphics printer.

Telstra hoped to set up deals that would enable users to pay bills and book tickets via the terminals, with the ticket being printed out on the spot by the terminal's printer. It also hoped that most of the revenue generated by the units would come from advertisers and information and service providers, not directly from Internet access and phone call charges.

Each unit was to be individually programmable so they could, for example, be used as an advertising medium for shops in their locality. Other planned enhancements included smart-cards with an associated email address which would be promoted to overseas visitors enabling them to send and receive email messages and an A4 printer module to support receipt of fax messages.

An initial, six month, trial of the terminals was carried out with the Health Insurance Commission which installed them in pharmacies to provide online claims for Medicare benefits.

Just under a year after the product's announcement Telstra called for expressions of interest from companies interested in manufacturing 10,000 units for the local market and up to 40,000 for export. However, according to Hales, who claimed to have been in discussions with Telstra at the time, the product was under development, it was not sufficiently reliable, and was probably ahead of its time. "Telstra bought hardware from one supplier, software from another and developed an email client in house. The three never really worked properly together."

Years of searching for right product

He added that Telstra had not been alone in these difficulties. "We have been waiting for years for a multimedia payphone that would work. We've looked

locations, and dynamic self-selection of the additional PWLAN services through personalized web portals."

The SDX -300 is a key component of Juniper's Model for Integrated Network Transformation (MINT), its vision of delivering and managing services over an end-to-end IP network through the use of MPLS (Exc 14/48, p2).

Leading laptop makers opt for Atheros WLAN

Atheros Communications, the company that was first to market with chipsets for the 802.11a 54Mbps wireless LAN standard, has announced that its current multimode (2.4 and 5GHz) WLAN chipsets, providing both 802.11a and 802.11b wireless connectivity, are being built into new notebooks from HP, IBM, NEC and Toshiba—four of the world's top five PC vendors according to Gartner Dataquest. Atheros claims to be still the only volume provider of a single 802.11-compliant chipset supporting all Wi-Fi standards.

This development appears to be a significant blow to Cisco, which had a world lead in 802.11a chip design when it bought Australian company Radiata, only to see Atheros come out first with 802.11a chipsets. According to In-Stat/MDR, 5.7 percent of all notebooks were wireless-enabled in 2002. In-Stat/MDR predicts this figure will grow to 35 percent in 2003, and to 90 percent by 2005.

Moody's sees trouble for Intelsat

Moody's Investors Service has changed the outlook on Intelsat's debt ratings from stable to negative because of "Intelsat's fixed satellite service (FSS) revenue backlog erosion and the shortening average life under capacity leasing contracts; the increased credit risk of Intelsat's largest customers, including concentrations of marginally investment grade and speculative grade long haul carriers; and the expectation of continued pressure on revenues for Intelsat's high-volume routes from excess fibre optic capacity."

Moody's notes that "Since Intelsat is sometimes a secondary source of capacity, a continuation of the present environment of downward pricing pressure will likely result in contracts for FSS telephony that are shorter in term...These cyclical and secular issues will pressure Intelsat to grow through acquisitions or risky business initiatives, especially as the company prepares for a Congressionally mandated IPO." Moody's

worldwide but found nothing that was worth investing money in. None of the equipment had anywhere near the reliability of the Marconi payphone."

Hales attributed the product to the collaboration between Marconi and BT. "It's a joint effort by the two major players in the space. BT and Marconi have a very close relationship." (The company that is today Marconi incorporates Plessey which has for many years been a strong player in the payphone market, and for 30 years the supplier of BT's core digital switching technology, System X).

Challenges of payphones

Telstra is likely to be keen to boost its payphone revenues. It is still required under the USO to "ensure that payphones are reasonably accessible to all people in Australia on an equitable basis, wherever they reside or carry on business," and the price it can charge for payphone calls is regulated.

Thanks to the increasing popularity of mobile phones, Telstra's payphone revenues have declined substantially, from a peak of \$254 million in 1995 to \$154 million in 2002 and has been reducing the number of phones installed. In the US former monopoly telcos have either substantially increased the price of payphone calls, or, in the case of Bellsouth which had 140,000 payphones, exited the market altogether.

However, in the face of similar pressures in the UK, BT Payphones has doubled the number of units installed since 1984, to 141,000, claims to be operating profitably and is also moving into overseas markets.

new zealand

ICMS development stays in NZ

The future development site for the New Zealand developed ICMS, customer care and billing system, recently sold by IBM to a US billing software specialist CSG Systems, will be Wellington, New Zealand, but the team of 140 staff who were working on the product prior to the sale have lost the work and their jobs.

ICMS, which is in 40 sites around the world – mainly telecommunications network operators and including Saudi Telecom, The Philippines Long Distance Telephone Company, Telecom Fiji, ntl and Cable & Wireless - was sold by IBM Corporation in August to Colorado-based CSG Systems, which undertook a cost-effectiveness review of IBM's Wellington development lab. In the meantime it retained the IBM development team until December 31 to complete version 5.2, a major upgrade of the product which has been underdevelopment for the last three years (the last upgrade, Version 5.1 came out in late 2000).

CSG's review was not complete when IBM gave notice to all 140 staff in early December, with 100 told to leave at the end of December and the rest a month later (Exc 14/48, p7). The development work was expected to end up offshore, despite the fact that the development expertise was largely concentrated in Wellington.

From 140 developers to 15

CSG Systems' vice-president global software systems, Grant Gabrielson, spent a week in Wellington at the end of January and announced that a small New Zealand software company, Teliss, had been given a contract for continued development. Teliss will set up a small lab in Wellington of 10-15 staff, and is talking to the ICMS staff who have been laid off.

Teliss is owned by two former IBM ICMS staff, Simon O'Connor and Allan Campbell, who also own half of software company, Maximum Availability, which consults worldwide on disaster recovery and uptime for IBM's E-Servers, formerly the AS/400 machines. ICMS runs only on E-Servers using the OS/400 operating system, so the two companies are complementary. Teliss

says, "it is very important that Intelsat execute its IPO to maintain its credit rating".

Indian telco picks News Skies for int'l telephone

New Skies Satellites has signed a multi-year, multi-transponder deal with Indian telco, Reliance Infocomm. New Skies says the deal will "create a complete, end-to-end value-added service enabling Reliance to launch international long-distance telephony services to the United States". New Skies will supply multiple transponders on the NSS-703 satellite, uplinking/downlinking services at its partner's mediaport northwest of London, and local loop and trans-Atlantic fibre to connect the European gateway with Reliance's facility in New York City.

Indonesian order for Airspan

Airspan Networks, the company supplying broadband WLL technology to Australian carrier, Unwired, has received a \$US1 million order for wireless DSL equipment from PT Yuta Mitra Mandiri of Indonesia for the Airspan AS4000 wireless DSL network to provide voice and videoconferencing services in the Kutai province of East Kalimantan, Indonesia. The network will be expanded to cover all subscribers in the region by the end of the first quarter of 2003 and will service more than 3000 subscribers in the first phase of the deployment

MPLS and Frame Relay Forums to merge

The Multiprotocol Label Switching (MPLS) Forum and the Frame Relay Forum (FRF) have announced plans to merge. The combined organisation will be known initially as the MPLS and Frame Relay Alliance. According to Joe Kimball, chairman and president of the FRF, "This alliance will foster the interworking of both technologies. Frame relay serves as an ideal access technology and the integration of frame relay with MPLS networks is important to both the end users and the industry."

Frank Ianna, president of AT&T Network Services, said: "We envision a future network that will replace today's multiple networks (ATM, frame relay, private line) with a single, global, MPLS-enabled backbone over an intelligent optical IP-based core, with intelligent nodes and multi-protocol/multi-service capabilities at its edges. It's our hope that the combination of these two forums helps us and the industry move closer to that vision."

works for ICMS sites around the world, advising them on customisation and related matters.

Gabrielson said that the employment of 140 staff at IBM's lab in Petone was 'a stretch' given the worldwide telecommunications recession of the last eighteen months. He said many of the jobs at Petone were duplicated at CSG which specialises in billing and related systems for telecommunications and cable television companies.

CSG bought the Kenan billing product from Lucent Technologies in February last year. That system is installed in more than 200 sites around the world, and runs on the Unix operating system.

Gabrielson said there were no plans to amalgamate Kenan and ICMS, nor any plans to rewrite ICMS for Unix. The Petone lab attempted a Unix version a few years ago and ended up laying off several staff and admitting defeat, due to the complexity and costliness of the exercise.

He said the two products were quite different, with ICMS being a comprehensive end-to-end customer care system while Kenan was limited to billing and ratings. ICMS was a hugely robust product, he said, covering service orders, customer account maintenance, provisioning and plant management.

Development planning for the next version of ICMS post 5.2 is under way now with Teliss, and a product roadmap covering 2003-2004 is about to be sent out to customers. Gabrielson said that future development could incorporate some of the innovative customisations that had been done by individual sites as part of the core product.

Customers are happy

He said customer reaction to CSG's purchase of ICMS had been very positive, because customers knew that CSG was dedicated to this market and ICMS would be a core company asset. He said CSG was putting serious funding behind ongoing development of the product.

Certification testing of 5.2 is nearly complete and the product is expected to be generally available by the end of March. The new version offers better integration capabilities with products such as Siebel's CRM, web-based front ends, and with CSG's own electronic bill presentation and payment offering.

O'Connor said that he hoped to expand the new ICMS development lab quickly but declined to give projections. He said that growth would depend on CSG's ability to win new ICMS customers and encourage existing customers to more fully exploit the capacities of the product.

While CSG has been holding its own in a tough market, Gabrielsen said that the recession had led to much longer sales cycles, and a much more intensive level of detail being sought by customers before purchase. Rationalisation had also reduced the potential customer base. Internet Protocol and prepaid systems were also impacting sales, leading to much more immediate real-time billing needs by telcos.

CSG has just announced financial results for the year to December. It reported revenue of \$US610 million, up from \$US476.9 million a year ago. Net profit was \$US44 million compared to \$US113 million the previous year. It employs around 2000 staff. - *Adrienne Perry*

international

Asia Global Crossing sale gets the nod

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ITU issues specs for gigabit PONs

The ITU has produced new standards for gigabit-capable passive optical networks (G-PONs) which it says represent a further step towards all-optical networks. PON technology is used in the local loop to connect residential and SME end users premises in an all-fibre network. By eliminating the dependence on expensive active network elements, the use of PON enables carriers to make significant savings.

The new standards, G.984.1 and G.984.2, build on the existing and widely adopted G.983 series Recommendations relating to broadband PONs. G.984.1 describes the general characteristics of a gigabit-capable PON system such as architecture, bit rates, reach, signal transfer delay, split ratio protection and security. G.984.2 describes a flexible optical fibre access network capable of supporting the bandwidth requirements of business and residential services. It covers systems with nominal line rates of 1.25Gbps and 2.5Gbps in the downstream direction and 155Mbps, 622Mbps, 1.5Gbps and 2.5Gbps in the upstream direction. This represents approximately twice the capability of the previous release of the standards (G.983.4 and G.983.5). Both standards cover symmetrical and asymmetrical (upstream/downstream) systems.

Ipv6 mobile roaming demonstrated

Ericsson, in conjunction with a number of other organisations working under the EU-project IPv6 Wireless Internet Initiative (6WINIT) (<http://www.6winit.org/>), has conducted what it claims is the world's first demonstration of IPv6 communication maintained while roaming across 3G UMTS/WCDMA, 2G and WLAN networks.

In its laboratory Ericsson demonstrated an application known as Guardian Angel designed to transmit patient data from an emergency ambulance to the receiving hospital. According to Ericsson, "From a hospital setting, doctors can observe the patient in the ambulance, check the heart rate and blood pressure using mobile networks such as GSM/GPRS or UMTS/WCDMA. Once the ambulance reaches the hospital, the system can automatically switch over to an indoor WLAN hot spot. Data flows can use separate network interfaces in parallel. For example, if the WLAN does not have

Under the terms of the transaction, Asia Netcom, a new company, described as "organised by China Netcom (Hong Kong) and including Newbridge Capital and Softbank Asia Infrastructure Fund," will acquire substantially all of Asia Global Crossing's operating subsidiaries, excluding Pacific Crossing Ltd and related entities.

Bill Barney, Asia Global Crossing's, president and chief operating office, in an interview with *Exchange* shortly after the deal was announced last November, said that China Netcom Hong Kong would be the lead investor in Asia Netcom but "there are a bunch of issues they are working through".

According to Barney, "The expectation with our new investors is that we will be a powerful company in the whole of Asia, They know the Asian market very well. They have made some very prudent investments. They believe the Asian markets are where the growth is and I believe that is why they are investing in our company."

Asia Global Crossing filed for bankruptcy protection primarily to facilitate the deal, although it was heading towards bankruptcy after the failure of its bankrupt majority shareholder, Global Crossing to meet loan commitments. Its subsidiary, Pacific Crossing and its related entities, filed for bankruptcy protection early in 2002.

Barney described Asia Global Crossing's bankruptcy filing as being designed to facilitate "a very complex legal and financial transaction...[Chapter 11] is a very effective way to move the assets cleanly and quickly. The most important issue for us is our customers and we should be able to get through this in 70 -100 days. It takes many companies one or two years."

Barney said Asia Global Crossing would have preferred to retain Pacific Crossing within the group, but, "we are optimistic that whoever buys Pacific Crossing will work very closely with us" adding there were "a couple of potential buyers for the company".

Although various figures for the price to be paid by Asia Netcom were bandied about at the time of the announcement, Barney said there was no set figure.

Price hard to fathom

"A number of bankers have looked at it but no one has really been able to put a value on it...You would have to look at the business plan and the future revenues to see what the value is. The vendors [primarily suppliers of network infrastructure to Asia Global Crossing] will get paid over a period of time so they are essentially becoming investors in this company.

"The funds coming in will cover a funding gap over a period of 12 to 18 months when the company is expected to go EBITDA positive and cashflow positive."

Barney said the revised business plan forecast the company turning EBITDA positive in 2003 and cashflow positive in 2004, three and half years earlier than the original business plans.

Like most other global carriers, Asia Global Crossing's revenue forecasts were thrown into chaos by rapidly declining prices for international bandwidth. "You need to grow 40 percent just to stand still in this market, which is scary," Barney said, However, he added that, "There has been very little price
(continued on page 12)

sufficient reliability, vital data transmissions could simultaneously use a GSM/GPRS or UMTS/WCDMA channel."

iPass upgrades PocketPC2002, Mac OS X clients

Internet roaming access provider, iPass, has announced upgraded version of its iPassConnect client software for devices running Microsoft's PocketPC 2002 and the Mac OS X operating systems. According to iPass, "These platforms support wireless and wired broadband connections and can provide mobile professionals enhanced productivity with secure global access to corporate network resources."

iPassConnect 2.0 for PocketPC 2002 "simplifies the experience of connecting a PDA to a broadband Wi-Fi network...[It]...contains many of the features of the Windows version of the iPassConnect client, including Global Broadband Roaming (GBR) and Internet phonebook updates."

iPassConnect 2.3 for Mac OS X is claimed to be "the first and only enterprise connectivity ... client built for Apple Computer Mac OS X and Jaguar operating systems". It supports wireless and wired broadband venues on the iPass virtual network. iPass has had a client available to Mac users for OS 9.2 and earlier. Rival, Gric, used to have client software for the Macintosh, but no longer supports any Mac operating system.

CORRECTION: Portus smart home gateway

Last week's article on the Portus smart home gateway gave the company's name as Protus instead of Portus. Also it stated that Portus was a member of one of three consortia selected for trials by the Singapore Government's Infocomm Development Authority and that the other members of the Portus consortium were Asian property developer Capitaland, its Australian subsidiary, Australand, and Singapore company Air Gateway. In fact, five consortia were selected and the Portus consortium does not include Australand.

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Who's driving the broadband market?

The question "How will the spread of broadband services change the service provider's business model?" formed the title of this month's Span meeting, and a panel of senior execs from the broadband industry was on hand to present their views and some answers, following a bit of crystal ball-gazing presentation from Internet industry veteran and Telstra's chief Internet scientist, Geoff Huston.

There was much talk of peering, or rather the lack thereof and the cost of gigabits, of when networks might converge (Huston does not think it will happen this year) and of the importance of Ipv6, particularly its greatly expanded address space compared to the current incarnation, Ipv4.

Huston made the point that the business model of simply providing Internet access and seeking more and more customers no longer works, saying that customers were looking for quality of service, utility, flexibility, reliability and integrity, valued added services and "innovative services and applications".

That's the key "innovative services and applications" Particularly for the residential market. In the early days of dial up Internet access the offers were all about how many hours a month connection time, the cost per hour and at what time of day those hours could be used. That model is now well past its use-by date. Elsewhere in this issue we report on MyschoolSP.com.au which is offering unlimited dial up access at \$13.95 per month and donating \$2 per month to the subscriber's nominated school). - There's a bit of innovation and value-add for you!

Voice a killer broadband app?

Broadband plans for the residential market are at the stage where dial-up was a couple of years ago: the focus of

advertising is on how much data can be downloaded at no cost, and the market abounds with complex offers designed to confuse the users as to just what they are getting and how much it will cost.

This has got to change. The mass market doesn't give a fig about peering and interconnect charges nor do most users care about the cost of gigabits. They want attractive applications that are affordable. Joe Public sends millions of SMS messages everyday which, at 20 cents a pop, represent just about the most expensive data service on the planet.

A pity then that not much effort was devoted by the panellists to looking at a service provider business model centred around applications. Probably the most interesting comment along these lines came from Comindico CEO John Stuckey, who, almost as an aside hinted at boring old voice becoming a significant broadband application.

Comindico has spent \$350 million (\$90 million of it raised only recently in very tough times) building an all IP network around Australia with nodes in all 66 Telstra call collection areas. It is busy upgrading the network to support voice, with a launch planned for later this year. Stuckey admitted that the voice was not up to toll quality, but said it was better than cellular and talked about "a fixed rate national call price".

In other words, don't sell broadband access but sell low cost telephony with broadband thrown in. For on-net calls (with both calling and called party on the Comindico network, you can bet the costs would be very low indeed, and customers would not be worrying about how much they were paying per gigabit.

It seems quite possible that Comindico would be able to offer unlimited national calls for a fixed monthly price.

D-Link this week announced a \$900 videophone that works over the Internet using a television and a broadband connection. They could easily be sold (in pairs at least) bundled with broadband Internet access (and charged by the hour of usage) to the reasonably wealthy and to small businesses who have never surfed the net or used email and have no desire to do so.

Last month *Exchange* reported on home gateway developer, Portus, which has bundled a broadband terminal with Wireless LAN, bluetooth, security and surveillance and meter reading technologies. It's quite possible that it could be installed and operated as a monitored security service at a cost competitive with the current dial up technologies. Then there's another broadband customer who does not have to know or care about the world wide web, email or the cost of gigabits to be a revenue generating broadband customer.

None of these ideas were discussed at the Span meeting, but then perhaps the question should have been not "How will the spread of broadband services change the service provider's business model?" That suggests a reactive industry trying to adapt to an evolving market. Far better to give the service providers a pro-active role and ask the question. "How can the service provider's business model change to spread broadband services?"

Because, all the other contentious issues aside, innovation from service providers will be one of the key factors driving broadband take up.



• *Ex cathedra*, meaning "from the chair", is a column for authoritative comment by industry stakeholders. We would welcome your contribution, but it should be no longer than 700 words. Please email enquiries or submissions to stuart@3rdwave.com.au.

No firm base

The latest OECD report on broadband access is long on opinion and short on analysis. Its fundamental message is at odds with the facts in Australia and it provides no firm basis for our policy work.

The report, *Broadband Access for Business*, was released by the OECD as recently as December 2002 but it has already entered the Australian policy debate, being referred to in the BAG report released a fortnight ago by Senator Alston. However, on close inspection, it is analytically weak and over-extends its reach when offering policy advice.

The report does contain a lot of relevant information, including the latest so-called League Table of nations ranked by broadband penetration, which crops up often in the media and in policy documents. The OECD is good at that kind of work, collating data for comparisons and calculating global trends and averages, and had the report done no more it would have been useful. But its author went way beyond that appropriately modest task.

Clayton's conclusion

This report is loudly, pro-market and it decrees that promoting competition is the way to improve the spread of broadband access. It concludes (the use of that verb does not mean to imply there was preceding argument) that "infrastructure competition has been the main driver of overall broadband penetration ... due to competition between DSL and cable modem services". The report also makes the counterpoint: "the evidence continues to show that ownership of cable networks by incumbent telecommunications carriers, leads to slower roll out of broadband access". The reason for this is that it "appears to slow DSL growth and may therefore hold back the overall market".

Now you might think that such strident statements over an important and topical policy matter would be consistent with the data presented elsewhere in the report and supported by analysis of those data. Alas, that is not the case. We get none of the standard statistical work we might expect (correlating DSL and cable ownership by incumbents to broadband growth for example has not been attempted) even though only simple manipulation of the data presented about Australia is enough to show that our experience is at odds with the report's conclusion.

The OECD report has pretensions beyond presenting data but is an uncertain base for policy analysis.

Ours is such a case as the OECD laments: the incumbent owns both the PSTN and a cable network (as is the case, incidentally, in nearly a third of all OECD nations) but we have suffered neither of the supposed consequences the OECD predicts. Firstly, Australia's rate of broadband rollout in total (that is, DSL, cable and the much smaller "other" category) is more than twice as fast as the OECD average - 67 percent over the six months to June 2002 cf the 31 percent average. Secondly, having Telstra own both cable and the PSTN is not slowing the roll out of DSL. Quite the contrary, DSL is growing much faster than cable (242 percent cf 27 percent over the stated period) and this has been so since the data were first collected in 2000.

Not only did these anomalous, simple ratios not caution the author against his conclusion, they do not even appear in the report. Apparently there was time for many pages of text but very little for presenting the

data in a way which would allow comparisons and an assessment of the policy advice.

Unsubstantiated assertions

The report has pretensions beyond presenting data but is an uncertain base for policy analysis. At one point it tries to find a link between national trade intensity and the number of leased lines connected to the Internet but when no evidence can be presented we are told, "it is interesting to speculate on what might be occurring". (On your own time, mate!) The speculation is just some simple deductions from narrowly orthodox economic theory and, throughout the text, we get what amounts to a series of conjectures, as in "experience shows that entities with monopoly power ... act in anti-competitive ways". We also get assertive adverbs attached to unsubstantiated statements such as, in conjunction with the claimed delayed roll out of DSL, "this is extremely frustrating to business users" and "overall broadband growth rates are clearly higher where there is competition between ... DSL and cable ..." (I think that prominent adverbs nearly always indicate an inordinate desire to convince but an unwillingness to let the facts speak for themselves.)

The recent performance of the global telecommunications industry is such that we must revisit the policy reforms made in the late 1990s. The OECD's Working Party on Telecommunication and Information Services Policies should, to quote Bob Dylan, cease to "stand in the doorways and block up the halls".

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The week in retrospect

Almost 60 submissions to the Government's enquiry into the structural separation of Telstra went up on the web just before Exchange went to press, but one from the National Competition Council, presided over by possible future ACCC chairman, Grant Samuel, which quoted Samuel purporting to advocating structural separation of Telstra's infrastructure and retail arms made front page news.

However the attribution to Samuel, in a report in the *Australian Financial Review*, was not strictly correct, and it certainly was not news. The NCC's submission consisted of a report commissioned by the NCC and prepared by the economic consultants, Tasman Asia Pacific (TAP) for the NCC's second tranche assessment of governments' progress in implementing the National Competition Policy. It was supported by a covering letter from Samuel.

In the letter, Samuel said:

In its 2002 assessment of governments' progress in implementing NCP, the Council acknowledged that 'part privatisation means that shareholders have invested in Telstra on the basis of its ownership of the integrated local network.' It noted that 'achieving a competitive telecommunications industry capable of delivering substantial benefits to consumers suggests, however, that the Government should further consider the structure of Telstra, including the option of the structural separation of the fixed network.'

Which doesn't quite match up with how the AFR reported it: "In a surprise submission...Samuel said the Government should consider dividing the infrastructure and retail arms of the business".

What Samuel actually said, after quoting from the 2002 assessment, was: "The Council is continuing to monitor and

assess the Commonwealth's responses to these issues and industry developments in terms of adherence to NCP. The present inquiry by the Standing Committee will contribute to discussion of the issues." But that's much less exciting.

Telecom NZ and Uecomm both announced results this week, TNZ for the half year and Uecomm for the full year.

Challenges for Telecom NZ

TNZ maintained EBITDA at \$NZ1.1 billion and boosted net profit from \$NZ289m to \$NZ301m despite revenues falling from \$NZ2.84b to \$NZ2.60b compared to the corresponding half last year, and despite predictions of a profit fall. However when net profit had been adjusted for one-off items, it was down to \$NZ289m. TNZ achieved considerable reductions in capex, of almost 37 percent.

Much of the focus, however was on the performance of AAPT which saw revenues sink 17 percent to \$NZ773m. Pretax profit, however was up 16 percent to \$NZ78m.

Telecommunications analyst, Juan Merchan of Merchan and Associates, summed up the results by saying "In its home market, Telecom New Zealand experienced negative growth across a number of its core sectors: wireline minutes, wireless minutes and mobile service... On the positive side, management focused on cost, capital control and on reducing their high level of debt... The net result was a 50.1 percent increase in net operational cash flow."

He suggested that the company faced significant challenges. "The key drivers of growth, mobile and data, have stagnated... In New Zealand, the company is likely to be affected by additional competitive pressures from TelstraClear. In Australia, AAPT

continues to lose market share. While Telecom NZ continues to argue that the reduction in Australian revenues is mainly due to its focus on high value customers, it is not clear whether Telecom NZ has a long-term strategy for its Australian operations."

Uecomm improves

Uecomm reported total revenue of \$44.7m for the financial year ended 31 December 2002, an increase of 35 percent over 2001. EBITDA was \$3.6m, a \$52.8 million improvement over 2001. Net loss after tax was \$5.5m, an improvement of approximately \$50m from a \$55.2m loss in 2001.

CEO, Peter McGrath, said that the strategy to restructure the business in 2001 and focus efforts on being "a leading provider of high quality broadband data services to the corporate, government and service provider sectors" was proving successful.

The company sought to highlight recent successes which did not yet show up as revenue, "At 30 June 2002, Uecomm had signed \$35m in sales contracts, and by the end of the year this had increased to more than \$86m from 450 new contracts. These contracts have an average life of approximately 30 months and will provide a solid boost to future revenue. Only \$8m of this revenue was brought to account in 2002."

Merchan described the result as "and excellent turnaround story", but noted that "the high cost of building infrastructure is reflected by Uecomm's capex requirements and the increase in its net debt."

Capex for the year was \$21.3m, and net debt increased from \$19.1m in 2001 to \$35.2m in 2002. Capex was well down on the \$91 million of 2001, but Merchan is predicting an increase in capex to \$40m and an increase net debt to \$56m, based on guidance provided by Uecomm.

Ten Years Ago...

From Exchange 5 February 1993

- **First bundling enquiry**

Austel says it is still examining a complaint lodged by Optus last year that Telecom's bundling of local and long distance calls under the same discount scheme is illegal because of Telecom's *de facto* monopoly on local calls. Austel's Chris Pattas said Austel still wished to consult with a number of interested parties before taking a position on the matter.

- **Start of international simple resale**

MIG International Communications, a small Sydney-based company, is expected to be the first to offer the general public an alternative to Telecom and Optus for international phone calls, under the provisions for international resale in the international service provider class licence. MIG will target the South American and Middle Eastern communities in Australia and offer discount rates to their home countries... MIG is one of four companies enrolled as international service providers with Austel. The others are BT, Infolink Network Services and Pacrim Financial Network.

The conditions of the licence require enrolment only from companies wishing to provide international resale services interconnected to the PSTN at one or both ends.

- **Bending the rules**

Austel has given Optus until 15 March to provide coverage [long distance and international services] to 45 percent of the population. Optus was required by its licence to achieve this by 31 December 1992, but failed to do so... Ian Slattery, manager of Austel's Competition Policy Branch, said Optus had interpreted its licence condition to mean 45 percent of lines on which CLI was available, and in light of the difference in understanding between Austel and Optus, the Authority had granted an extension to the compliance period. The licence, however, is quite unambiguous. "No later than 31 December 1992, the licensee must have offered, and be in a position to supply: (a) domestic long distance services and international long distance services to not less than 45 percent of the population of Australia; and (b) terminating access to 99 percent of the population of Australia."

Optus was not able to explain how this condition had been interpreted differently.

Appointments...

- **Submariner takes charge at m.Net**

The Adelaide-based 3G and wireless LAN test bed, m.Net Corporation, has had a change of CEO with its director - projects and operations, **Horden Wiltshire**, replacing **Andrew Ekiert**. Prior to joining m.Net in 2002, Wiltshire was a member of the Royal Australian Navy for almost 20 years, most recently as commander of HMAS Sheean, one of the Navy's Collins Class submarines.

- **New CEO for Staffware**

Business process management (BPM) software company, Staffware, has appointed **Mike Cawsey** as managing director Australia and New Zealand, replacing **Angela Gregory** who has held the post since the opening of the Australian office in 1994. Cawsey has been with Staffware since June 2000 initially as sales director Asia Pacific and later as regional sales and marketing director Asia Pacific. He will continue in this role for the time being.

- **Head of Qld's Government portal named**

Jane King has been appointed to head the Queensland Government's new whole-of-government service delivery unit, Smart Service Queensland. She has been running Brisbane City Council's customer service area for the past six years. Smart Service Queensland aims to provide the public with a 'front door' to Government transactions, information and referrals via the Internet, phone or face-to-face customer service. Currently, Queenslanders can arrange camping permits and vehicle and boat registration renewals through the portal.

Queensland's minister for innovation and information economy, Paul Lucas, said another 40 services involving 16 State Government agencies were being reviewed for inclusion over the coming 12

months, with more than 400 services set to be rolled out over the next three to five years.

Mergers & Acquisitions...

- **Call centre companies merge**

Call centre managers, Datacom and Connect Interactive have announced plans to merge and to name the merged company, Datacom Connect. Michael Browne, CEO of Datacom, will assume the role of CEO of Datacom Connect and John Purdie-Smith, CEO of Connect Interactive, has been appointed to the board of the merged company.

The new company will be part of the Datacom group which has revenues in excess of \$200 million. Following the merger, the group will employ 1,500 staff in Australia, New Zealand and South East Asia.

Datacom specialises in the provision of customer contact services to technology companies, Connect Interactive in the provision of customer relationship management services to government and corporate clients (it was the official call centre for the Sydney 2000 Olympic Games).

Datacom claims to be the only organisation in the southern hemisphere certified to the COPC (Customer Operations Performance Centre) standard, developed in 1995 by a group of large corporates dissatisfied with the performance of their suppliers of outsourced call centre services.

Reports & Surveys...

- **Gov't role in broadband highlighted**

According to the latest research from Strategy Analytics, 7.5 percent of all European households now subscribe to a broadband Internet service. A record 6.3 million new customers signed up for broadband during 2002, an increase of 55 percent over 2001. ADSL increased its share of new customer acquisitions from 72.3 percent in 2001 to 76.1 percent in 2002, while cable's share fell from 26.0 to 22.6 percent. Strategy Analytics predicts that a further 7.2 million European homes will acquire broadband during 2003, bringing the total to 19.1 million, or 11.9 percent of total households. Cable's share is expected to increase to 25 percent and ADSL's share to fall to 71 percent. Cable's improved performance will be dependent upon successful financial restructuring and increased investor confidence, the report said.

According to Nick Griffiths, director of the company's Global Broadband Practice, "Our analysis shows that broadband has been most successful in countries such as Belgium, Denmark and the Netherlands, where there is strong competition between cable and telco operators. Governments and regulators must adopt policies to encourage multiple operators and service providers to compete for new subscribers, otherwise broadband will remain the preserve of the affluent, urban minority."

- **Optic equipment market still going down**

The latest five-year forecast report by Dell'Oro Group points to three segments in the optical transport equipment market having positive growth to 2007: metro DWDM, Sonet/SDH and optical switching. However, according to Dell'Oro the growth of these three segments will not be sufficient to offset the further decline in the DWDM long haul terrestrial and SONET/SDH ADM markets, which it predicts will keep the total optical transport equipment market shrinking until 2005, when overall growth is expected to resume. Details: <http://www.delloro.com>

- **Internet growth slows**

Internet traffic in Asia-Pacific grew by 126 percent in 2002, failing to match the previous year's growth of nearly 200 percent, according to a new study by RHK. The report estimates that broadband users contributed the largest portion of traffic in the Asia-Pacific region, accounting for two-thirds of the total.

Just three countries accounted for much of the spike in traffic growth in 2001: Japan, Korea, and Taiwan, through their aggressive broadband deployment initiatives and in two of these countries broadband deployments slowed dramatically in 2002, according to RHK. China accounted for only six percent of the region's total Internet traffic, although China's traffic grew most rapidly in 2002. RHK forecasts that China will continue to lead the region in growth for at least the next five years, as the number of Internet users steadily increases.



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(continued from page 7)

erosion in the past month. All our competitors are in restructuring or heading in that direction. They are all in a pretty difficult situation right now."

The subsea component of the Asia Global Crossing network is now complete, the company is expanding its network into Malaysia, it has an agreement to

provide layer 2 services into Indonesia and plans to move into India and into parts of China.

"We have built a layer 2 network in China that will be very complimentary to China Netcom's," Barney said. "Having the largest broadband network in China connected to ours will bring tremendous Chinese content and give us IP capabilities across Asia."