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Stuart Corner

IN THE NEWS THIS WEEK

Some months ago I suggested, in *Ex Cathedra* and not entirely seriously, that training for computer users should be mandatory before they be allowed connect to the Internet. My column was prompted by a report that consumers' ignorance had been identified as a major contributor to the global spam problem because their inadequately protected computers are easily converted into spam-spawning zombies. So, it was interesting this week to see the OECD going one small step in the same direction. However, it's clear from many of this week's stories that the Internet security problem will get worse before it gets better.

stuart@3rdwave.com.au

Tel: +61 2 9557 9337 Fax: +61 2 9012 0702 email: info@exchange.com.au http://www.exchange.com.au ISSN 1033 - 2014

Global initiatives on Internet security

Both the OECD and the ITU have this week launched major initiatives aimed at tackling the growing problem of Internet security, against a background of several new reports highlighting the growing problem.

The OECD has launched an Anti-Spam Toolkit, available online at www.oecd-antispam.org, and has urged governments and industry to adopt a more co-ordinated approach to battling spam, saying it has become damaging and costly for business and a regular weapon in the arsenal of cyber criminals.

"It disrupts networks, cuts productivity, spreads viruses and is increasingly used by criminals who steal passwords to access confidential information and often bank accounts." the OECD said.

The Toolkit aims to "give policymakers a comprehensive package of concrete regulatory approaches, technical solutions, and industry initiatives to fight spam". It includes a guide to best practices for Internet service providers and other network operators, and for email marketing. These were produced by the Business and Industry Advisory Committee (BIAC), the business advisory group to the OECD, in co-operation with the Messaging Anti-Abuse Working Group (MAAWG), an organisation of Internet service providers.

According to the OECD, "this is the first effort by the private sector to develop a series of common best practices at the international level". And it notes that international co-operation will be key to solving the spam problem. "Spam moves between countries and investigators have to follow the flow across borders to track spammers".

Teach consumers net security

The OECD also recommends that lessons on spam and Internet security be included in computer courses for schools and for senior citizens.

OECD governments have approved a "Recommendation on Cross-Border Co-operation in the Enforcement of Laws against Spam", urging countries to ensure that their laws enable enforcement authorities to share information with other countries quickly and effectively. The OECD has also called on each country to "establish a single national contact point to facilitate international cooperation".

It says there is no single solution to the spam problem but if governments and the private sector "act fast on a number of fronts...establish clear national anti-spam policies and give enforcement authorities more power and resource," they can do much to mitigate the problem. "Co-ordination and co-operation between public and private sectors are critical."

ITU to launch Internet security survey and website

Meanwhile the ITU has launched a worldwide public survey to assess users' trust of online transactions and awareness of cybersecurity measures. It will also next month launch a cybersecurity website.

Unwired offers Google for net surfers on the go

Wireless broadband provider, Unwired Australia, has formed an agreement with Google that will initially see Google search technology incorporated into Unwired's customer-only homepage and the two companies sharing advertising revenues. These revenues will come from searches generated from Unwired's customer home page via Google's AdSense for Search, which displays ads relevant to a customer's search request.

While the present deal may seem to offer users little beyond what they can get by accessing Google via its own home page, Unwired envisages future location-related searching for users on the move. Unwired CEO, David Spence, said: "Internet search engines such as Google will become even more sophisticated as the trend towards personal mobile broadband and ultra mobile PCs continues. Internet users will increasingly demand services relevant to their specific location...and we intend to be able to cater for this demand."

BigPond clocks up one million ADSL users

Telstra's BigPond has reported a doubling of its ADSL user base in less than 12 months, to pass the one million mark. BigPond group managing director, Justin Milne, said: "The first 500,000 ADSL services took almost six years to achieve...With broadband growth in Australia in the top six for OECD countries, and broadband penetration above the OECD average, BigPond looks forward to continued strong growth."

In the latest OECD figures, for December 2005, the OECD average was 13.6 services per 100 inhabitants and in Australia, 13.8.

ACMA tightens customer credit rules for telco service providers

The ACMA has registered a revised ACIF code, *ACIF C541: Credit Management Industry Code,* dealing with credit management practices in the telecommunications industry. It includes new financial hardship programs that, according to the ACMA, will assist customers experiencing difficulties with paying their bills. Service

It plans to use the data collected through the survey to increase global awareness of cybersecurity, particularly in developing countries, and to help decision-makers in assessing the cyberspace "trust" level with a view to reviewing national and corporate strategies and priorities.

According to ITU secretary-general, Yoshio Utsumi, "In order to safeguard our systems and infrastructure and in order to instil confidence in online trade, commerce, banking, telemedicine, e-government and a host of other applications, we need to strengthen the security practices of each and every networked country, business, and citizen. We need to develop a global cybersecurity mindset. We urge everyone using or fearing cyberspace to take part in the survey".

The ITU will make 'Promoting Global Cybersecurity the theme for World Telecommunication Day, 17 May 2006 - a day that commemorates the founding of the ITU in 1865 and which this year also marks the first commemoration of the World Information Society Day, declared by the United Nations General Assembly on 27 March 2006. It will use the occasion to launch its cybersecurity website, designed to be "an easy-to-use information resource on national and international cybersecurity-related initiatives and websites worldwide".

It will be geared towards four specific audiences: Citizens, Businesses, Governments, and International Organizations and structured around five main themes:

- Information sharing of national approaches, good practices and guidelines;
- Developing watch, warning and incident response capabilities;
- Technical standards and industry solutions;
- Harmonising national legal approaches and international legal coordination;
- Privacy, data and consumer protection.

The Cybersecurity website will be accessible at http://www.itu.int/wtd/ from 17 May.

An analysis of survey data received before 8 May 2006, will be posted on the World Telecommunications Day website on 17 May. The survey will, however remain open for some time beyond that date.

Rent zombies, bring down a network

The OECD's call to better educate consumer users of computers was supported by the findings of Internet security company, Panda Software, which claimed that zombie computers are now the biggest source of spam on the Internet.

A zombie is a computer infected with malware that enables the sender of the malware to take control of it. The malware most frequently used to convert computers into zombies are 'bots' - Trojans designed to automatically respond to commands of their creators.

Panda re-iterates the OECD's claim that spam is now much more than a mere nuisance. "Spam has evolved - it is now becoming a serious threat with potentially disastrous consequences because

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providers must also offer tools such as call barring, caps on expenditure, download limits and pre-paid services to help customers manage their spending to avoid going into debt.

Carriers and carriage service providers have six months to implement a number of improved practices. Consumers will be able to take complaints about credit management issues to the Telecommunications Industry Ombudsman if they are not satisfied with the response of their provider.

HP Media Center PCs to include IceTV interactive programme guide

IceTV, a company that provides an interactive programme guide for free-to-air TV services, has partnered with Hewlett-Packard Australia to include a free subscription to IceTV with HP's new Media Center PC. The service is normally sold on subscription for $3 per week. The duration of the free subscription depends on the model purchased: the top of the range m7399a comes with 12 month subscription worth $156.

IceTV promises to simplify the process of watching and recording digital television by offering an on-screen guide and 'point and click' recording functionality. The guide is constantly updated to deliver programming schedules for all major Australian free-to-air networks. IceTV works in conjunction with either a digital set-top box, personal video recorder or a PC Media Center.

IceTV is in the process of listing on the Australian Stock Exchange and is seeking to raise $4 million to fund further growth. The prospectus can be found at www.icetv.com.au. The IPO closes on 25 May 2006.

Primus offers SMS from PCs

Primus Telecom has released WebTXT, a personal messaging service that allows Primus Internet subscribers to send an SMS direct from a computer. The service is charged at 18 cents per SMS message and is billed to a user's iPrimus Internet account.

According to Primus, using the computer to send SMS also opens up a range of other value-added features, which are not possible, or limited, on a mobile phone. "It's

cyber crooks are using spam to propagate phishing attacks...The fraudsters usually aim to gather data for online banking services to perform fraudulent financial operations."

Panda Software points out that bots cause problems not only for those receiving spam, but also for the owner of the infected computer, because any investigation will lead directly to the zombie computer, while the real attacker's identity will remain unknown.

Panda contends that traditional antivirus solutions provide only limited protection against zombies because "malware programmers try to ensure that their creations go unnoticed for as long as possible by both users and security companies... [They] exploit the limitations of traditional antivirus solutions, which can only detect previously identified malicious code."

It recommends complementing traditional antivirus solutions with technologies that are able to detect malicious code by analysing the behaviour of the infected computer and identifying abnormalities.

How big is the zombie problem?

Eighteen months ago security company, Symantec, estimated that, on any day, anywhere between 30,000 and 70,000 computers, mostly owned by ignorant consumers who failed to keep their antivirus software up to date, were under the control of gangs of organised cyber criminals and used to launch spam campaigns, phishing scams or denial-of-service attacks.

Panda spokesman, Javier Merchan, told *Exchange* this week that it was extremely difficult to get data about zombie computers. "We have heard of some botnets consisted of more than one million computers but this is something we cannot tell you for sure." However, he said that one botnet was found to consist of about 1.5 million compromised computers, 15 times the number first thought.

He also cited the case of James Ancheta, a 20-year-old, California resident, who has been indicted on multiple cyber crime charges. He had amassed a collection of over 40,000 zombie computers under his control, and had set up a website offering these for rent to others suggesting how many would be needed to mount successful denial of service attacks against corporate networks of various sizes. "The indictment lists a few exchanges with individuals who took Ancheta up on his offer, individuals who went on to create denial-of-service (DoS) attacks against King Pauo Electronic Company and Sanyo Electric Software Company, for example," Merchan said.

Ancheta, however was able to capture not only computers of inexpert consumers but those that should have been highly secure. "Some of the bots included computers at the Defense Information Systems Agency (DISA) in Falls Church and at China Lake Naval Air Facility in California," Merchan said. "The DISA offers network-based solutions for the president, the vice president, and the secretary of defense."

Australian business fear evolving menace

This week in Australia Juniper Networks released the results of a survey of Australian enterprises' experience of cyber security attacks. It found that 72 percent of companies surveyed had experienced

possible to send messages directly using a spreadsheet, create an address book with categories, and check the history of SMS messages sent and received by date".

Primus has partnered with SMS-based messaging solutions provider, Qmani, to deliver the service.

ACCC rejects Hutchison mobile termination undertakings

The ACCC has released a draft decision rejection six access undertakings lodged last October by Hutchison for mobile terminating access to its 3G network, '3', and its 2G CDMA network, Orange. The undertakings were lodged on 5 October 2005 and on 18 November the ACCC released a discussion paper relating to the undertakings, to which it received submissions from Telstra, Powertel, Vodafone and Hutchison itself.

AAPT launches trans-Tasman IP network service

AAPT has launched a service providing IP connectivity between multiple business sites in Australia and New Zealand using AAPT and Telecom NZ infrastructure. It claims that the new service, dubbed One Office, "enables customers with trans-Tasman operations to centrally manage company-wide applications, including all types of business communications from highly-demanding IP voice telephony and video conferencing applications through to standard email or file transfers on a single connection."

ACE retains national relay service

The Australian Communication Exchange will continue to provide the telecommunication relay services to help people who are deaf or have a hearing or speech impairment after signing a new contract with the Federal Government. Under the new contract it will be required to provide "enhanced services including...an Internet relay service and much stricter service level standards."

ACE, an Australian not-for-profit company employing around 200 staff with call centres in Melbourne and Brisbane, has provided the relay service since its inception in 1995.

The Government has also recently

virus or worm attacks in the past 12 months, and 67 percent had received spyware or malware.

According to Greg Bunt, Juniper Networks' manager for emerging technologies for APAC, "IT decision makers interviewed for the report – including CIOs and other corporate leaders of information technology – were very concerned about the increasing sophistication of advanced threats such as phishing and spyware."

Frost & Sullivan surveyed 100 Australian companies of more than 250 employees each – from the finance, insurance, real estate, government, manufacturing, construction, wholesale trade, retail trade, services, transportation, communications, electric, gas and sanitary services sectors.

Forty two percent of respondents reported phishing attacks; 36 percent reported experiencing denial of service and distributed denial of service attacks; 27 percent experienced hacking attacks, and26 percent suffered a deliberate insider intrusion.

Intel announces chip level security solution

In the longer term, chip-level changes in PCs, announced by Intel this week, could do much to make computers less vulnerable to attack.

Symantec announced that it is working with Intel to build security solutions for the new Intel vPro technology "that will allow IT managers to effectively manage security threats outside the main PC operating system".

Intel announced vPro this week, billing it as "a revolutionary shift in desktop PC security and manageability along with remarkable energy-saving computing performance". Intel claims it enables the creation of a separate independent hardware-based environment inside a single PC "so IT managers can create a dedicated, tamper-resistant service environment – or partition – where particular tasks or activities can run independently, invisible to and isolated from PC users".

According to Symantec this means that, in the event that malware is successful in infecting a desktop environment, the Symantec virtual security solution will contain the threat on that particular desktop, isolating it from other network resources. "Since this new solution is built specifically for security and is separate from the primary OS, it offers IT departments a separate, stable environment from which to protect the desktop from attacks," Symantec claims.

technology

Linksys, Netgear launch 802.11n WLAN products

Less than six months after agreement on a draft of the 801.11n wireless lan standard, two major equipment vendors have announced products using the new standard, to be on the market within weeks.

Cisco subsidiary, Linksys, claims that its range of wireless local area networking equipment conforming to 802.11n standard will offer 12 time the bandwidth and four times the range of current 802.11g products.

announced a new National Relay Service Outreach provider, WestWood Spice, who will provide awareness raising and training for users of the National Relay Service. Previously ACE also held the contract to provide outreach services.

BroadIP boasts big surge of eager VoIP resellers

Recently-launched wholesale VoIP provider, BroadIP, claims to be on target to sign more than 50 resellers this week. It claims that they have approached it "attracted by competitive pricing and the high quality of BroadIP's service", and claims to be on track to have more than 200 resellers by 1 July.

BroadIP's claims come against the background of rapidly proliferating VoIP service providers. According to figures from telecoms research company, Market Clarity, there are now 128 VoIP providers in Australia, 26 of which offer wholesale services and 119 retail. However Market Clarity has not researched how many of the retail providers have their own infrastructure, as opposed to reselling services from the wholesalers. Eighty six Internet-based VoIP providers primarily focus on the residential market, and 59 on businesses.

Pacific Internet secures GPs' broadband access

Pacific Internet has re-signed the Hunter Urban Division of General Practice (HUDGP) under stage two of the Federal Government's Broadband for Health (BFH) programme and will now deliver managed network security on top of the broadband services already supplied to local general practitioners.

Pacific Internet has provided broadband to HUDGP - a representative body for GPs in the Newcastle and Hunter area - since November 2004. The group will now increase its investment in security, and has selected tailored Pacific Internet broadband plans featuring a managed network security component powered by Cisco hardware, called PacNet SecureSite.

Pacific Internet launched SecureSite in August 2005. It was billed by Cisco as "Australia's first managed end-to-end IP connectivity and security service to small and medium-sized businesses based on the Cisco Integrated Services Router."

Products announced are a wireless gateway/access point, wireless router, PCI adaptor and notebook adaptor. Australian pricing has been announced and products will be available in May or June. Netgear has released a similar range of products, but Australian availability and pricing has not been announced.

All the products rely on MIMO (multiple input, multiple output) technology: they use multiple radios to simultaneously transmit two streams of data over multiple pathways. This enable each standard 20MHz channel to carry much more data than in 802.11g mode.

The standard also allows Linksys Wireless-N products to transmit over two available channels at the same time, effectively creating a 40MHz channel that doubles the capacity for applications such as high definition video, audio streaming, online gaming and VoIP. However industry experts have warned that this mode of operation has the potential to 'hog' the unlicenced spectrum used for all 802.11 systems.

Doubts about interoperability

This technique has been used in proprietary variants of 802.11g to boost speed in so-called turbo modes, but according to a report in US magazine *Personal Computer World*, "controversy over this led some vendors to switch off turbo mode by default or to have it switch off when it detects other WiFi networks".

This technique, channel bonding, is, however, standard in 802.11n, which also specifies that products provide both mixed mode operation and backward compatibility with 802.11g and 802.11b. Mixed mode operation designates that, unlike previous proprietary networking technologies, 802.11n networks must maintain optimum speeds when operating with legacy products. Similarly, backward compatibility requires that existing standards-based wireless products are able to work at their respective highest performance levels in mixed environments.

Vendors have made claims for data rates of up to 600Mbps for 802.11n, but it has been suggested that only 150-170Mbps will be achievable without channel bonding. The P*ersonal Computer World* report quoted Paul Senior, vice-president of Airspan Networks, saying that it would not be possible to assess real world performance until certified 802.11n products had been put through interoperability tests. There have also been suggestions that current 802.11g products using MIMO are less than friendly to neighbouring 802.11b/g networks.

Linksys claims interoperability tested

Linksys, however claims to have anticipated any such problems, Malachy Moynihan, vice president and general manager, Home Networking for Linksys, said in the company's802.11n product announcement that "a substantial number of products for both homes and businesses will soon depend on compatibility with Wireless-N to reach their full potential. Because of the importance of the technology, we have taken the unique step of conducting extensive testing with multiple vendors to ensure that the greatest possible number of them will perform at peak levels when interacting with our 802.11n products."

However despite the rush of products, more than a rubber stamp stand between the 802.11n draft and a final standard. According a report last month in US magazine, Network World, The IEEE has now accepting comments on the just-adopted 802.11n draft, and "the number and scope of the responses will determine whether there will be big or small changes to the draft at the next 802.11n task group meeting in May."

thePlatform revealed as key component of BigPond Movies

US-based provider of digital audio and video publishing solutions, thePlatform's Media Publishing System (MPS) has been chosen by Telstra to support the delivery of personalised digital video to PCs for its BigPond Movies service. Subscribers will also use thePlatform's MPS Download Media Manager (DMM) to manage and play back content acquired from the BigPond service.

thePlatform claims that, with its MPS, "Telstra can efficiently aggregate sports, movies and other forms of video-on-demand content from many different providers and deliver it using Windows Media and Windows Media Digital Rights Management (DRM) to BigPond customers.

"In addition to aggregating content, MPS makes it simple for Telstra to associate rich metadata with content, enabling customers to easily discover and receive personalised media based on their selected preferences," the company said.

NEW ZEALAND

TelstraClear to build $NZ43m 10Gbps NZ research network

TelstraClear has signed a contract with Research and Education Advanced Network New Zealand (REANNZ) to build a high speed network linking the country's research and educational institutions to each other and to their peers in over 40 countries with the aid of a $NZ43 million Government grant spread over four years.

TelstraClear will lay fibre from its national fibre network to a series PoPs throughout the country. Education and research institutes will then connect to the PoPs through an access provider. The network will have a dedicated 10Gbps wavelength on TelstraClear's core optical backbone network, providing a separate network from TelstraClear's commercial network.

TelstraClear will install the 10Gbps optical transmission network and the REANNZ routers and switches. TelstraClear subsidiary, Sytec, will provide first level help desk and network management services, backed up by REANNZ and TelstraClear technical teams.

Standard won't be final before mid 2007

The report said that, if only small changes were made to the draft, the standard would remain on track for final ratification and interoperability testing in mid-to-late 2007. The report quoted a Linksys spokeswoman saying " "We're confident [our draft 802.11n products] will be software upgradeable [to the final 11n standard], but we haven't said we'll guarantee that."

Nevertheless, analysts are predicting rapid uptake of 802.11n, in the consumer market at least, According to Dell'Oro, 802.11n products will account for 15 percent of home wireless network product sales worldwide in 2006 alone, and by 2009 the figure will be 90 percent.,

Linksys' Australian pricing

The Linksys 802.11n products are: Wireless-N Gateway (WAG300N), Wireless-N Broadband Router (WRT300N), Wireless-N PCI Adapter (WMP300N) and Wireless-N Notebook Adapter (WPC300N). All will be available in Australia in late May or June at recommended retail prices of $379.95, $279.95, $229.95 and $229.95 respectively. Linksys says that additional products for both the home networking and small business will be launched in the second half of 2006.

Linksys was pipped at the post in the race to come out with 802.11n products by Netgear which announced early in April what it claimed were the first draft 802.11n-compliant wireless networking products. Products released included the RangeMax Next wireless router Gigabit Edition with 10/100/1000 Switch (WNR854T) ($US249) and RangeMax Next Wireless Notebook Adapter Gigabit Edition (WN511T) ($US129); the RangeMax NEXT Wireless Router with 10/100 Switch (WNR834) ($US179); RangeMax NEXT Wireless DSL 2+ Modem Router with 10/100 Switch (DG834N) ($US249); RangeMax NextWireless Notebook Adapter (WN511 ($US129); RangeMax NEXT Wireless PCI Adapter (WN311 ($US129); and RangeMax NEXT Wireless Access Point (WN802T) ($US249).

international

Asia gets third mobile carrier alliance

A group of Asian mobile carriers has formed an alliance to "enhance members' competitiveness in international roaming and corporate mobile services in their own countries/regions and across Asia-Pacific." It is the third such entity to have been formed in the past three years.

The alliance, tentatively called the "Asia-Pacific Mobile Alliance," comprises Far EasTone Telecommunications (Taiwan), Hutchison Essar (India), Hutchison Telecommunications Hong Kong (Hong Kong and Macau), KT Freetel (Korea), NTT DoCoMo (Japan), PT Indosat (Indonesia) and StarHub (Singapore). It boasts a combined customer base of about 100 million mobile subscribers over eight countries and regions, and says it plans to expand its membership over time.

It promises to provide multinationals as well as business and leisure travellers with "greater convenience, ease of use and value-added mobile features" when they roam onto other members' mobile networks. It will promote voice, video and data roaming via members' GSM/GPRS and /or W-CDMA networks, with an intention to launch

INTERNATIONAL

Intel teams with Pacific Internet to push WiMAX in Asia-Pac

Asia-Pacific regional ISP, Pacific Internet, has signed an MoU with Intel to develop mobile WiMax infrastructure in Singapore, and the region.

Under the MOU, PacNet and Intel will conduct studies, including market trials, "to better understand market needs and behaviour". PacNet says it will "leverage on Intel's know-how and worldwide experience in WiMax and wireless access technology, including its strategic partnerships along the value chain, to build new business models in offering differentiated wireless services that will benefit operators worldwide". The two companies say they will also look to sharing some of the insights gained through the release of educational white papers.

PacNet's joint trial with Intel is expected to start in the middle of 2006 for select customers. PacNet says it will test the performance of both nomadic and mobile access, including handover.

Globalstar raises $US400m for new satellites

Global mobile communications satellite operator, Globalstar, has closed a $US400 million debt and equity financing. The financing consists of $US200 million of debt in the form of a five-year term loan and a four-year revolving credit facility, both underwritten by Wachovia Securities. The $US200 million in equity capital is being invested by affiliates of the Thermo Companies.

Globalstar intends to use the proceeds of the financing, as well as cash from its ongoing business, to fund the design and deployment of a second-generation satellite constellation, upgrades to its ground segment and the launch of eight spare satellites for its current constellation in early 2007.

Earlier this year, Globalstar LLC converted from a limited liability company into a corporation and is now known as Globalstar, Inc. Globalstar is mandated by its organisational documents to register its shares with the US Securities and Exchange Commission before 13 October 2006.

roaming via HSDPA networks "once the market is ready". These initiatives are targeted for launch in the latter half of 2006.

Another aim of the alliance is to create a 'Virtual Home Environment' amongst customers of member operators, so that they are able to experience seamless, convenient mobile-related services when they roam. It promises that customers will be able to get caller ID display and a short-code service to allow them quick and easy connection to their home country/region operator's voice mail and customer-support centre, etc. The alliance is also planning to enhance cross-border customer support for multinational corporations.

Now there are three

The first Asian regional mobile carrier alliance, the Asian Mobility Initiative, was formed in 2003 with Telstra, its Hong Kong subsidiary CSL, Maxis (Malaysia), MobileOne (Singapore) and Smart (Philippines) as members. By mid 2005 the organisation appeared to be defunct, but in mid 2005 Telecom Malaysia joined through its subsidiaries, TM International and Celcom. Telecom Malaysia said its membership would increase AMI's total subscribers by 35 percent from the 37 million as at 31 March 2005 to 49.8 million, and that AMI's membership now included CTM Macau and DTAC of Thailand.

The organisation, however has an extremely low profile: it has no website and a search on Google yielded less than 10 hits.

The most ambitious such alliance is the Bridge Mobile Alliance, formed in November 2004. It has taken the form of a Singapore incorporated entity in which key members hold equity, and, at its launch committed to investing around $US40 million over three years to "build and establish a shared regional mobile infrastructure, to develop seamless cross-border services and deliver a suite of regional mobile services across the Asia Pacific region."

Operator members are Airtel (India), CSL (Hong Kong), Globe Telecom (Philippines), Maxis (Malaysia), SingTel Mobile (Singapore), SingTel Optus (Australia), Taiwan Mobile (Taiwan) and Telkomsel (Indonesia). In addition to its principle members it also has an associate member program and now boasts a total of 18 associate and operator members. Associate members are Axalto, Ericsson, Gemplus, Hewlett Packard, LogicaCMG, Motorola, Nokia, QUALCOMM Siemens which became a member on April 19) and ZTE.

No announcements have yet been made of any results of the planned $US40 million investment, but in mid 2005 LogicaCMG announced that it had been chosen as the solutions and systems integration partner for Bridge Mobile. "LogicaCMG is setting up the underlying core infrastructure with a common access gateway and a wholesale billing and settlement system, as well as enabling the initial service offering of Bridge Prepaid," the company said. The access gateway was to comprise LogicaCMG's Open Messaging Gateway (OMG) and Aepona Causeway - the standards-based integration backbone for convergent networks.

Also at that time BSS/OSS supplier Intec revealed that Bridge was using its InterconnecT v7 billing and settlement system, developed in partnership with LogicaCMG to facilitate its regional mobile infrastructure and a common service platform for pre-paid subscribers across the Asia-Pacific region.

TECHNOLOGY

Cisco teams with Intel, RIM and Nokia to boost WiFi phone development

Cisco Systems has teamed up with Nokia, Intel and Research in Motion to ensure development of an adequate range of client devices to support voice over wireless local area networks built with Cisco technology. Cisco claims its WLAN systems are already 'voice ready' (ie able to support VoIP) but that are a critical component of a complete solution is "client devices with fully integrated advanced wireless LAN capabilities to ensure optimal performance".

It hopes to achieve this by working with these and other companies through the Cisco Compatible Extensions program which "aims to ensure widespread availability of client devices that are interoperable with a Cisco WLAN infrastructure and [able to] take advantage of Cisco innovations for enhanced security, mobility, quality of service and network management."

Cisco links unified messaging to Microsoft CRM

Cisco Systems has announced, with the support of Microsoft, the Cisco Unified CRM Connector 3.0, a customer relationship management (CRM) application tightly integrated with Microsoft Dynamics CRM 3.0 and designed to help small and medium-sized businesses quickly gain access to customer information on inbound and outbound calls.

When a call is received by the Cisco Unified CallManager or Cisco Unified CallManager Express, the Cisco Unified CRM Connector 3.0 automatically links to the Microsoft Dynamics CRM system and provides onscreen pop-up windows of the customer contact record and phone call activity so that the service agent can track the call. The same information and capabilities are also accessible remotely.

Rival FTTN proposal: too little too late

Had it been announced six months ago the plan by Telstra's competitors for a broadband access network owned jointly with Telstra would have been a really good idea.

Even three months ago it would have been a good idea. Last week it really looked like a stunt aimed at forestalling what now seems inevitable: some sort of deal between Telstra and the ACCC on access to the FTTN that will clear the decks for the government to make a decision on T3 on May 8, on the eve of the federal budget.

Telstra announced its FTTN plan at its November 15 strategy and reports immediately started to emerge that Telstra was demanding relief from access regulation before it would proceed. That position became official with a letter to the ASX in late December.

Despite that announcement there has been much speculation that Telstra was indulging in brinkmanship and would go ahead anyway before too long, or that the Government would cut a deal.

As late as March, in her address to the Atug annual conference, communications minister Helen Coonan was putting out a hard line that there would be no compromise, but in the last month or so all that has changed. And this makes the joint proposal seem all the more like a stunt.

Where's the detail?

Its backers claim to have the model well-developed and at the announcement Optus CEO, Paul O'Sullivan gave a brief overview of the four main options. But the details were so scant that they could have been cobbled together in 10 minutes on the back of an envelope. With so few details the proposal was an easy target for Telstra which described it as "a self-serving plan to rip-off Telstra shareholders and taxpayers, and "like pitching a tent on top of a skyscraper, then demanding rent from all the tenants."

Clearly the proposal has the potential to make use of Telstra investments without fair recompense but equally, properly structured, it would not. There was simply not enough detail to make that call. When I asked for more details of the four proposed scenarios, the official response was "We will provide you with updates as the project progresses".

Given the well-publicised deadline it's hard to see what timeframe the project's backers envisage. Do they want the current negotiations between the ACCC and Telstra put on hold, and the T3 decision deferred until their proposal has been fleshed out, discussed and fine-tuned to the point where they get buy in from Telstra? In your dreams!

One proposal envisages the sale of the Telstra local loop into a new jointly-owned company. We're talking here about major and very widely distributed assets of a very large public company. Due process would have to be followed. It could take years.

Another proposal envisages cobbling something together from existing high speed access networks: the Optus and Telstra HFC networks, the TransAct network, Soul's etc. Why not throw in the likes of BigAir and Access Providers to boot?

As Ross Kelso observes (page 10) We need a standards-based future-proof broadband network able to deliver tens and hundreds of megabits per second. How would it be built from this hotchpotch? And given that the Telstra and Optus HFC networks have nigh on 100 percent overlap, whose would get used, whose would be obsoleted and how would they be compensated?

Government should set the agenda

At the press conference called to announce the initiative, O'Sullivan sought to make the point that broadband infrastructure was as important, if not more important than more tangible national infrastructure such as roads. "If we were talking about freeways leading into our capital cities the front pages [of the newspapers] would be burning with these issues."

He's absolutely right on both counts. And he might have added that if it were roads, rail etc, a hastily cobbled together bunch of normally competitive players, the largest of which is foreign-owned, would not be allowed to hijack the national agenda at the eleventh hour.

Of course, if there really was a national agenda on this one there would be neither opportunity nor the need for such an unlikely coalition -variously dubbed 'The Magnificent Seven' and 'The Seven Dwarves' to do so.

O'Sullivan also said it was important to avoid the overbuild of the nineties, when billions were squandered on the two HFC networks. For Telstra the investment was worth it to protect PSTN revenues.

Maybe The Magnificent Seven should put their money where their mouth is and start rolling out their own FTTN network in parallel with Telstra's. That might make a sufficient impact on Telstra's business case to bring it the negotiating table to combine the two into one common network that would serve the long-term interests of all Australians. Can't see it somehow.

Ex Cathedra, meaning "from the chair", is meant to be a forum for authoritative comment by industry stakeholders, rather than an outlet solely for my views. I would welcome contributions. If you have views you would like to air please email me: stuart@exchange.com.au

Needed: Next gen broadband for our next generation

Before we all get swept away with the rhetoric of competing claims by Telstra and others to deliver 'next generation broadband' to our homes and offices, we should be asking – what will we be getting?

This is a matter of consequence because Customer Access Network (CAN) infrastructure has a habit of hanging around for many decades. Do we want our children and their children as well to be stuck with only 10 percent of the broadband capacity they need and then be tied to only one service provider?

But how would we recognize broadband connectivity suitable for serving our next generations? For starters, it should deliver symmetrical bandwidth of 'future proof' dimensions, be neutral to all applications and service providers, and be addressable as well – almost sounding more like the old telephone network it replaces!

Surely network designers and carrier accountants would always employ the latest technology, liberating scarcity of capacity by using optical fibre and emulating the worldwide connectivity we've become used to with the Internet ever since dial-up days? Unfortunately their track record has been dismal with a strong tendency towards 'walled gardens', 'triple play services' and 'media gateways' as evidenced by closed access business plans designed to minimize short-term investment risk. Don't forget what happened with the 1995-97 rollout of hybrid fibre coax cabling for pay television delivery.

Future-proof bandwidth

Assuming only a semi-national rollout lasting four years, that takes us to the year 2010. Considering the natural monopoly of fibre in the CAN, capacity and service planning should focus at least on the demands of 2020 and preferably a decade or more beyond. Studies show that by then individual consumers will require at least 100Mbps with fibre-based systems readily upgradeable to deliver at least 1Gbps. End-to-end video connectivity for users will demand upstream bandwidths of perhaps only an order less.

Application neutral

Our children will be shocked to inherit any so-called broadband network that hasn't been designed to act as a dumb utility, carrying data bits regardless of their information and facilitating the connectivity of any user application – which includes ones we've not yet heard about. With an open access regime that completely separates bit transport from the content business, a multiplicity of service providers are then free to add value and innovate – with users also being creators! Any service gateway device within the home or office will be of open source design and purchased from the local chain store. Our children simply wouldn't contemplate a residential gateway locked to a sole optical fibre network provider.

Addressable

Video on demand, coupled with end-to-end video connectivity on an international scale for telephony and email applications will call for next generation broadband networks that replicate the connectivity of the present PSTN. Multiple simultaneous broadband one-on-one connections will rapidly become the norm for entertainment, education and the carriage of personal affairs.

And how do you get all of this? In the absence of a national strategic plan for telecommunications, we need bureaucrats, regulators and investors with vision and commitment to the long term interest of end users - which should also equate to our long term national interest.

Beware or carriers bearing gifts

They have to closely examine what the gift bearers are offering, discard the wrapping of hype and self-interest, and assess:

- Whether the underlying technology is destined to become yet another natural monopoly;
- Whether the chosen system design is so closely integrated with the network provider as to lock out or discriminate against multiple service providers; and
- Whether there any inbuilt barriers, technical or commercial, that inhibit the ready upgrade of future service delivery.

In short, are we being promised only 10 percent broadband service capability now and into the foreseeable future, 10 percent now but with monopoly rent payable to get the rest later, or rather will a network architecture and system design be chosen now that equips our next generation to enjoy satisfying lives and be internationally competitive?

No longer can our bureaucrats and regulators hide behind the paper-thin shield of technology neutrality for fear of picking favourites. A bad short term investment and regulatory decision made now will saddle Australia with very negative long term consequences.

So instead of calling out from our couches *"I want my Foxtel"*, we should be thinking of our next generations and demanding of carriers, regulators and politicians: *"I want true broadband, all 100 percent of it"*!

Ross Kelso is a doctoral candidate within the Creative Industries Faculty of QUT, Brisbane. http://www.rosskelso.com

The week in retrospect

A proposal from Telstra's rivals for a jointly owned and funded FTTN network, and reaction to it, was the main news of the week.

A number of Telstra's largest telco and ISP competitors, lead by Optus, made a joint call for collective investment in an open, national broadband access network, claiming that the model proposed by Telstra would harm broadband competition by keeping prices too high and suppressing take up.

Under the proposal - backed by Internode, Macquarie Telecom, Optus, PowerTel, Primus, Soul and TransACT - Telstra would be joined by other telcos and ISPs in making the necessary investment to upgrade the existing copper local loop into a high bandwidth fibre to the node network. Its proponents said the initiative would "broaden the debate and give the ACCC and Government options they can accept – without putting competition at risk."

Network to reach the parts Telstra's won't

Optus CEO, Paul O'Sullivan said the consortium members hoped to reach 30-50 percent more homes than Telstra has indicated it will serve. They plan to develop a detailed proposal which will "set out the benefits that Australia will receive from a genuinely national, open and competitive broadband network".

Soul CEO, Michael Simmons, said: "Telstra's planned rollout will go to only four million homes and businesses in the five major capital cities. This will divide Australia into the digital 'haves' and 'have nots', with less than half of all lines being able to receive the new high speed services."

Key elements of the proposal are: co-investment in an FTTN network from Telstra's competitors and from Telstra; all parties to be involved in network design so that it can interconnect with the technologies and capabilities of each of the operators; the price of wholesale access to be determined upfront and with certainty so all parties will know ROI and telcos will know pricing; all retail telcos will pay the same access price.

O'Sullivan said the carriers were appointing economic advisers to assist the project and would be putting the proposal forward to Government and the ACCC.

Four variants floated

Four broad approaches are being proposed. These are:

1: Interconnected individually-owned networks.

Australia would be divided up into geographic areas with Telstra responsible for some areas and consortium members for others, either individually or jointly. "The key issue is that the networks would be built to common standards and with guaranteed interconnection, so everybody's products and services would work on all parts of the network," O'Sullivan said.

2: Telstra-built but jointly-funded

Telstra and the other carriers would co-operate on the design of the network and jointly supply the capex, but much of the build would be handled by Telstra.

3: A new local loop owner

The existing local loop would be sold to a new joint venture company in which all carriers could participate and work to design, finance and build the new network. O'Sullivan said there were existing models for this in the USA and Canada.

4: Combination of existing access networks

The network would incorporate several existing high speed access networks: the Optus and Telstra HFC networks, the TransAct network, Soul's etc and these would be used as the basis for an integrated network.

Not all the seven members of the consortium plan to participate as investors. "O'Sullivan said: "some have indicated a strong willingness to invest, other are keen to progress the proposal and some are more likely to want to access the network rather than invest." He added: "There are others who are in discussions with."

The group appears to be hoping that the merits of its case will see the Government, the ACCC and public opinion pressure Telstra into co-operating. If it remains unwilling to do so, but if these avenues fail, "we will be seeking legislative support," Simmons said. He was unable to say what form this might take.

Telstra slams joint FTTN proposal

Telstra branded the proposal "a self-serving plan to rip-off Telstra shareholders and taxpayers". It claimed that the seven companies "want other people to carry the risk while they skim-off profits."

Telstra also criticised the group of seven for the lack of detail in its plan.

Labor backs joint FTTN plan

Shadow Communications minister, Stephen Conroy, welcomed the proposal saying that Labor had been advocating such an approach since last year and had publicly canvassed a detailed set of regulatory reforms to encourage such an approach.

He has called on the Government not to waste the opportunity presented by the proposal. "The government should give this joint venture proposal equal consideration to Telstra's fibre to the node plans, Conroy said. "Australia needs an open debate about the relative merits of this national joint venture approach compared to Telstra's metropolitan only plans."

Ten Years Ago...

From Exchange 26 April 1996

- **Launch of Optus Wholesale**

Optus Communications this week claimed to "unveil its strategy to capture commanding share of the wholesale telecommunications market" through its industry services division, formed late last year as a result of recommendations from the high level management review conducted by McKinsey and Co.

The structure of the unit, under director Andrew Bailey, closely parallels Telstra's under David Stokes McKeon in that both have responsibility for service providers and interconnect with other carriers. However Optus has also brought international carrier relations responsibilities into the unit.

- **Defining moment for Cisco**

Cisco Systems has announced plans to acquire Stratacom Inc, a supplier of ATM and frame relay high-speed WAN switching equipment. "By combining our networking technologies with those of Stratacom, Cisco will become the first vendor to provide advanced network infrastructure for the intranet and Internet environments and the only vendor to offer end-to-end connectivity across public, private or hybrid networks," said John Chambers, president and CEO of Cisco Systems.

- **Beginning of RBOC consolidation**

Bell Atlantic and Nynex Corporation have announced plans to merge in a deal that will create the second-largest phone company in the US. The merger is the second-biggest in US history...and comes just three weeks after the first-ever combination of regional Baby Bell companies. The Nynex-Bell Atlantic combination also follows SBC Communications' plan to acquire Pacific Telesis Group of California for $US16.7b.

AT&T and MCI, who stand to be most affected by the Bell/Nynex merger, have questioned its propriety. A MCI statement expressed "concern over a growing trend toward consolidation of the monopoly power of the Bells". An AT&T statement said that: "the Bell Atlantic/Nynex deal will deny customers the benefits of head-to-head competition between the two Bells".

The merged Bell Atlantic/Nynex acquired GTE in 2000 and became Verizon, which recently acquired MCI. This company, however was not the MCI of 1996: it had been bought by WorldCom along with many others. The remnants of this disaster rejected that tarnished name and reverted to MCI which retained the cachet acquired by being the first challenger to the AT&T monopoly, the remnant of which has just been acquired by SBC.

Appointments...

- **New boss for Orion Telecoms**

Amanda Lacaze, recently appointed as a director of telecoms reseller, Orion Telecommunications, has been made executive chairman. Her appointment was foreshadowed when she was made a director of the company in March. At that time chairman **Ian Roberts**, who will now become deputy chairman, said: "she has specific experience in acquisition and retention programmes, and is an expert in the area of customer churn."

Lacaze was most recently CEO of AOL 7 Pty and before that, managing director of marketing for Telstra's Commercial & Consumer Division, responsible for all marketing to its residential and small business customers.

Her expertise will be needed at Orion which is presently recovering from legal action by Telstra alleging illegal churning. It has also been accused of overly aggressive cold calling tactics and has been ordered by the court to maintain a register of people who do not wish to be approached.

Orion also announced the resignation of **John Lawrenc**e as joint company secretary. **Dwayne Jahnke** will continue as sole company secretary. Lawrence had been with the company since late 1990s when it was known as QAI.

- **Packeteer's regional VP moves to Polycom**

Polycom has appointed former Packeteer Asia Pacific managing director, **Hansjoerg C Wagner**, as vice president and managing director, Polycom Asia Pacific. **Leo Cortjens**, who held the position of acting vice president Asia Pacific, has been promoted to a newly-created role of vice president, global alliances.

Wagner will be based in Polycom's offices in Singapore and will report to Kim Niederman, vice president worldwide sales. Cortjens will return to Polycom's headquarters in the US and will also report to Kim Niederman.

Prior to joining Packeteer, Wagner held various senior management roles at Netegrity (acquired by Computer Associates) and Milgo Solutions (formerly Racal Data Group).

In his new role Cortjens will assume responsibility for what Polycom says is one of its primary strategic initiatives for 2006 and beyond: building strong relations with technology alliance partners such as Alcatel, Avaya, Cisco, IBM, Microsoft, Nortel and others, and establishing new global partnerships.

- **destra's new role to market music and content**

destra Corporation has appointed **Sharon Ashworth** to the newly-created role of general manager, marketing and content services for destra Media. She will report to destra Media general manager, Clive Mayhew. Ashworth has 18 years experience in marketing within the music industry, working with Shock Records, EMI Music Australia and, most recently, Festival Mushroom Records. She also recently spent time at mobile content company Glovebox (now owned by ASX-listed Broad Investments).