Lastly, Apple is making it possible for users to now share their App Store, iBooks, and iTunes purchases with other Apple users. The Family Sharing feature allows up to six users to share purchases, and creates a shared family photo stream, shared calendar and even provides an option for locating family members and their devices.

**NEW iOS SDK:** Meanwhile, Apple said it has added over 4,000 new applications programming interfaces to the iOS software development kit. Specific APIs highlighted by Apple include widgets for the Notification Centre, and support for third party keyboards, as well as "frameworks" for specific market segments like HealthKit and HomeKit.

Tony Chan

# EQUINIX LAUNCHES PERFORMANCE HUB IN ASIA PAC

Equinix is bringing another form of its interconnection services to the Asia Pacific region. The new service, dubbed Equinix Performance Hub, offers a packaged solution that now "uniquely combines elements of data centres, networking infrastructure and connectivity, and cloud computing access." According to Equinix, Performance Hub now improves application performance and delivers "a globally consistent quality of experience" to end users. The service is available immediately across Equinix Asia Pacific data centre facilities. The firm has also put up "proof-of-concept" demo environments in its Solutions Validation Centres in Singapore and Sydney.

## TELECOM NZ TO DEREGISTER SHARES UNDER US EXCHANGE ACT

Telecom New Zealand has announced it intends to deregister its American Depository Receipts and ordinary shares under the U.S. Securities Exchange Act. The telco had delisted its ADRs from the New York Stock Exchange in July 2012. Telecom currently offers a sponsored ADR program with the US Bank of New York Mellon on the over-the-counter market, enabling investors to trade ADRs. Following deregistration under the Exchange Act, Telecom NZ plans to maintain the program, while ADRs will continue to trade on the US OTC market. The company's ordinary shares will remain listed on the NZX Main Board and the ASX in Australia. Telecom expects the deregistration of its ADRs and ordinary shares to take effect and its Exchange Act reporting obligations to be terminated 90 days after filing for deregistration with the SEC.

### ON THIS DAY 10 YEARS AGO: FROM THE COMMSDAY 2004 ARCHIVES

Wireless broadband provider Unwired unveiled its aggressive pricing strategy with the commercial launch of the first phase of its services in Sydney... Telstra's rivals pounced on the opportunity to woo disenchanted customers away from the carrier following its fixed-line pricing increases, with AAPT releasing a new raft of bundled consumer packages... DigitaLife2004, a consumer electronics convention held in Melbourne, aimed to be the first in the world to implement a new mobile phone-based ticketing system, which would provide participants with venue access, business card information, e-cash and loyalty card functions via a basic SMS message.

# Letter to the editor from Brian Louey-Gung

# **C-Band Spectrum issue continues**

The recent debate on C-band in CommsDay has seen some rather surprising claims being made. The latest from Andrew Kerans is that allocating IMT to C-band will boost Australia's economy in a way that benefits Pacific Islands via the Pacific workers in Australia who remit money back to their families and communities.

This may indeed be accurate, although very hard to quantify in any meaningful way. However, the allocation of IMT to C-band is likely to have a much more devastating effect on those families and communities than any benefit from increased remittances.

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The telecommunications industry is global and major investments in technology families succeed or fail on their ability to access the global market. Fail to recognise this fact and a technology will be a market failure, irrespective of whether it is or is not technically superior to alternatives.

C-band satellite technology currently sells to a global market, but authorising IMT to access Cband spectrum on a country-by-country basis will be the start of a slow and inevitable death for Cband satellite services. Why? As each individual country allows IMT to access C-band spectrum the resulting interference will effectively excise that country from the market for C-band satellite services. Critics of this argument will cite technical countermeasures and regulated safe zones around sensitive facilities ensuring the survival of C-band satellite in these instances – but customers in the lucky countries with access to another suitable technology will sooner or later migrate to an alternative that won't require complex regulatory protections. Eventually, and my guess is that it won't take too many years, the so-called 'global' market for C-band services will become too small to support the equipment manufacturers. Even if C-band satellite somehow survives, the reduction in market size will see increases in prices for equipment due to the loss of economies of scale, imposing higher costs on countries that have no other option. This is Economics 101.

The pace of this market decline will be accelerated by the fact that the countries with the most need for more mobile spectrum are, in general, those for which there are viable alternatives to C-band satellite. That they include the wealthier countries in the world means that the first bites into the 'global' C-band market will be substantial.

So who will be left in the cold?

A number of Pacific Island countries are totally reliant on C-band satellite for all international links. Even for those with access to a submarine cable, the domestic backbone network may still rely heavily on C-band satellite, where distances to other islands are beyond the capability of microwave. Remove C-band satellite and you have a situation akin to serving Sydney and maybe Newcastle and Wollongong, but the other state capital cities, regional centres and smaller towns will be connected by HF radio. This means no mobile broadband for the rest of the country.

What about satellite services in other bands?

For satellite communications services to be economically viable each satellite beam must carry a certain minimum amount of paid traffic. C-band satellites are capable of beams that are so large that a single beam can have a footprint that covers the entire Pacific Ocean and all of the inhabited islands within it. Providing service to small communities on very remote islands that individually generate minimal traffic is commercially viable only because the total traffic carried by that single beam is the cumulative traffic from customers on all of the Pacific Islands.

Satellite services operating in other bands do not offer beam footprints of anywhere near the size possible with C-band, and these small remote communities will be reduced to reliance on HF radio.

For example, reports from the Cook Islands are that the Ka-band O3b is providing very good service to Rarotonga and will commence service to the southern group of islands shortly. Unfortunately its beam footprint is not large enough to also cover the northern group of islands, which does not generate enough traffic to economically justify a second O3b beam. Thus the Cook Islands still requires a Cband satellite service in order to provide connectivity for its northern islands.

Quite simply there is no substitute for C-band satellite for many Pacific Islanders.

It is important that IMT be excluded from C-band until a viable substitute technology is available for all situations. Just as Reg Coutts says in his clarification, the ACMA's recommendation is perfectly justifiable and understandable given its national mandate. However, a broader international consideration is necessary, which encompasses Australia's interests in the Pacific.

These are the personal views of the writer and should not be considered to be the views of the Pacific ICT Regulatory Resource Centre. Disclosure: The writer is not a lobbyist for any entity and has in the past worked at different times with Reg Coutts, Bob Horton and Andrew Kerans.

Brian Louey-Gung, Pacific ICT Regulatory Resource Centre