



ACMAsphere

Invasion of the iPods

Demand for content and the impact on the structure of the communications industry

Sometimes apparently simple ideas and products have the greatest appeal, ultimately becoming catalysts for major industry and regulatory change.

Take the popular iPod, for example. According to iPod maker, Apple, 6.5 million of the devices were sold worldwide in the three months to 30 September 2005 and Apple has sold more than 28 million since their introduction in 2001. That's a lot of iPods and a lot of people reliant on downloading their chosen music from the internet. The demand for online music has exploded to the point that it now has the potential to reshape the business model of the retail music sector entirely.

But the retail industry is not the only one facing significant change as a result of the world's

love affair with the iPod. The Australian Bureau of Statistics reports of major increases in the amount of data downloaded by internet subscribers in Australia, is witness to an increasing demand for broadband.

In response to the growing demand, telecommunications industry participants have announced a range of broadband infrastructure rollouts that will increase broadband availability and capacity in Australia. While Telstra is clearly a major broadband network provider, much of the infrastructure is being installed by internet

service providers (ISPs), some of which were formerly resellers of Telstra services.

Many ISPs are also partnering with second tier or newly licensed telecommunications carriers as part of their evolution from resellers to infrastructure owners. This trend suggests that the traditional distinction between the ownership of telecommunications networks and reselling of telecommunications services—reflected in the regulatory categories of carrier and carriage service provider—is becoming increasingly blurred. As a result, the structure of the telecommunications industry is becoming more complex and multilayered.



NEW MARKET ENTRANTS

Coinciding with the Australian consumers' new thirst for more bandwidth, the Australian Government has assisted with the increase in availability of broadband services.

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MELBOURNE COMPANY FINED for RADIO BREACH

A Melbourne company, Street Nation Pty Ltd, has been fined more than \$16,000 after being found guilty in the Melbourne Magistrate's Court on charges under the Radiocommunications Act 1992.

The case, brought by ACMA, involved the operation by Street Nation of a low power open narrowcasting (LPON) service from 101 Collins Street, in the Melbourne CBD. Other LPON

operators complained during 2003 that the service was interfering with their coverage areas.

Field strength measurements at various locations found that Street Nation had exceeded the allowable transmitted field strength at distances greater than two kilometres from their transmitter.

ACMA decided to prosecute Street Nation when the offences continued despite several written warnings and a penalty in lieu being issued.

The court found all three charges proven and imposed a fine of \$4,000

on each charge. Costs totalling \$4,399 were also awarded against Street Nation.

Magistrate Lisa Hannan said the penalty was a deterrent and that licence conditions were imposed to enable equitable access and use of the radio spectrum for the whole community.

Low power open narrowcasting services provide niche FM radio services with limited reception. Programs include racing and tourist information, ethnic broadcasting, information services, musical and religious programming.

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ISPs can use the higher bandwidth incentive scheme (HiBIS) incentive payments to reduce the price of existing broadband services, such as satellite, or to roll out new broadband infrastructure such as ADSL or wireless local loop, where there might not otherwise have been sufficient consumer demand to justify the investment.

Highlighting the trend towards new market entrants and investment in broadband infrastructure, in 2004–05, ACMA issued 39 carrier licences to new carriers who are proposing to provide broadband services, with the majority using wireless technology. Wireless services can be provided where wire-based or cable-based services cannot because of factors such as remoteness or geography. Many of the new carriers are proposing to operate in rural areas, mostly around major regional centres: the central coast, Ballina and Monaro areas of New South Wales, the South Pine River Valley region and Mackay in Queensland, the Barwon, Surf Coast and Western District areas of Victoria and regional Western Australia.

Investment activity by the new carriers is directed at infrastructure that will enable interconnection with existing telecommunications networks. Their services generally target a particular market segment, whether defined by geography, such as a regional area, or by a particular type of service, such as a wireless service that interfaces with a computer



laptop to allow for a high level of mobility.

The advent of voice over internet protocol (VoIP) technology to carry voice calls may also drive increased demand for bandwidth. Because VoIP is potentially a cost-effective alternative to traditional telephony, people may take up broadband primarily to access it, or use existing broadband connections to take-up VoIP services. The effect of voice quality, access to emergency call services and equipment compatibility on VoIP take-up is still unknown.

REGULATORY AND POLICY INITIATIVES

Since 2002, changes to the telecommunications regulatory regime have been designed to encourage new entrants, ISPs and providers of telephony services into the industry. The changes include:

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- a reduction in the carrier licence application fee from \$10,000 to \$2,200
- a reduction in the fixed component of the annual carrier licence charge from \$10,000 to generally less than \$1,000 (the annual carrier licence charge consists of a fixed component and a variable component, determined for each financial year and calculated on the

basis of the carrier's eligible revenue)

- an exemption for smaller carriers from the requirement to keep an industry development plan detailing strategic commercial relationships, research and development activities, export development plans, and employment opportunities and training
- an exemption from the licensing requirements for some wireless 'hot spot' operators, for example, if a wireless 'hot spot' operates in one distinct location, and a temporary exemption for carriage service providers with small market share from complying with the requirements of the Customer Service Guarantee Standard in relation to geographic areas of interest to the carriage service provider for up to five years.

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Changes to the management of the radiofrequency spectrum are also intended to encourage new market entrants and the deployment of wireless broadband services, particularly in regional areas.

Changes to the radiocommunications licensing option for the 5.8 GHz spectrum band for fixed point-to-point apparatus licences in 2004 provided opportunities for the rollout of low-cost broadband wireless infrastructure and services in regional and rural areas. There is provision for allocating over-the-counter apparatus licences in the 1900–1920 MHz band in regional and remote areas and in the 2010–2025 MHz band in remote areas only—these licences will have special rollout obligations to

ensure timely deployment of broadband wireless services. In 2005, ACMA will auction wide-area spectrum licences in the 2010–2025 MHz band in metropolitan and regional areas.

many new entrants propose to deploy more advanced technology such as ADSL2 and ADSL2+. They may also challenge existing providers to upgrade infrastructure.

calls' since 2002, but now consumers can access content such as daily news, pop chart ringtones and streaming video clips from their mobiles.

The creation of ACMA indicates government recognition of the need to consider content, carriage and technical matters in a more integrated way.

As the telecommunications industry continues to evolve and offer new products and services, demand for digital content and broadband access, in particular, will continue to increase. The iPod phenomenon is an example of how quickly an IT device can take off and have significant implications for established industries, as well as of the transience of apparent advances in technology.

In a recent interview, Microsoft's Bill Gates saw mobile phones overtaking stand-alone MP3 players and views the popularity of Apple's iPod player as unsustainable: 'If you were to ask me which mobile device will take top place for listening to music, I'd bet on the mobile phone for sure,' Gates told the interviewer.

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INFRASTRUCTURE OWNERSHIP

There is evidence that a more competitive broadband industry structure may be emerging:

In a recent series of field visits, ACMA has noticed that many wireless operators come from an information technology background—another sign of the breakdown of the boundaries between the telecommunications and other industries.

CONVERGENCE

3G mobile phone services offer another salient example of convergence. Hutchison has provided Australian consumers with the ability to make 'video



ACMA BROADCASTING CONFERENCE 2005

See page 15 for the draft program

To register for the conference, go to the ACMA website:
www.acma.gov.au/events