# Growing diversity in regional telecommunications

#### New infrastructure, products and services are increasingly being offered by telecommunications carriers in regional markets, according to ACMA's report, *Telecommunications Services Availability in Australia 2004–05*.

The combination of new carriers installing their own infrastructure and servicing regional areas, and the growth in new and innovative access technologies, such as wireless broadband, means that customers in regional areas are starting to get a greater choice of providers and services.

'This wider geographic availability of broadband access networks is being driven by consumer demand for online content and higher bandwidth services, reduced barriers to market entry and changes in the cost of access technologies,' said Lyn Maddock, Acting ACMA Chair.

'Broadband access, especially the deployment of wireless broadband networks, underpins the intended plans of many new carriers. More internet service providers are also investing in their own infrastructure,' she added.

In remote areas, the Higher Bandwidth Incentive Scheme and other government funding programs to extend the coverage of mobile networks had played an important role in delivering access to broadband and mobile services.

The report covers the availability of fixed voice, mobile and data services in metropolitan, regional and remote areas of Australia. It also identifies changes in the ways consumers are using telecommunications services.

#### **KEY FINDINGS**

The structure of the telecommunications industry is changing. ACMA granted

AVAILABILITY OF WIRELESS SERVICES AND ADSL-ENABLED EXCHANGES

40 new carrier licences in 2004–05, compared with 14 in 2003–04, and more internet service providers invest in and own their own infrastructure.

Approximately 26 of the 40 newly-licensed carriers intend to deploy wireless broadband networks.

Existing telecommunications carriers are providing higher bandwidth capabilities: they are installing new broadband access infrastructure and upgrading existing mobile and broadband networks.

There is increasing industry interest in regional markets, and providers are using different supply models and access technologies to supply fixed voice, mobile and broadband services in regional areas. At least 14 of the new carriers licensed in 2004–05 have indicated an intention to install infrastructure in regional areas, mainly around regional centres.

Consumer usage of telecommunications services

is changing; while the take-up of mobile and internet services continues to grow, the number of fixed voice services has declined for two consecutive years. There were 18.42 million mobile services in operation compared with 11.46 million fixed voice services at the end of June 2005, and 5.98 million dial-up and broadband internet subscribers at the end of March 2005.

#### FIXED VOICE

An estimated 38 carriers operate networks used to supply fixed voice services to business and residential customers, and approximately 20 carriers have entered this market since 2002-03. Three operators of national networks supply fixed voice services, and other carriers supply services to particular customer or geographic markets. Voice over the internet protocol (VoIP) telephony features in the plans of at least 15 of the new entrants.

The focus on regional

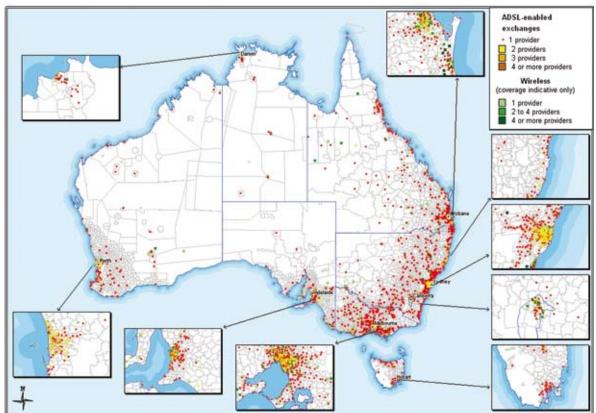
markets has increased: an estimated 18 carriers, as well as Telstra, offer or propose to offer fixed voice services in regional areas, often as part of a bundled service offering.

In remote areas of Australia, Telstra remains the major supplier of fixed voice services and payphone services.

Payphone numbers in urban and rural areas have declined since 2002–03, but have increased slightly in remote areas, particularly in remote Indigenous communities.

#### MOBILE

An estimated 98 per cent of the Australian population has access to a terrestrial mobile Continued on page 4



Sources: Telstra (www.telstrawholesale.com), DCITA data on HiBIS, provider websites and other publicly available information. Note: depiction of ADSL availability may obscure some areas of wireless coverage.



#### GROWING DIVERSITY IN REGIONAL TELECOMMUNICATIONS

Continued from page 3 network. Satellite networks provide mobile services for customers outside the coverage areas of the terrestrial mobile networks. Mobile service penetration is high at 90 per cent of the population.

Coverage by code division multiple access (CDMA) networks continues to expand, and the roll-out of third-generation (3G) networks has accelerated, through infrastructure sharing arrangements of mobile carriers.

An increasing focus on value-added services as a potentially significant revenue stream is driving investment in 3G networks and the provision of higher bandwidth services on existing mobile networks.

#### **BROADBAND AND DATA**

Broadband service coverage continues to expand; at least eight carriers installed ADSL networks and an estimated 61 broadband wireless network operators supplied or proposed to supply broadband wireless access networks in metropolitan and regional centres.

Satellite broadband provides access for those unable to access wireless or wire-based broadband services.

The wider geographic availability of broadband access networks is being driven by the demand for online content, reduced barriers to market entry and changes in the cost of access technologies.

Internet service providers are moving from resale of broadband services to ownership of their own infrastructure. There are early signs that broadband access is contributing to the move of VoIP telephony from the business market to residential customers.

In regional areas, wireless broadband access accounts for the majority of regional broadband network operators. *Telecommunications Services Availability in Australia 2004–05* is on the ACMA website, www.acma.gov.au. (Go to Consumer > Telecommunications Services Availability.)

# More broadband and mobile services ...

A large increase in the number of broadband internet subscribers, continuing strong growth in mobile services and a small but significant decline in fixed services were among the telecommunications industry highlights in the last financial year, according to the ACMA's *Telecommunications Performance Report 2004–05*.

The report shows the performance of telecommunications carriers and carriage service providers, and reports on consumer satisfaction, consumer benefits and quality of service. It analyses significant telecommunications trends and reports on compliance by carriage service providers with consumer safeguards in telecommunications legislation. BROADBAND BOUNDING

### AHEAD

The highly competitive internet market is in a period of rapid transition. Broadband services became more affordable and higher data rate broadband services more available, providing the platform for more widespread take-up of high bandwidth applications such as video-streaming.

The trend away from dialup to broadband subscription is expected to accelerate in the next few years. The number of broadband subscribers grew by 108 per cent in the year to 30 June 2005, but in the year to 31 March 2005, dial-up internet subscribers fell by four per cent.

The geographic availability of terrestrial broadband services is also experiencing strong growth, increasing nationally by seven per cent in the 12 months to 31 March 2005. There was particularly strong growth in Tasmania and the Northern Territory over this period.

#### MOBILE SERVICES

During 2004–05 mobile services increased by 12 per cent to 18.42 million, a penetration rate of 90 per cent of the population. There was particularly strong growth in retail pre-paid mobile services, up by 20 per cent. The mobile handset market continued its exceptional sales rate, selling eight per cent more handsets than in the previous year. The number of SMS and MMS messages sent increased markedly (33 per cent and 264 per cent respectively).

## ... but fewer fixed services

The number of fixed services declined by two per cent in 2004–05. Consistent with this trend, the number of services covered by the Customer Service Guarantee Standard fixed telephone services supplied to residential and small business premises with five lines or fewer—declined by four per cent.

In the 12 months to 31 March 2005, the local, long distance and international fixed service markets all experienced declines in revenue, total call volumes and call minutes. The biggest decline was 14.2 per cent for local call revenue.

A broad range of measures indicate the fixed services market is declining, with fixed to mobile substitution and the increased use of alternative modes of communications, such as SMS and email, leading to a significant restructuring of the telecommunications market.

Emerging trends indicate that the telecommunications market will become increasingly diverse in the next few years. There was a very large increase (14 times the average annual demand over the last three years) in the allocation of geographic (local) telephone numbers, predominantly to carriage service providers planning to offer voice over the internet protocol (VoIP) services.



#### **COMPLAINTS UP**

A less welcome trend in 2004-05 was the increase in complaints to the Telecommunications Industry Ombudsman about fixed, mobile phone and internet services. When this data is 'normalised' against the number of services in operation in 2004-05, complaints about fixed services increased by 25 per cent, about mobile phone services by 68 per cent, and about internet services by 34 per cent. Credit default listings made by carrier service providers to Baycorp Advantage, the largest credit bureau operating in Australia, increased by 63 per cent.

Ms Maddock commented that: 'The Ombudsman's complaint data for 2004–05