

Broadband Networks and Services Australian Case Study

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Keys to Understanding the Australian Context

Distribution of Households:

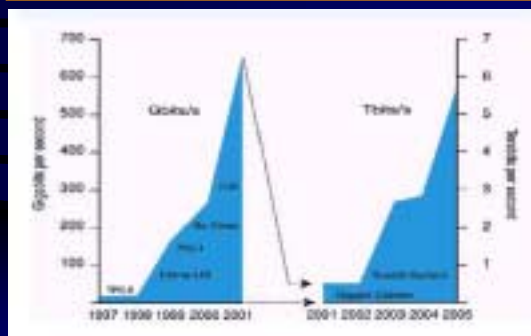
- > 63% of Australia's 6.8 million households are in the 8 state capital cities, 28% (1.9 million) are in provincial towns, and 9% (632 400) are in rural and remote areas

Deregulation:

- > 1989 - competition in value-added and other customer services, and separate regulator
- > 1991 - facilities-based duopoly, 3 mobile carriers, and open resale
- > 1997 - open competition, with no restriction on entry into any telecommunications market or on the number of carriers

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Asia-Pacific Cable Capacity



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Examples of Network Developments (CAN)

- > DSL - 90% of the population able to access ADSL by 2002
- > Telstra and Optus major players, but Primus, Pacific Internet, AAPT, One.Tel, Netcom, iiNet and RequestDSL are also entering the ADSL market
- > Telstra and Optus HFC networks pass 35% of Australian households - deliver Pay-TV, internet and telephony
- > Austar using MMDS network, targeting city-based business users
- > AAPT using LMDS to deliver high speed capacity in capital city and regional markets
- > Optus has acquired spectrum for an LMDS network
- > Unwired offering high bandwidth local loop services using the 3.4 GHz band
- > Telstra, Optus and Austar offer internet services using asymmetric satellite

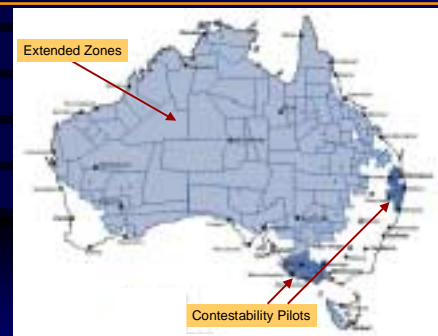
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Recent Regulatory Developments

- > USO arrangements - introduction of Digital Data Service Obligations, extended zones and contestability
- > Unbundling the local loop - twisted pair & HFC
- > Allocation of 3G mobile spectrum
- > Introduction of digital broadcasting and 'datacasting'
- > Regulation of submarine cables
- > Negotiations on international charging arrangements for internet

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Extended Zones & Contestability Pilot Areas



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Unbundling the Local Loop

Declared Unconditioned Local Loop Service in July 1999:

- > Fundamental to competitive DSL services
- > Telstra launched wholesale ULL product in August 2000
- > Disputes over access price and delays in conditioning exchanges

Declared analogue Pay-TV carriage in August 1999:

- > Opened access to HFC networks *and* set-top boxes
- > Foxtel and Telstra appealed
- > Federal Court dismissed the appeal, but disputes and delays continue

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Digital Broadcasting

- > Digital TV broadcasting began in major cities in January 2001, and will be extended to regional stations by 2004
- > Must broadcast in Standard Definition (SDTV) at all times, and High Definition (HDTV) for at least 20 hours a week
- > No new commercial broadcasters allowed until end of 2006
- > No multi-channelling before end of 2005
- > Cost and content market concerns

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'Datacasting'

- > Datacasting - is a service delivered in the broadcasting services bands, which cannot provide television programs in genres commonly regarded as free-to-air television
- > Datacasting using spectrum outside the broadcasting services bands will not be subject to controls
- > Datacasting license auction process appears to have collapsed - no major industry players are interested

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International Internet Charging

- > US ISP port charges mean that Australian internet users 'subsidise' users in the USA
- > Telstra has argued that this kept their internet prices higher than US prices
- > Since the Southern Cross Cable came online in November, Telstra has offered flat-rate deals to ISPs
- > ISP prices for unlimited hours have fallen by more than 40% - now equivalent to US prices
- > What happened to the subsidy problem?

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Understanding Convergence

"Convergence is not a single homogenous process, but a range of processes operating at a variety of levels... Once convergence has been 'unpacked' into a series of inter-related developments it is easier to assess the pace at which each form of convergence is occurring, the different implications which each has for competition in electronic communications markets and the regulatory responses that are most appropriate."

Waters, P. and Lloyd, D. (2000) *Competition in Converging Markets*, Gilbert and Tobin, Melbourne.

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