

Broadband and Beyond 2009

Our Digital Future



Department of Innovation, Industry and Regional Development

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Innovation and Technology/MMV

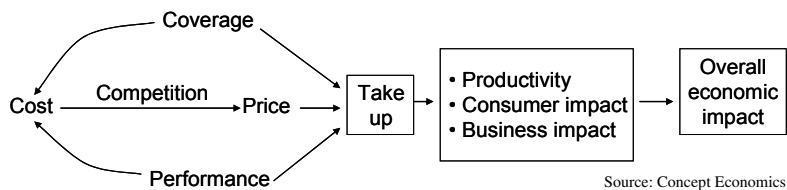
- State agency in the Department of Innovation, Industry and Regional Development (DIIRD) under Minister for ICT.
Broadband Framework
- Context – ICT is a rapidly evolving general purpose infrastructure that enables innovation/productivity in business and government – driving economic growth and improved public and private goods and services.
- Goals – effective use of ICT in government, broadband/ICT access/uptake for economic and social development and local ICT industry development (equity issues are predominantly the Commonwealth's).
- Strong collaborator with other State agencies, other levels of government and ICT and other industry sectors.



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Broadband, productivity & growth

- A cycle of growth, where improvements in hardware and bandwidth stimulates new applications and services that drive productivity, growth, and consumer benefit, which in turn fuels demand for more broadband coverage and capacity.
- But broadband supply is subject to constraints arising from legacy infrastructures, monopoly and 'thin' regional markets.
 - In ICT – the policy problem is contained in 'C'.



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Legacy, monopoly and thin markets

- Legacy copper network with long loops in regional and outer urban areas constrains DSL speeds. Big fixed investment to overcome this.
- No widespread fixed infrastructure competition to DSL. 70% of fixed services are DSL based and Telstra owns ubiquitous DSL inputs (backhaul, exchange, copper loop). The HFC (Optus and Telstra) networks are not being aggressively extended.
- Competition regulation has been costly in both time and money – there has been limited policy direction in respect of the policy goals (such as the market structure).
- Government policy should have recognised that infrastructure and services in regional markets would lag urban settings, and developed a clear and consistent policy setting for the development of these markets over time.



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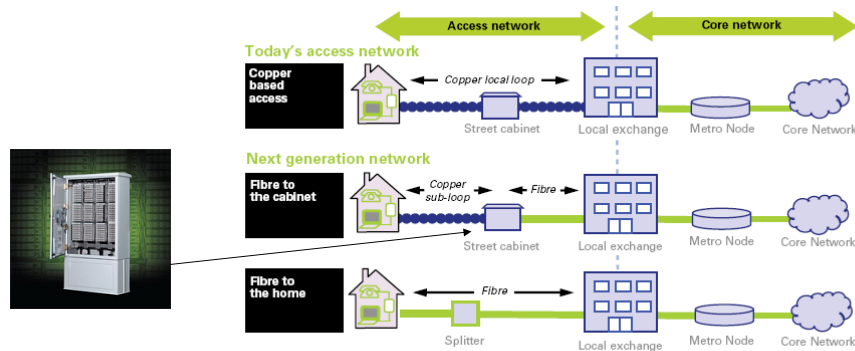
- A multitude of inquiries: National Bandwidth Inquiry (1999), Telecommunications Services Inquiry (2000), Regional Telecommunications Inquiry (2002), the Broadband Advisory Group (2002), Broadband Blueprint (2005) and
- A multitude of programs: Networking the Nation (1997); Networking the Nation Social Bonus (1999); The Higher Bandwidth Incentive Scheme (2003); Coordinated Communications Infrastructure Fund (2004); Connect Australia (2005), Broadband Connect Subsidy First & Second Stage, Metropolitan Broadband Connect, Broadband Connect Infrastructure, Mobile Connect; Australian Broadband Guarantee (March 2007); Australia Connected (June 2007); NBN (2008).....



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The National Broadband Network (NBN)

- \$4.7bn Commonwealth initiative to build a FTTN network to 98% of the population with a minimum speed of 12 Mbps.



Source: Ofcom



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The economics of the NBN

- The economic impacts are strongly driven by the “catch up” factor: Improving regional infrastructure leads to higher speeds and greater take up by businesses (conservatively assuming of no impact from new & unknown high speed applications);
- Current regional cap for uptake by business is 60%, with the NBN it would be 95% (comparable with uptake by business seen in benchmark markets such as Canada and Finland);
- Pricing and ongoing competition is critical to maximising the economic benefits (with a 10% increase in price over LR average costs GDP impacts decrease by ~10%); and
- In general terms, it is a good project for GDP and consumer welfare, but the devil is in the detail of how it’s done.



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What might the future look like?

- Victorian Government has been a strong supporter of eResearch:
 - Victorian Partnership for Advanced Computing (>\$8m)
 - Victorian Education and Research Network (~\$20m in-kind)
 - Victorian eResearch Strategic Initiative (~\$10m)
 - Synchrotron Supercomputer (~\$1.5m)
 - Australian Cancer Grid (~\$10m)
 - Victorian Life Sciences Supercomputing Initiative (\$50m)
- eResearch is powered by and in turn powers the grid (refer <http://www.gridcafe.org/>), over which researchers share data, data storage space, computing power, large instruments and results. It enables global collaboration on large scale projects such as addressing the mysteries of the universe (\$bn experiments such as the SKA, LHC...)
- This signposts the future of business and consumer networks and applications



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Previous Victorian broadband initiatives

2000s data speeds = 128/256 Kbps to Schools, under VicSmart
= 4Mbps, now moving to 10Mbps – a 100 fold increase from
early 2000s) ...soon Gbps??

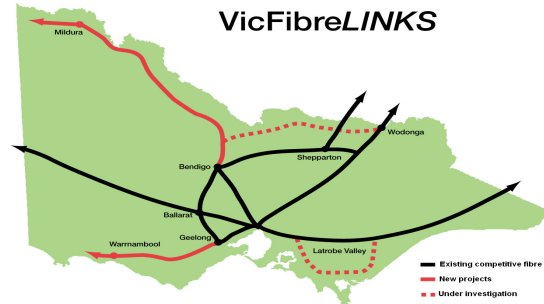


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08-09 Victorian broadband initiatives

LINKS

to Warrnambool. This will also serve outer government demand (Unis, TAFE, Health, ESOs,..) in these markets.



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08-09 Victorian broadband initiatives ctd



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Thank you



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