

Economic Aspects of Broadband

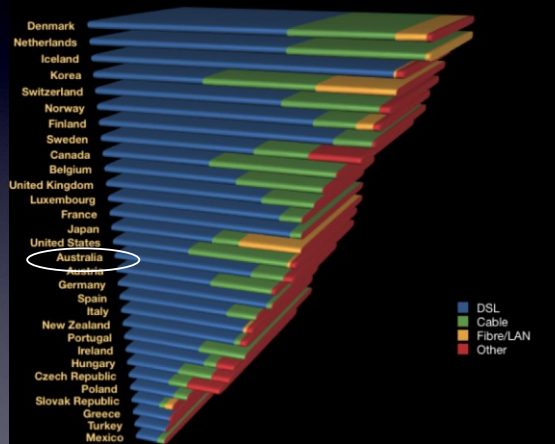
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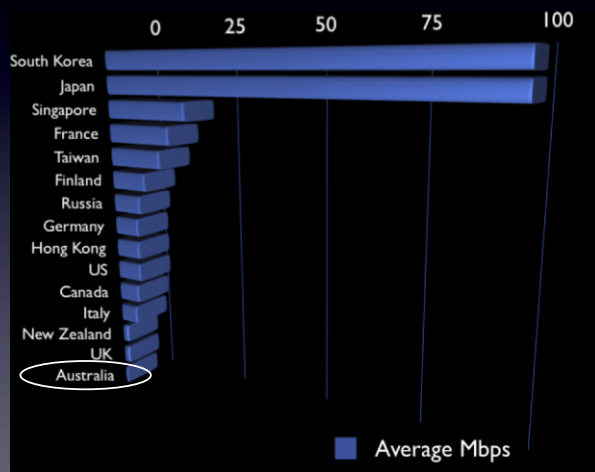
The State of Play

- Basic broadband with speeds .256Mbps rolled out across the country
- High-speed broadband with speeds in excess of 8Mbps
 - Available in capital city CBDs
 - Some local areas (Cable Extreme, ADSL2)

Broadband penetration



The emotive graph



Risks and rewards

- Being behind we risk ...
 - restricted communications
 - limited access to knowledge
 - lost opportunities for applications
- Being behind we get ...
 - to see what applications are developed
 - match needs to applications
 - to buy equipment at established lower costs

The Dream

- e-Health
- e-Education
- Video conferencing
- Video downloads
- Games



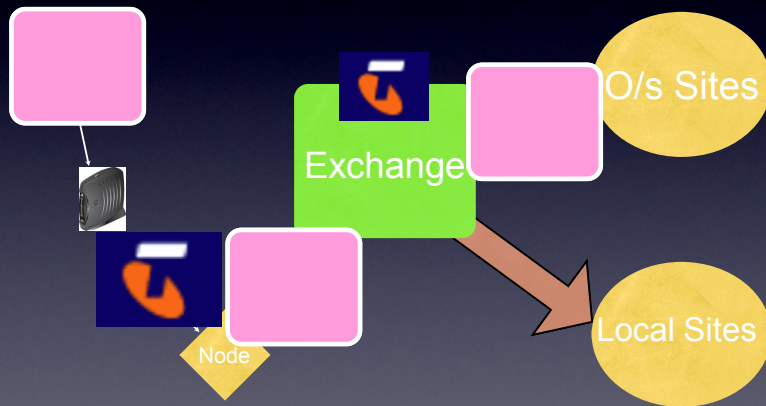


The Vision



The Reality

Internet paths



Just not enough

- No guarantee of fast uploads
- Bottlenecks across the pacific
- Download limits exhausted in seconds
- Will the price be right?
- Do people have the computing technology to benefit?

The Reality

- e-Health
- e-Education
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Is this a good use of public money?

What we need

- Applications
- Global connectivity
- Subsidies
- Regulation

e-Health

- What would it take to avoid GP waiting rooms?
- Need to upload pictures
- GP needs to be assured of liability
- Legal and health insurance systems need development



Low cost backhaul



- Just two providers
- High US interconnect rates
- This is why we have download limits

Subsidies

- Regional areas will always be too expensive to get the latest communications infrastructure
- Need to subsidise connections
- This has worked in basic broadband
- Better than a USO that entrenches cross-subsidies

Regulation

Avoid this issue by giving it all to Telstra
... but the cost is large

... where we have competition (e.g.,
mobiles) the quality is better and prices
are lower.

If there is going to be diversity in
providers, regulation is needed at the
exchange

... this includes the public partnerships.

The real priorities

- Public money for overseas backhaul
- Ensure high speed connections in regional centres
- Find regulatory solutions
- Public money for innovations in broadband applications

Don't subsidise bricks to get a hospital or school

The Local Solution

- The best way to ensure that the market can take care of itself and Australia isn't left behind is to think local
- Broadband is a local issue (much like garbage collection)
 - Specific technologies
 - Different demographics
 - Social networks
 - Potential for competition

National FTTN Network

- The Federal government wishes to build a nation-wide FTTN network.
- Will use a public-private partnership model
- But it does not have to be a single provider ...

Tender process

- The tender process can sort it out
- Use a combinatorial auction locality by locality
 - It may be that a single provider emerges
 - But it also may reveal the scope for competition
 - It may also mean FTTH investment
- A thoughtful design can save the Government and consumers billions

Precedents

- Forestry auctions in Victoria
- Spectrum auctions in Australia
- Spectrum auctions around the world