An International Perspective on Australia's NBN

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Overview

• Australia’s NBN: background info
• Changing the nature of competition
• Broadband as infrastructure
• Unanswered questions
• What could work elsewhere?
April 2009 NBN Announcement

• $43 billion AUD investment (public/private)
• FTTP to 90% of premises, up to 100 Mbps
• Fixed wireless or satellite to remaining 10%, up to 12 Mbps
• 8 year rollout plan

“We are fixing two real and pressing problems:
- the need for better, faster broadband services through building a better network; and
- the structural problems that plague the sector and prevent genuine competition.”
December 2010 Update

• 93% fibre, 4% fixed wireless, 3% satellite
• fibre to communities with more than 1000 premises
• more than 12 M hh in fibre footprint by 2021 completion
• $27.5B from government in equity funding
• open access, wholesale only
• uniform pricing/cross-subsidies
Current Status

• 3 Tasmanian sites operational since late 2010
• 5 mainland sites operational as of Sept 2011
• Commercial offerings began Oct 2011
• Construction schedule to connect next .5 M hh
• Ongoing debates about pricing, uptake
• Political opposition to NBN, does FTTP make sense?
NBN Objectives

• “The NBN will provide reliable, ubiquitous, high-speed broadband to all Australian premises”
• “Enabling infrastructure for the digital economy”
• Provide “improved access to business and job opportunities, health, education and government services”
• Drive productivity, better connect Australia
Cast of Characters
Enormous change in industry, e.g.

- June 2011 agreement between gov’t and incumbent Telstra (approved Oct 2011)
  - $9B for decommissioning copper and HFC networks, NBN Co to use Telstra infrastructure
    - Telstra to structurally separate

- Reform of telecoms regulation
  - ACCC consultation on Telstra’s structural separation undertaking (industry forum Nov 4)

- Legislation to reform USO

- Convergence review
Competition and the NBN

• Competition seen as the driver of investment in broadband infrastructure

• OECD on Australia (2010): “It would be preferable to maintain competition between technologies in the broadband sector and, within each technology, between Internet service providers.”

• NBN: enables retail level competition on single network
Competition and the NBN

• Nature of competition changes
• Competition on *services*, not on *infrastructure*
  – Avoids duplication of infrastructure
  – *Any* qualified service provider can use the network
  – Removes entry barriers
  – Potential to increase competition
  – May change role of ISPs
Competition and the NBN

• Outcomes are important
  – Choice, affordability, innovation
  – Effective use of broadband to realise benefits for citizens

• Does shift to services-based competition change outcomes?
  – Deeply entrenched positions, many international incumbents oppose this approach
  – Key question: can service-based competition deliver reliable, high quality broadband?
Broadband as Infrastructure

• Facilities-based competition delivers patchy infrastructure, un- or underserved areas
  – Unlikely to serve all premises
  – No uniform platform for service delivery

• Trans-sector services
  – Integrated, coordinated approach to healthcare, education, smart grid, e-government, etc.

• Managed/IP-based services
  – Not just about speed: need quality, security
  – Extends benefits of broadband
With FTTP, Broadband > Internet

“While many people use the terms interchangeably, the internet is not the same thing as broadband. In fact, you can use a broadband link to receive many different services which are completely unrelated to the internet, such as videoconferencing, security monitoring and health monitoring services.

The internet is a collection of networks and computers all joined together using the same basic communications technology. A broadband service is simply a fast, always-on way of linking your premises to the internet and other services.

Think of the internet as a city. Broadband is the highway leading there.”  

Key Differences

• Competing on services, not on building infrastructure
• Single high quality infrastructure facilitates service delivery, enables IP-based services
• Option for multiple service providers, changing business models
Size of government investment

- Is it warranted? How to answer this question?
  - Opportunity costs?
  - Cost-benefit analysis?

On average, a cost savings of between 0.5% and 1.5% in each of the four sectors over ten years resulting directly from the new broadband network platform could justify the cost of building a national point-to-point, fibre-to-the-home network.
Achieving anticipated benefits

• Rationale for government investment in broadband is based on realisation of broad societal benefits

• Uptake/effective use are key
  – Shift from engineering-centric approach to citizen-centric

• Mechanisms for enabling managed services delivery? How to actually develop and roll out trans-sectoral services?
What about Wireless?

- Wireless is a competing infrastructure
- Australian mobile carriers are upgrading mobile networks
Give the People What They Want?

- Is *infrastructure* limited to fixed line?
- If objective is providing better broadband, why not a wireless overlay? (add-on, not a substitute)
Questions about the NBN

• Is this a good investment?
• Will service-based competition deliver desired results?
• What is needed to fully develop a broadband-enabled service economy?
• What is the role of wireless broadband?
Lessons for other NGN projects?

• Vision and strategy needed to guide government action
• Leadership is key
• Takes time to achieve results
• Recognition that broadband can do more than provide internet access
  – Set objectives beyond speed targets
Thank you

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