



Australian  
Competition &  
Consumer  
Commission



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# Appendices

*Confidential*



## **State of competition**

- To date competition has developed unevenly
- There are some niche markets where full competition has emerged (e.g. TransACT) BUT Telstra remains a dominant vertically and horizontally integrated incumbent
- However in recent times investment & competition in broadband has been increasing

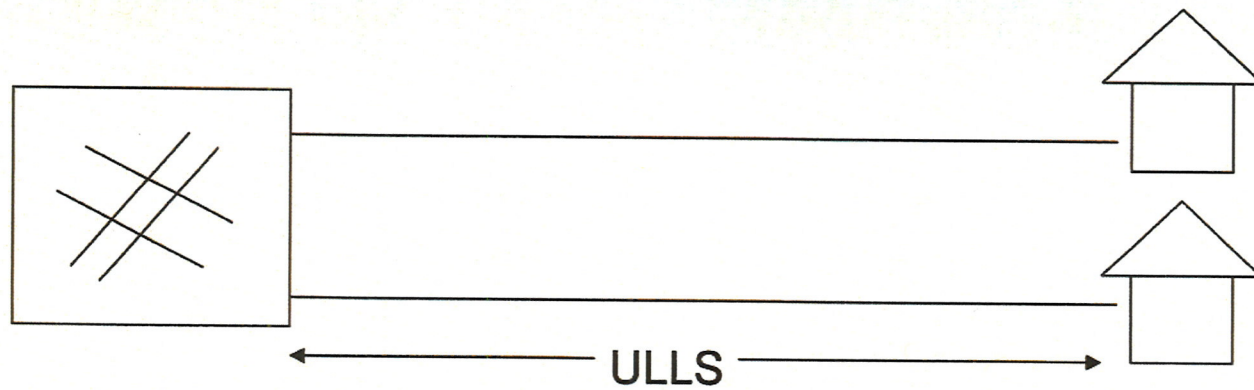


## Fibre upgrades

- Fibre has emerged as the upgrade path internationally:
  - Cuts operating costs
  - Enables certain high-bandwidth applications, eg IPTV
  - Effective competitive response to pressure from ULLS competition
- Fibre has the ability to provide better services for consumers:
  - Fundamental issues of market power remain unchanged
  - But regulatory instruments used to address the issue must change
- The existing ULLS will no longer be a viable means of facilitating competition

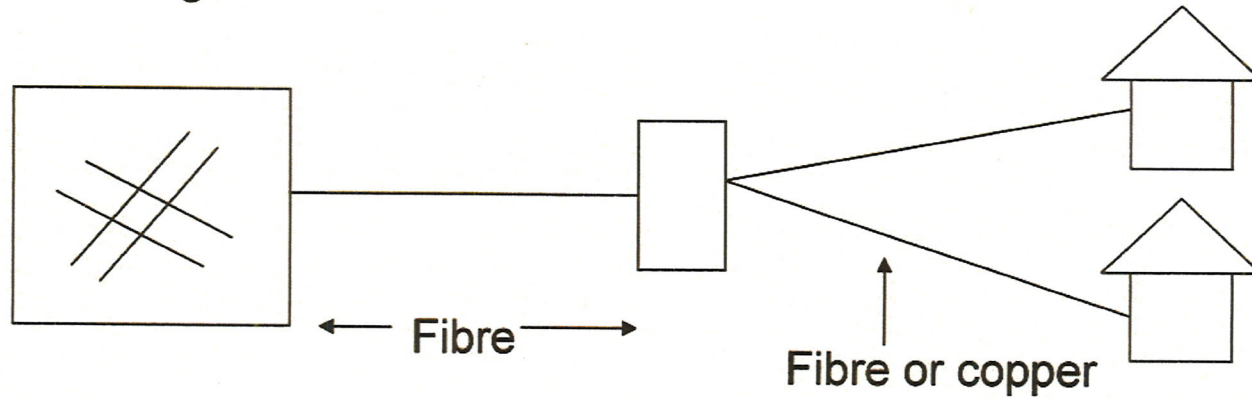


# ULL vs bitstream



Local  
exchange

Copper (Dedicated point-to-point)



Bitstream (shared fibre link)



## HFC & Wireless

### ➤ HFC

- Telstra and Optus
  - But coverage only in Sydney/Melbourne/Brisbane
- Capacity good - potential speeds up to 100Mbps

### ➤ Wireless

- Broad 3G coverage
  - Telstra claims 99%, Optus planning 98%, Vodafone similar
- But capacity more limited – always shared

### ➤ HFC & Wireless not effective substitutes for NBN



## Sol Trujillo, Telstra CEO

*“There are some natural advantages in the fixed-line network that I would argue says that fixed line is going to be here and is going to be more advanced as we go forward... now we’re going to move into where everything is high definition... and guess what, you need 8 to 10Mb to deliver high definition... when you think about moving to 40Mbps wirelessly, not everyone can use it simultaneously.”*



## OECD historical broadband penetration rates by technology, Australia 2004-2007

