

Technology meets Politics

The story of Australia's National Broadband Network

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Australia's National Broadband Network

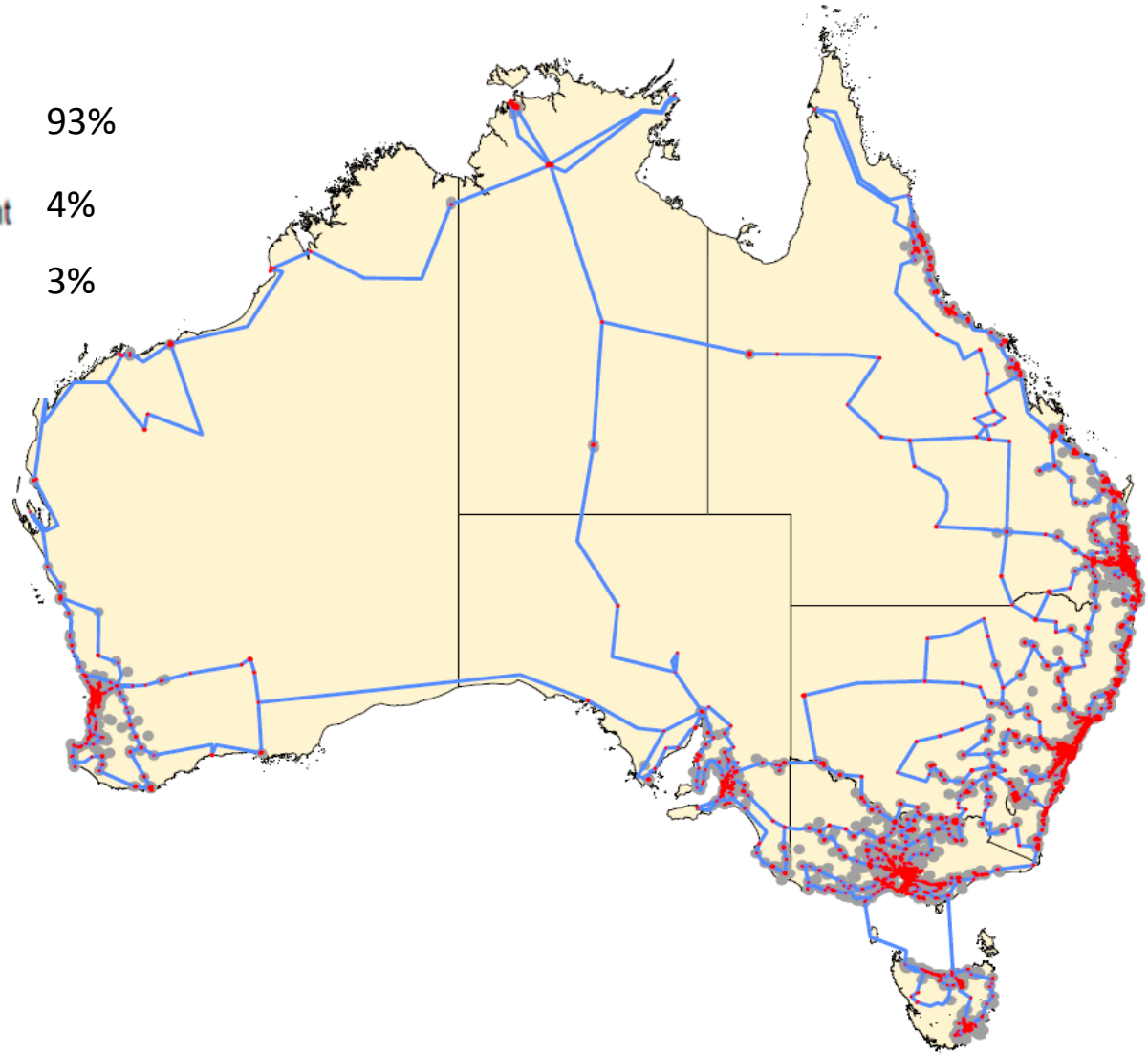
- **April 2009**: Announced by Federal Government (**Labor**)
- Fibre to the premises (FTTP) to 93% of population
- AU \$43 billion: biggest infrastructure project Australia's history
- Vigorous political debate around the project

- **September 2013**: Change of Federal Government (**Coalition**)
- New Government resets key parameters
- FTTP to be replaced by fibre to the node (FTTN) and HFC

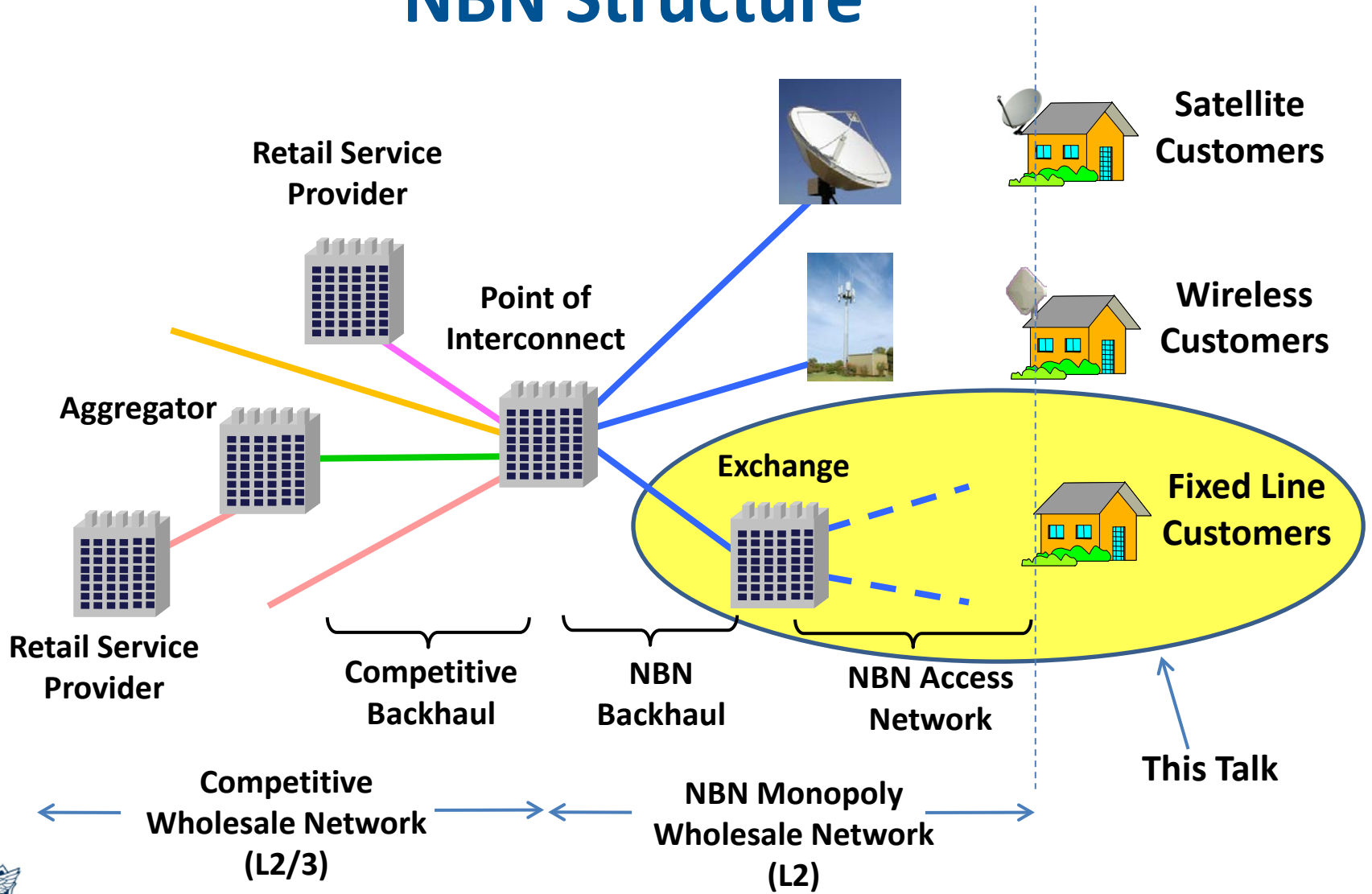
- **March 2015**: Transition to FTTN and HFC imminent



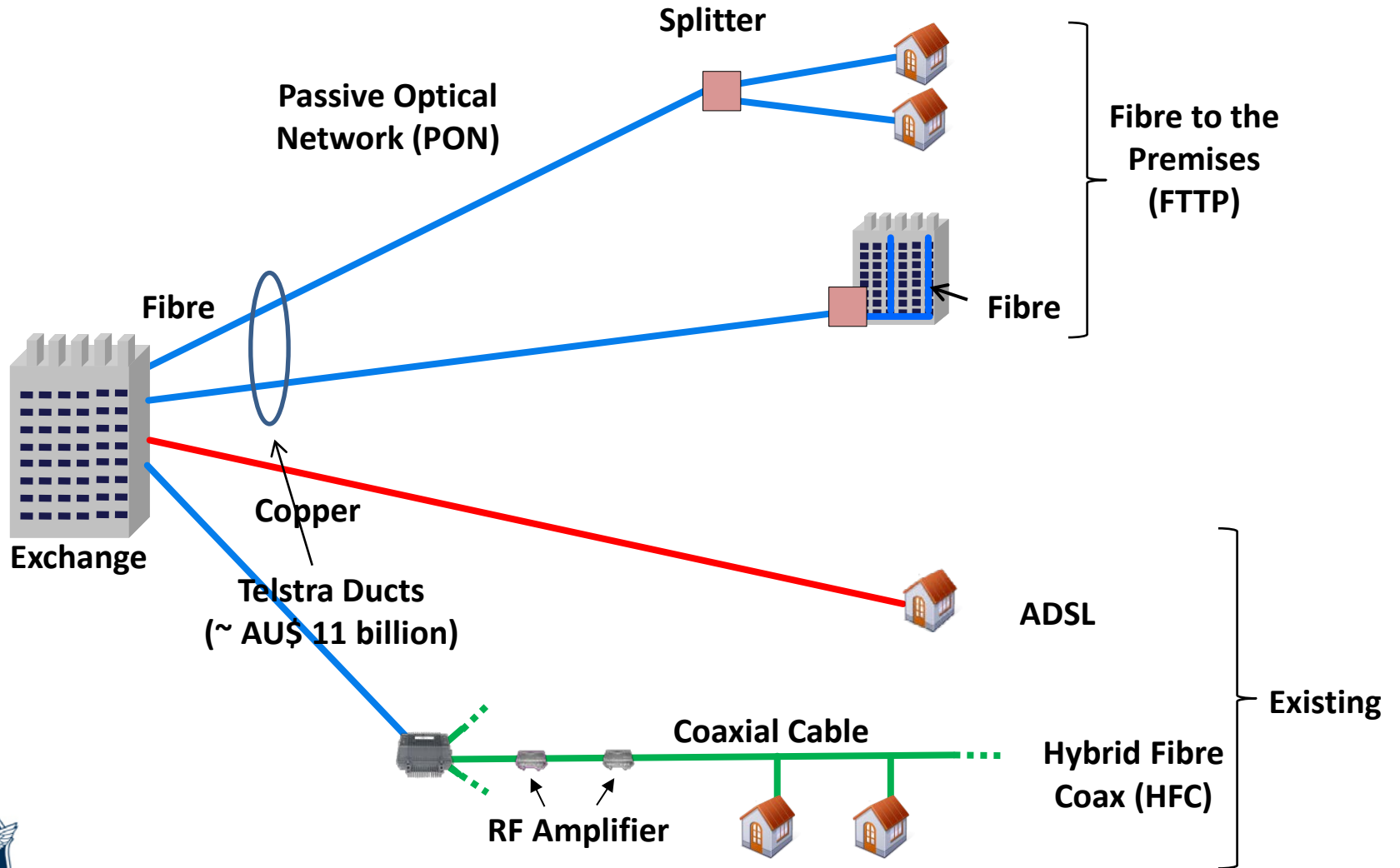
Original Technology Footprints



NBN Structure



Original NBN Vision



A. Political Debate around FTTP

- Overall project cost
 - Cost-benefit analysis
- Choice of technology
- Rate of rollout

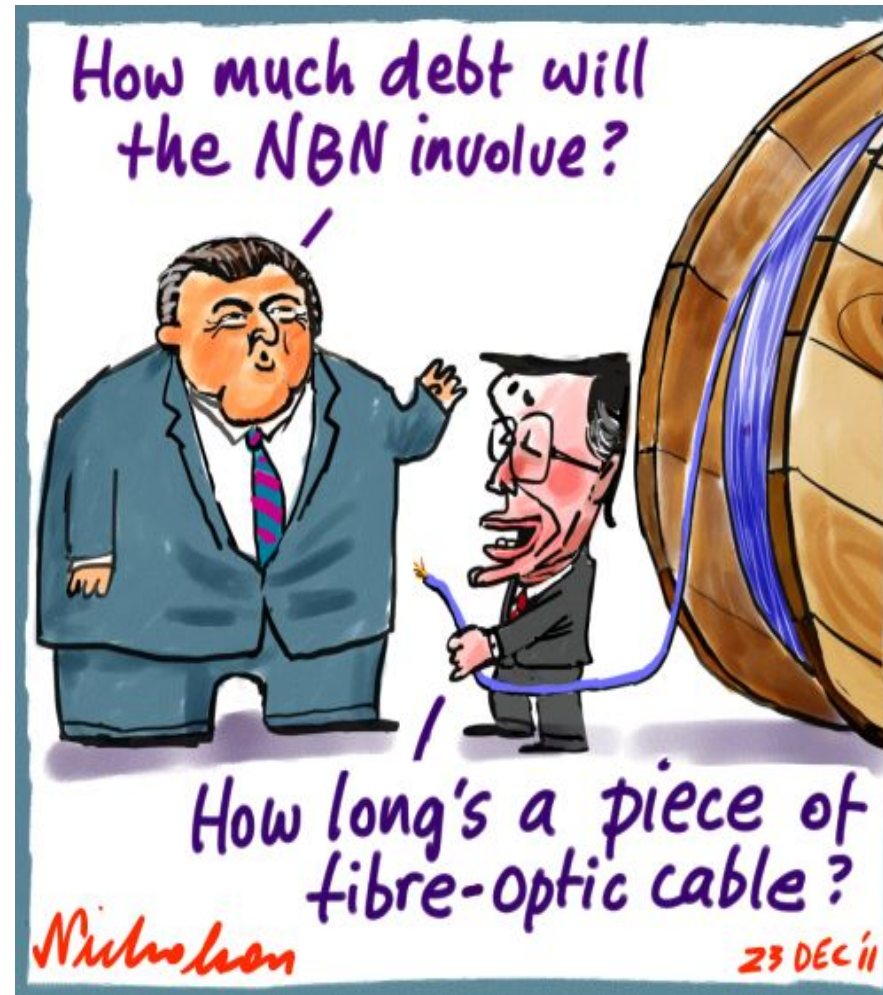


Cost

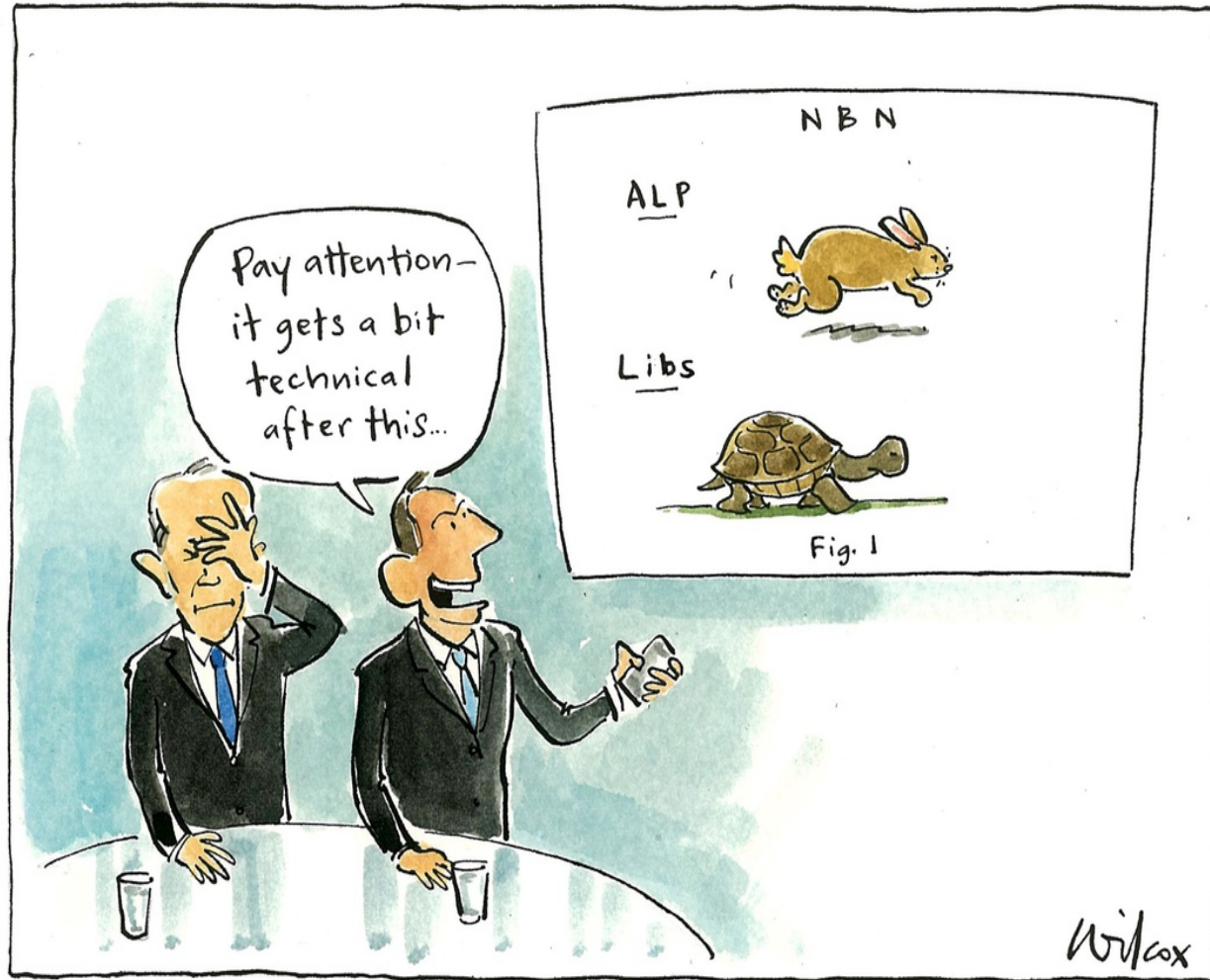
- Initial budget: AU \$43 billion over 8 years
 - ~ AU\$ 300 per person per year
- Some negative commentary before 2013 election:
 - a “shockingly misconceived, wasteful exercise in public policy”
 - a “dangerous delusion”
 - Predictions of cost blowouts to ~ \$70 - \$90 billion”
- Initial budget shown to be accurate (Feb. 2015)



Cost



Technologies



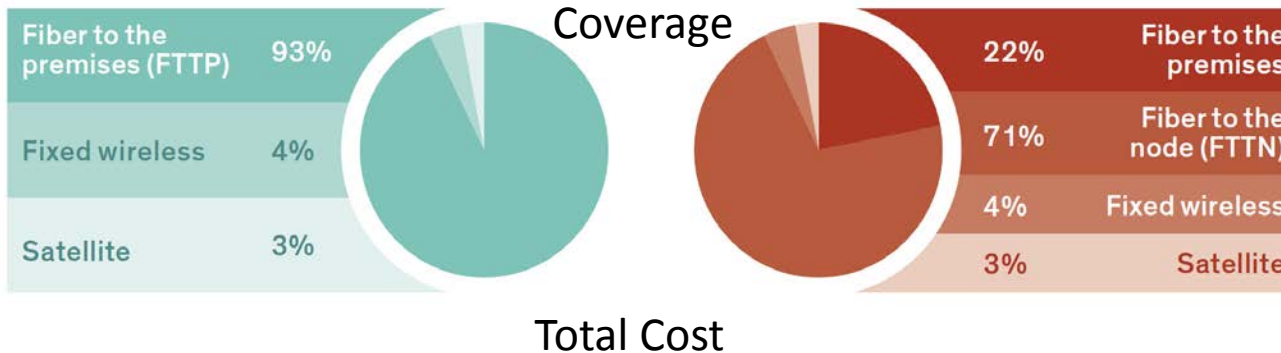
B. 2013 Election and Beyond

Original Plan

Announced by the Labor government in 2009

Revised Plan

Proposed by the current Coalition government in 2013



AU \$45.6 BILLION

AU \$29.5 BILLION

Completion: 2021

2019

Post-election review (December 2013):

Multi-Technology Mix:

FTTP: 20-26%

FTTN/B: to 44-50%

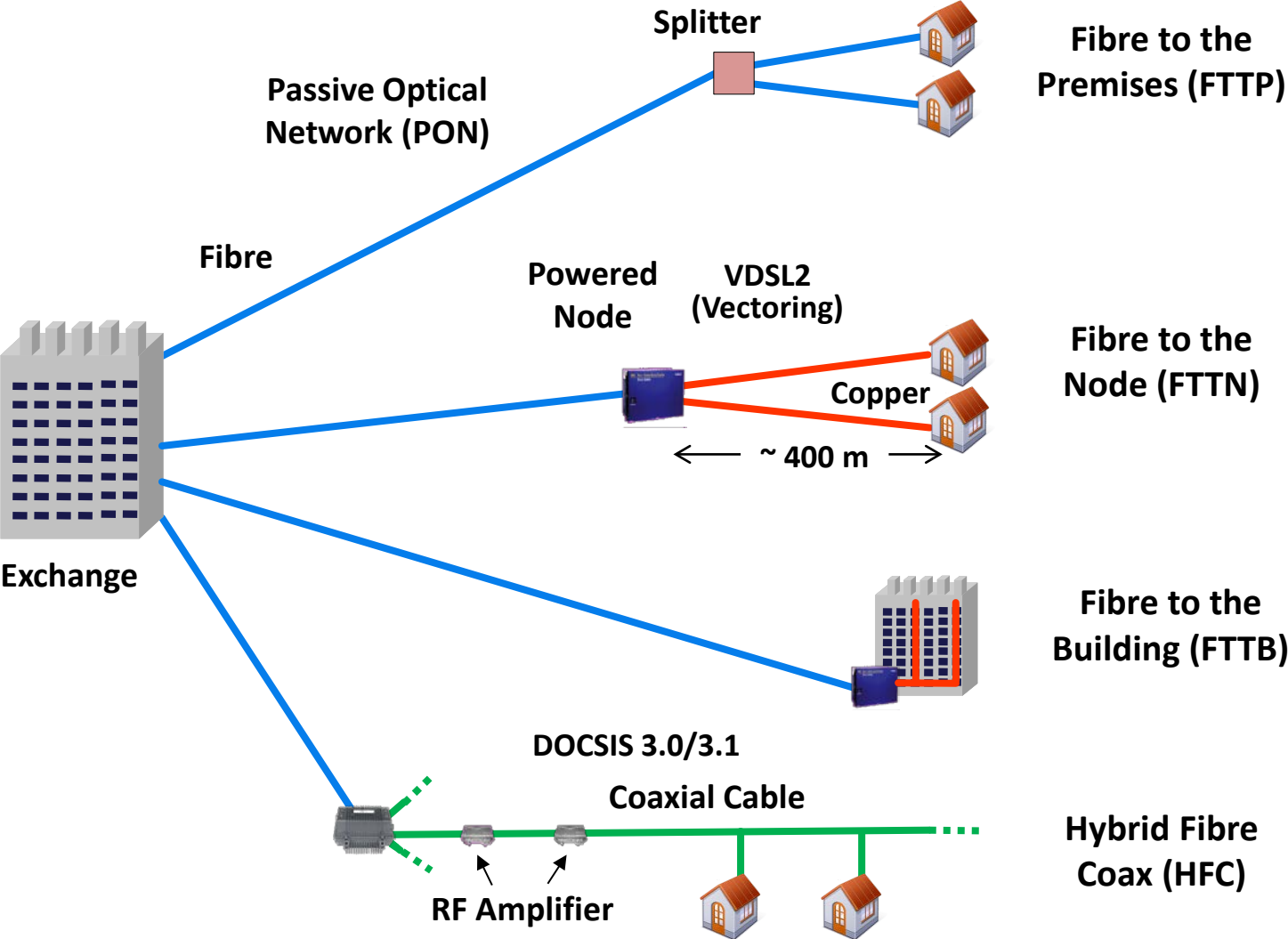
HFC: ~ 30%

April 2014:

≥ 25 Mbps and 50 Mbps to 90% of fixed-line premises



Multi-Technology Mix

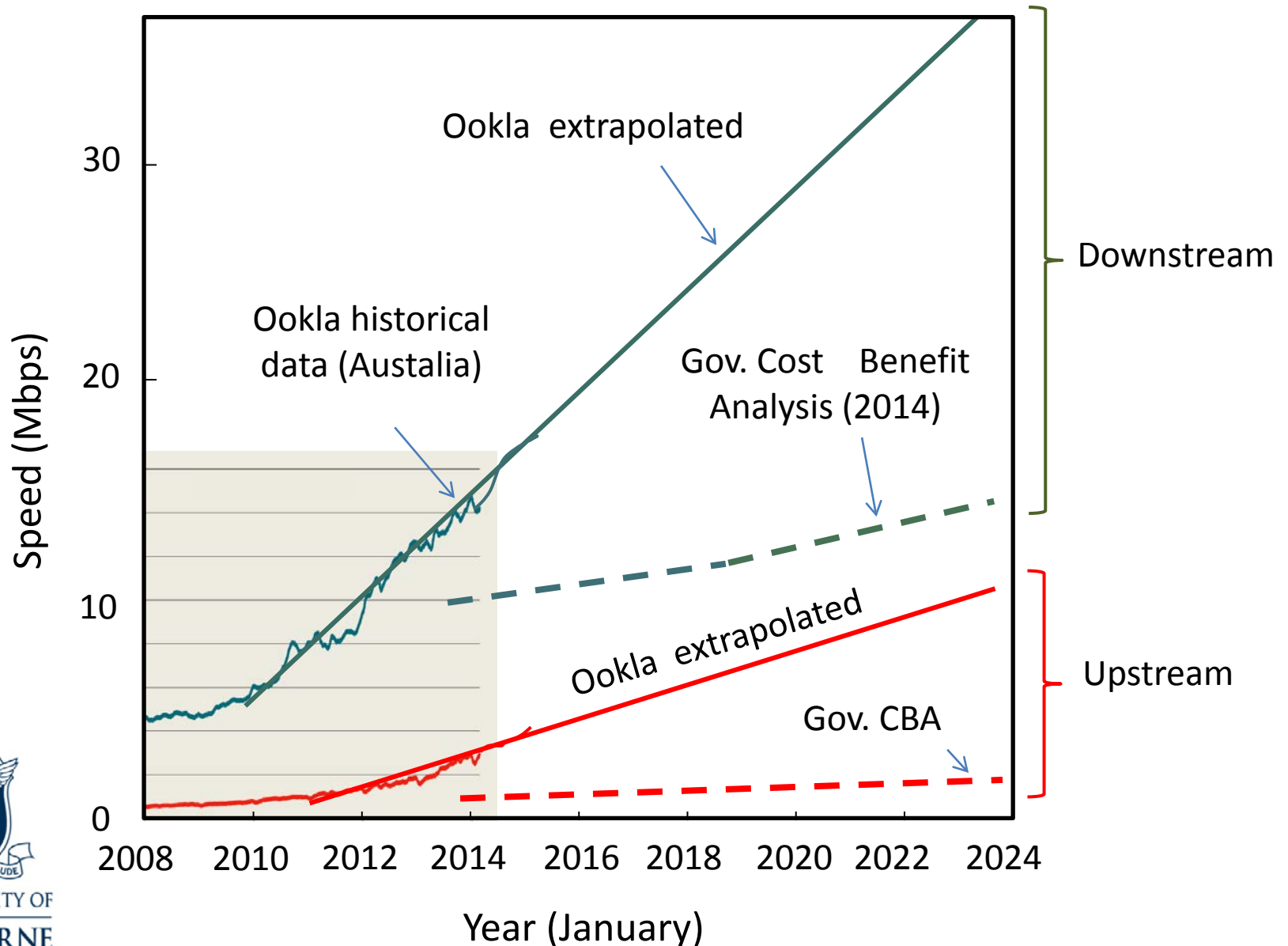


"Faster, Sooner, Cheaper"

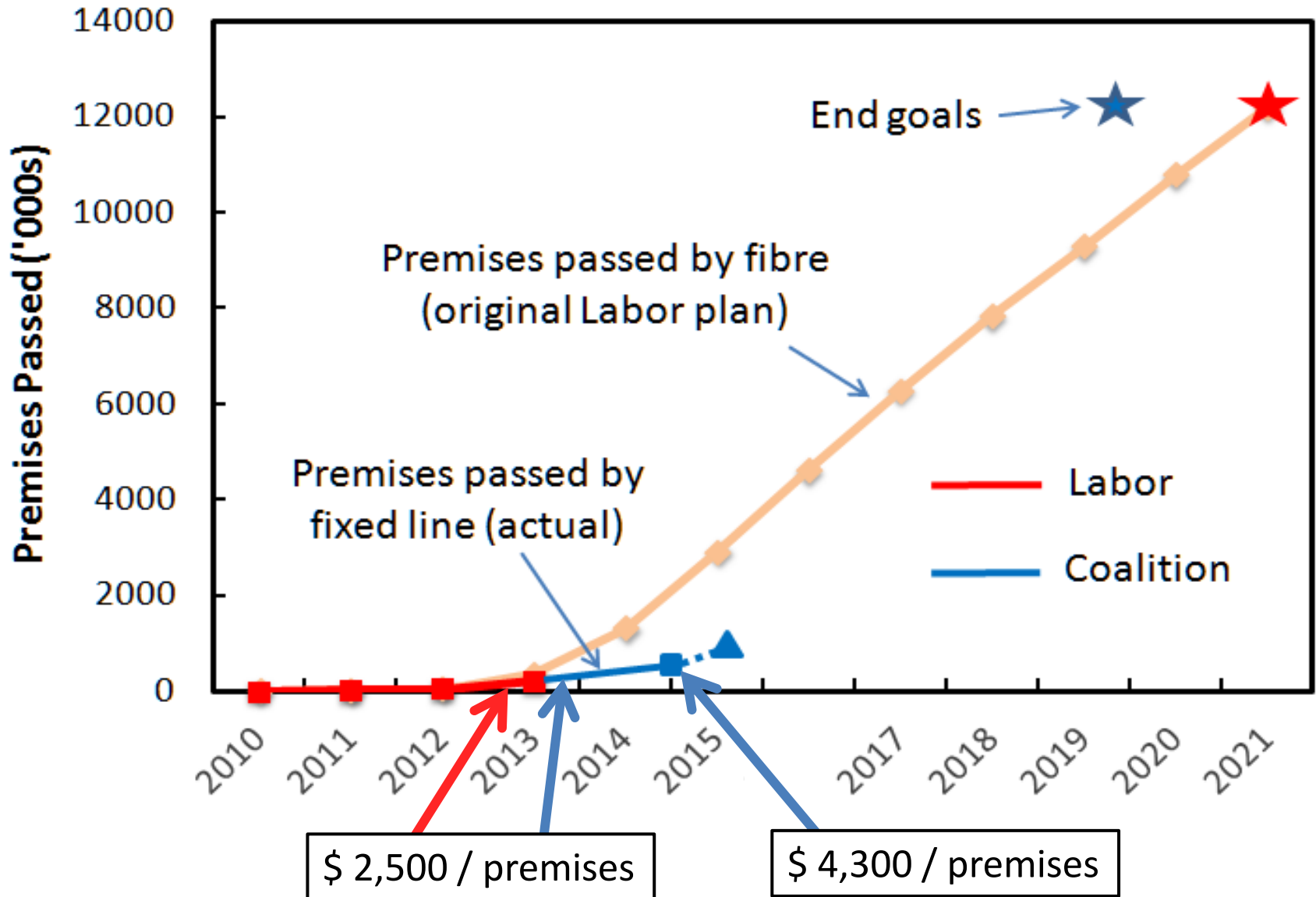
Multi-Technology Mix



Projections of User Demand



Roll-Out Rate and Cost



NBN home to fibre broadband connection cost per premise doubles

February 25, 2015

 Read later

Matthew Knott

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Take Home

- Technology + Politics + Policy → Confusion and Misinformation
- Engineers need to become more involved in political debate
 - Counteract technical confusion and misinformation
- FTTP will eventually come to Australia
 - But by a circuitous route

