Impact of the NBN on the communications sector: *A forensic view*

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Based on a report co-authored with Michael Reede, Partner, Allen & Overy

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The NBN will be the most disruptive policy initiative since Australian telecommunications market liberalisation

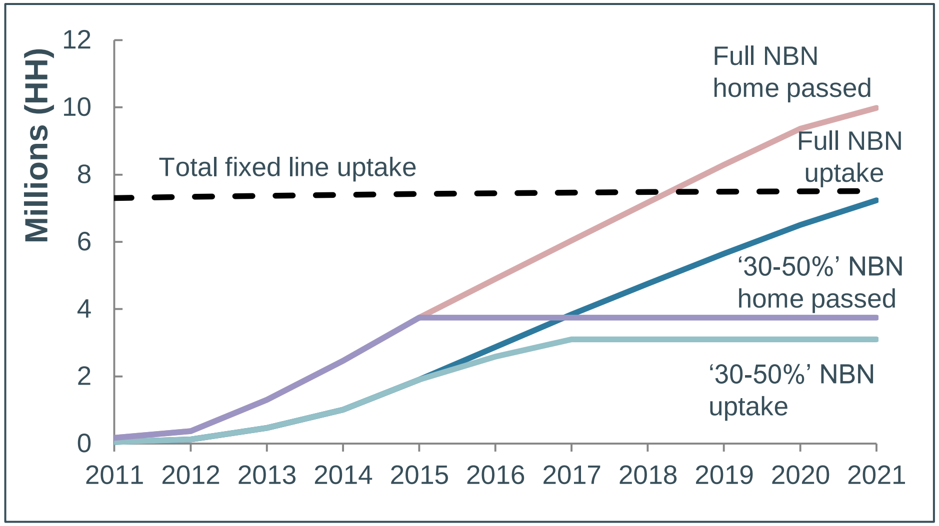
The return of Government to the market	*A ubiquitous network access company*	*Inability to generate retail demand*	*A wholesale only carrier*
Displacement of copper loop	*The removal of Telstra vertical integration*	*Ubiquitous superfast broadband*	*Metro to regional cross subsidies*

Source: Venture Consulting

VENTURE Consulting

But the closer the NBN gets, the further away it seems

Fibre coverage - with copper sunset



	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021
'30-50%' NBN % home covered	2%	4%	15%	28%	41%	40%	40%	39%	39%	38%	37%
'30-50%' NBN % HH take up	1%	1%	5%	11%	21%	28%	33%	32%	32%	31%	31%
'Full' NBN % home covered	2%	4%	15%	28%	41%	53%	64%	75%	85%	95%	100%
'Full' NBN % HH take up	1%	1%	5%	11%	21%	31%	41%	50%	58%	66%	72%

Source: Venture Consulting

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We see three broad NBN scenarios

Scenario	Worst case outcome	Mitigating factors	Likely scenario
Scenario 1 **No NBN** ***10% chance?***	• HFC / FTTN replaces NBN • Telstra / Optus 'controls' access • Expensive for access seekers • Prolonged uncertainty	• Telstra would be separated • ACCC would maintain LLU • … and would not allow a duopoly to develop • New HFC / FTTN would be regulated	• BAU extended • 'NBN 3' looks like UK's Openreach • Optus HFC might get sold
Scenario 2 **30% - 50% NBN coverage** ***60% chance?***	• NBN half built • Assets sold back to Telstra • Telstra 'controls' the fibre	• Neither political party would allow Telstra to take publicly funded fibre private unless it was regulated • Firm commitment to separation	• NBN Co is renamed • Copper and fibre assets combined • FTTN scaled up • Structural separation? • All open access
Scenario 3 **>50% NBN coverage** ***30% chance?***	• Fibre wholesale price increases • Retail price holds • Margins squeezed • Telstra gains share	• Government will not allow market to concentrate beyond today's levels • Will cut NBN prices before ISP margins decline significantly	• Wholesale prices cut to drive take up • Becomes a 4-5 player market

Source: Venture Consulting

VENTURE Consulting

From an access seeker's perspective, the economics of the NBN look ok at launch, but pricing will need to be revised in time

Component	Function	Cost structure
User Network Interface (UNI)	• The port(s) on the Network Termination Unit which connect into the home	• Per connection • Fixed price, dependent on speed of connection
The Access Virtual Circuit (AVC)	• Links the NTU to the Fibre access node	• Per connection • Fixed price, dependent on speed of connection
The Connectivity Virtual Circuit (CVC)	• Links the Fibre Access Node to the Point of interconnect (POI) • Allows access seekers to manage contention	• Shared resource • Variable price, dependent on contention ratio
Network – Network interface (NNI)	• The port(s) at the POI	• Shared resource • Fixed price per POI

- *As contention ratios decline, CVC costs will become a problem*
- *Our modeling suggests that this could add as much as $30 per sub over time if prices remain the same*

Source: Venture Consulting

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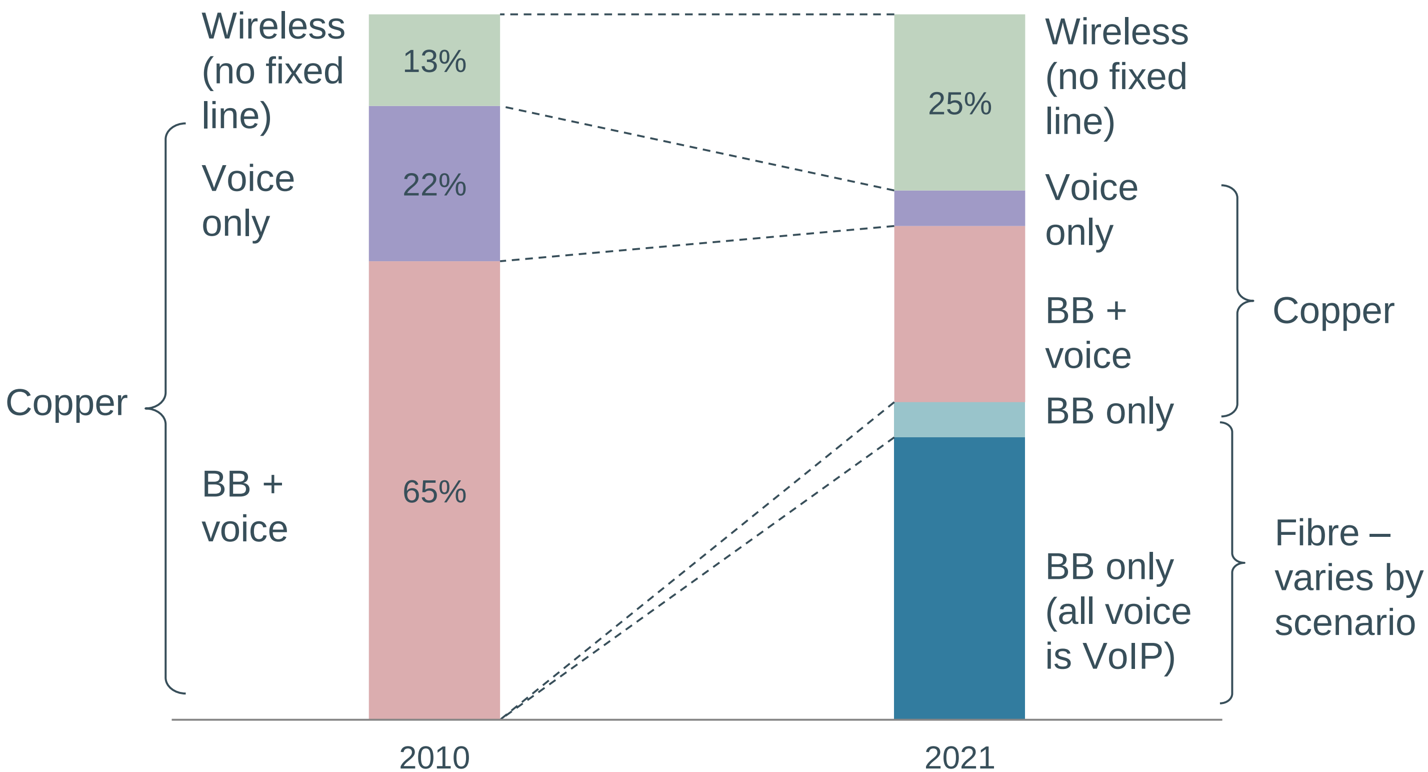
Over time, the NBN will drive a very different product mix

Customers by type of telecom services (2010A & 2021F)



Source: Venture Consulting

The devil will be in the detail, but the transition period has the potential re-shape the market

The transition – what we know

- 2 years
- Telstra and other players to have the same warning
- Telstra paid for each conversion – regardless of where they go to
- Telstra cannot promote mobile broadband as an alternative to copper

Implications

- All players will try and re-contract early
- Challengers will try to prevent re-contract
- Heavy marketing spend favours those with deep pockets
- In any given region, two years of churn
- Opportunity for new players in many regions
- Approach of the ACCC is unclear, but we know that *“pricing and the transition are our key areas of focus”*
- New national entrants delayed?

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