

# **Southern Cross Equities submission to the Senate Select Committee on the National Broadband Network**

## **Executive summary**

We believe that the \$43b NBN announcement raises more questions than answers. We believe that it may not be commercially viable and put to the committee that there are more effective means to achieve the “high speed broadband outcomes” that the Government seeks for Australia.

Fundamentally we believe a FTTH network, as that set out by the Government’s announcement, is not commercially viable. Our analysis shows that pricing would have to be 2x current to achieve a modest 10% project IRR. Separately the existing consumer research shows little demand exists for 100Mbps services.

Whilst demand for high speed broadband will increase over time we believe it will be some time before 100Mbps will be demanded by the majority. We believe increasing capacity demand will be met by mobile services whilst the NBN is focused on a fibre technical solution. We are also concerned that the much talked about “trans-sector” benefits will not eventuate in a timely manner. In fact many of these we believe will require generational change in consumer behaviour. Therefore, we contend that a rigorous cost benefit analysis should be performed.

We believe there are more effective means to achieve a high speed broadband in Australia. Specifically we believe the focus should be on areas (regional Australia) where it is uneconomic to deliver broadband, while economic areas (metro) should be left to market devices. In this submission we set out where we believe regulatory reform is desirable to ensure that equivalence of access to bottlenecked infrastructure exists.

We caution Government’s involvement in the free market where it increases the risk of distorting those markets. There is the risk that the “hand of government” may distort price signals and impact the incentive to invest. An unintended consequence of this risk is that it may impact capital inflows as investors redefine the risk of investing in Australia.

# Main submission

The Federal Government announced on 7 April 2009 that it will establish “NBN Corp.” to invest \$43b to build FTTH (Fibre-to-the-home) network to 90% of Australia with wireless and satellite to deliver 12Mbps to the remaining 10%. This is expected to take eight years to build. In parallel, the Government announced a review of the current regulatory process to facilitate the transition to the NBN.

We believe that the \$43b NBN announcement raises more questions than answers. We believe that it may not be commercially viable and put to the committee that there are more effective means to achieve the “high speed broadband outcomes” that the Government seeks for Australia. Below, we address some of those concerns.

**\$43b FTTH is not commercially viable**

## FTTH network is not commercially viable

We believe that a FTTH network to 90% of Australian homes is not commercially viable when assessing the cost to deploy (Government estimate of \$43b) vs. the demand take-up from customers. There are a number of reasons why we believe this is not commercially viable, including:

### WHOLESALE PRICES WOULD NEED TO BE 2X CURRENT LEVEL

For the NBN to achieve a 10% Project IRR (pre debt servicing), the wholesale access price would need to be \$100 per month. This compares unfavourably to the current access price of \$55 per month.

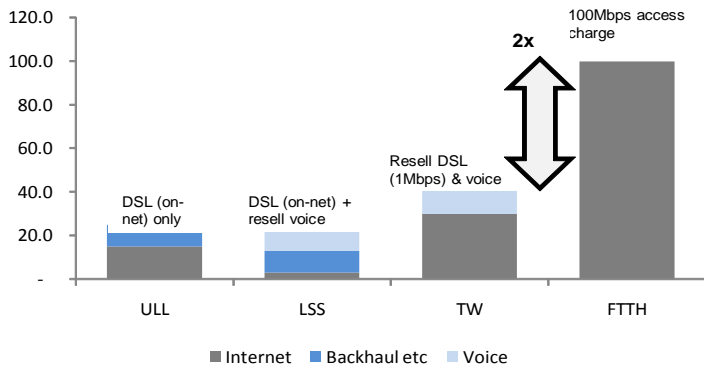
Figure 1 - FTTH commercial case

Assumption	SCEQ	Comment
<b>Build assumptions</b>		
Geographic build	Outside in	
Build cost	\$43b	Includes \$5b of asset for equity swaps
Timeframe	8-10 yrs	Expect delays
TLS involvement	Yes	TLS resells FTTH, but a two-tier market (legacy vs. FTTH) exists
Debt: Equity Funding	60:40	60% Debt (8% yield), 20% Govt (6% yield), 20% Private Equity (15% yield)
<b>Commercial assumptions</b>		
FTTH take-up	50%	Legacy at significant discount to FTTH
FTTH W/sale line cost (mth)	\$100.00	Current w/sale cost \$30-\$55
EBITDA margin	70%	Consistent with utility investments
Project WACC	9.0%	Weighted funding cost
<b>Project NPV (\$m)</b>	<b>1,967</b>	TV = 18x Yr10 cash flow
<b>Project IRR</b>	<b>10%</b>	

SOURCE: SOUTHERN CROSS EQUITIES ESTIMATES

We expect a \$100 wholesale price would equate to a \$200-\$220 retail price. This compares unfavourably with a current retail price of \$110-\$120 for a voice and data services.

Figure 2 - FTTH vs. current wholesale access



SOURCE: SOUTHERN CROSS EQUITIES ESTIMATES

**Why swap high value metro fibre for over-priced NBN Corp. equity**

**Two-tier market (cooper vs. fibre) likely to develop**

Key to the above assumptions:

- \$5b of existing fibre assets are vended into the NBN in exchange for an equity stake. It remains to be seen how willing Telco's will be to vend high value networks (typically metro fibre networks supporting high value customers) for equity in the NBN Co. This is because these assets have reasonably certain cash-flows, which the Telco's would forego in exchange for equity (i.e. no upfront cash) which would have a uncertain value and potentially be illiquid;
- Take-up - 50% take-up assumes strong support by both retail customers and Telstra. We believe it is likely that a two-tier market would exist, where legacy access via copper priced at a significant discount, limits take-up;
- Build cost - potentially lower than our \$38b cash cost although there is just as much risk it would be higher given complexity of build and rising cost of debt;
- To achieve price parity with current pricing we contend that the Government would have to inject a \$20b subsidy upfront with \$1b pa ongoing.

Below we detail sensitivities of these key input assumptions.

Figure 3 - Wholesale price sensitivities

		Long term FTTH take-up rate			
		30%	50%	70%	90%
IRR	5%	124	75	53	41
	10%	163	100	70	54
	15%	210	126	90	70
	20%	269	161	115	89

SOURCE: SOUTHERN CROSS EQUITIES ESTIMATES

**Cost of debt on the rise**

We believe the rising cost of debt has an implication for the NBN cost of funding. The Australian 10-year bond yields have risen 200 basis points in recent times but remain below their long term average. With the significant increase in Government bond issuance of late we believe there is a risk that the cost of debt will increase further, potentially beyond their long term average. This would effectively increase the funding cost for the NBN.

Figure 4 - Bond yields rising



SOURCE: IRESS

**Little demand for 100Mbps today**

**Average residential speed of 1Mbps today**

**NBN concerned with technology, when the focus should be end-user outcomes**

**How will access technology develop in ten years?**

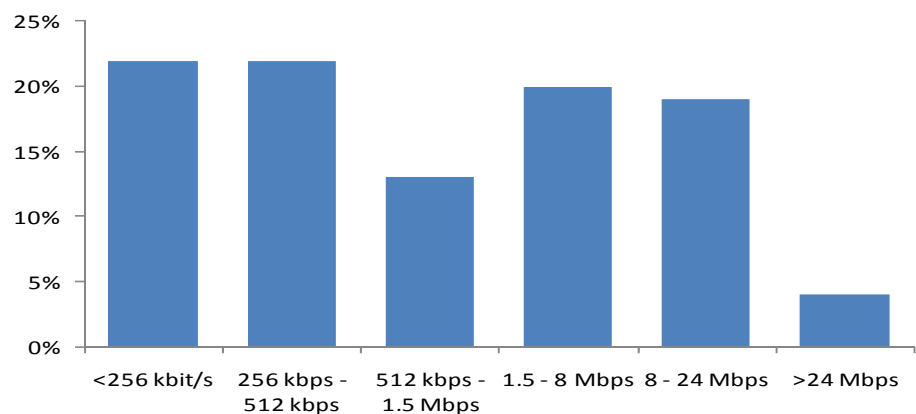
**DEMAND AND WILLINGNESS TO PAY DOES NOT SUPPORT \$43B NBN**

The current consumer average speeds (1Mbps) and consumer spend (\$110-\$120) do not support a commercial investment of \$43b. While we acknowledge the existence of future demand for 100Mbps, we believe this is some way off.

The current demand does not appear to support a 100Mbps;

- 57% of current internet subscribers have speeds less than or equal to 1.5Mbps. While this is increasing, it does not match currently available speeds – about 80% of households can access speeds up to 24Mbps today. To be clear we do believe the demand for speed will increase, however we believe this demand can largely be met from current capacity and does not warrant the proposed FTTH network;
- Current average price (ARPU) for voice and data (internet) is approximately \$110-120 per month, while our analysis suggests that the retail price under a FTTH build would be \$200-\$220 per month;
- New Zealand analysis<sup>1</sup> suggests there is a limited willingness by consumers to pay more than they currently do;
- The Telco market is increasingly mobile based – see below.

**Figure 5 - Internet subscribers by connection speed**



SOURCE: SCE AND SCMA

**NBN FOCUSED ON TECHNOLOGY RATHER THAN OUTCOMES**

We believe the NBN is focused on a technology solution when it should be focused on outcomes (i.e. what services and applications will be demanded with higher speed broadband access). We believe:

- Increasingly traffic will migrate to mobility solutions (i.e. 3G and in time 4G mobile, WiMAX) as this meets customer demand for mobility. This is especially likely to be the case for simple services such as voice, basic data, and internet access;
- Although this will increase the demand for backhaul capacity it will not necessarily increase the demand for high speed access to premises (which is essentially what the NBN is);
- One size does not fit all – we recognise deficiencies in certain parts of Australia (particularly regional Australia), while we believe there is a much stronger case that metropolitan Australia can be left to its own devices (the free market) with some changes to the regulatory process.

<sup>1</sup> "Getting the Most from High Speed Broadband in New Zealand: Investing in Productivity Growth": Castalia, December 2008, page 33

### DETAILED COST BENEFIT ANALYSIS REQUIRED

We believe an investment of this size justifies a rigorous cost benefit analysis. On this point we support calls for a full business plan assessment.

**“Trans-sector”  
benefits involve  
generational behaviour  
change**

This should assess both end-consumers as well as broader social and economic benefits (“trans-sector”). We believe many of these benefits are either addressable today or conversely somewhat off from materialising. In fact some of the often mooted “trans-sector” benefits (i.e. home diagnosis, tele-working) will take a decade or even generational change in consumer behaviour before they become embedded in society’s behaviour. This is significant as delays in these benefits materialising will gravely impact on the commercial viability of the investment. We direct your attention to the *Castalia*<sup>2</sup> report out of New Zealand which does an admirable job of discussing some of these issues.

### NBN CO. NOT ATTRACTIVE TO PRIVATE EQUITY

On the basis of our arguments above we struggle to see how investors will be attracted to this opportunity, principally because:

**NBN of limited  
attraction to private  
investment**

- Significant questions exist around the commercial viability to achieve a modest 10% return on investment;
- While significant risk exists with the project: due to customer demand and take-up; technical deployment; technology choice, and finally funding as debt becomes more expensive due to increasing sovereign issuance.

### More effective means exist to achieve outcomes

Whilst we believe there is not a widespread need for FTTH to 90% of Australia, we do believe there is an argument for some Government involvement to promote high speed broadband on a reduced scale to that proposed. WE believe the focus for the Government should be to:

- Intervene where it is uneconomic for the market to commercially support the investment case for high speed broadband;
- Reform deficiencies in the existing regulatory process.

### REGIONAL BACKHAUL FOCUS

**Focus where no  
commercial  
imperative to deliver  
broadband**

We believe the focus should be on investing in infrastructure to support high speed broadband where it is otherwise uneconomic for the private sector to do so. Where the market is willing to invest to rollout high speed broadband then there is a limited need for the government to intervene (perhaps only to ensure equivalence of access – see below).

We believe the focus should be to deliver a regional backhaul network to approximately 90% of Australia. We believe, with appropriate regulatory reform, high speed broadband can be provided to metropolitan and suburban Australia by the free market. However regional Australia does not have the same commercial imperative for investment in high speed broadband. It is our contention that investment in a regional backhaul network would overcome the significant bottleneck to the delivery of broadband.

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<sup>2</sup> Ibid, page 40

This would enable existing access providers to expand their “footprint” where otherwise it was not commercially viable to do so. Beyond the 90% threshold we support the use of wireless and satellite access to reach the remaining 10%. This network can be achieved either through subsidising an existing operator or via a purpose built venture. The advantages include:

- More cost effective to deploy (approx. \$3-5b vs. \$43b);
- Have less technical risks associated with it;
- While quicker to deploy;
- Would require less legislative and regulatory changes;
- Be politically acceptable as the Government would be seen to deliver high speed broadband to underserved areas.

**REGULATORY REFORM TO DELIVER EQUIVALENCE OF ACCESS**

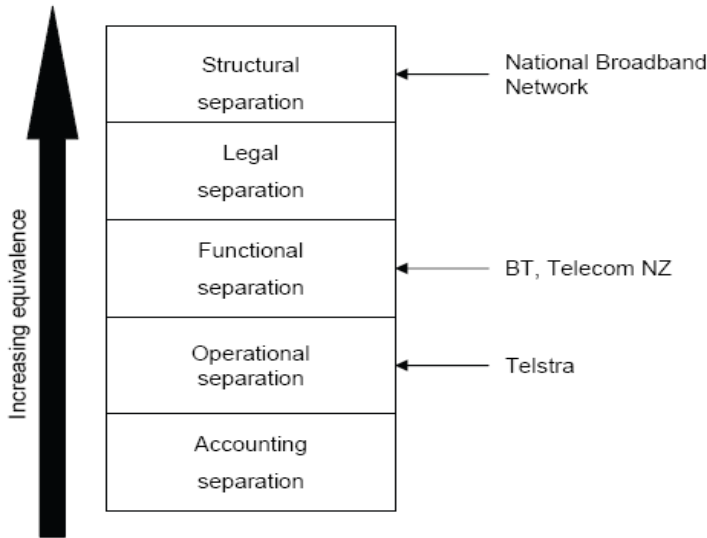
Part and partial of the above is the need to ensure an effective regulatory process exists across the broader market. While we argue the Government should subsidise regional Australia, we believe some reform is required to the existing regulatory regime to facilitate access to infrastructure in both regional and metro Australia.

The focus of reform should be to achieve equivalence of access to bottleneck infrastructure on both price and non-price terms. We believe this could be best achieved by the following options:

**Reform should focus on delivering equivalence of access**

- **Streamlining the Trade Practices Act (TPA)** – we believe that streamlining Part XIB and XIC of the TPA would help ensure equivalence of access to bottleneck infrastructure (largely that of Telstra). From Part XIC perspective this would be achieved by granting the ACCC greater powers to declare services upfront and set the terms (price and non-price) for all access seekers (effectively replacing the current negotiate-arbitrate model).
- **Functional separation of TLS** – While we have reservations about structural separation we do believe there are merits in stronger operational separation, such as that of functional separation, to achieve equivalence of access.

**Figure 6 - Possible models of separation**



SOURCE: NATIONAL BROADBAND NETWORK: REGULATORY REFORM FOR 21ST CENTURY BROADBAND DISCUSSION PAPER. ISSUED BY DBCCDE

In summary, regulatory reform should focus on the outcome of equivalence and the above options are possible mechanisms to achieve this.

## NBN potentially distorts the market

We are concerned that the extent of Government involvement has the risk of unduly distorting the market. We point to the following instances where this could become a possibility:

**Government intervention may discourage capital inflow to Australia**

- Increased sovereign risk in financial markets – the Government's actions, either through its participation in the NBN or via its regulatory reform agenda, have the potential to significantly influence the market capitalisation value of companies who participate in this sector.

Investors may become wary of the “hand of government” and this could have unintended consequences across all sectors of our equity capital markets – including the inflow of capital into Australia.

**Government actions are impacting ordinary Australia's superannuation**

- Further to above, this has potential far reaching consequences to Australian households through both their ownership of Telstra shares (1.4m shareholders) and also through Telstra largest shareholder, the Future Fund, which is responsible for the future pension liability of public servants.
- Telco marketplace consequences – price distortion – where the Government enters a marketplace its action can potentially distort price signals and ultimately investment decisions.

One such possibility, and unintended consequence, would be where metro users cross subsidise regional users through national average pricing. This could potentially distort metro prices by pushing them higher which could thereby create an opportunity for a competitor to undercut the NBN network and ultimately damage its commercial case.

## Significant delivery risk

**The Government does not have the expertise to deliver a project of this complexity**

Lastly, we point out that an infrastructure project of this size comes with significant delivery and operational risk. Although the Government is not proposing to deliver this itself, instead proposing a Public Private Partnership (PPP), we contend that the risk to execution should be considered.

We believe there are only a handful of companies in Australia with the “Project Office” capability to manage the delivery of this project. Although a large part of the project is civil engineering, of which that and other elements can be delivered by third party contractors, we believe the critical element is the project management that will ensure delivery.