INDICATOR	TELSTRA 2005/06	DCITA (2006)	ANALYSYS (FTTN) 2006	Ovum (FTTN) 2007	G9 (2007)	ANALYSYS (FTTP) 2006	Ovum (FTTP) 2007	DBCDE (FTTP) 2009
Premises covered		**•3,117,966**	**•5.6M** 1.5M businesses 4.1M residential	**•4.5M**		**•5.6M**	**•4.5M**	**• 9,630,000**
Coverage		FTTN to the 5 major cities excluding distribution areas that are 95% serviceable from the exchanges.	five major cities of Australia (focusing mainly on ULLS Bands 1 and 2)	60% of ULLS Band 2 households. Checked against the GNAF, 60% of band 2 is ~ 4.5m			60% of ULL Band 2 households. Checked against the GNAF, 60% of band 2 is around 4.5m	90% FTTP
Nodes		**•20,657**	**•20,723 upgraded •17,734 full FTTN build** (fibre link)	**•23,437**		**N/A**	**N/A**	**N/A**
Node-related costs		**45 %**	**52%** of overall FTTN cost composition. However, Analysis places line cards in a category of its own. If line	**Not sure**		**N/A**	**N/A**	**N/A**

			cards are considered 'node-related', then the total node-related costs would constitute **76 per cent.**					
Build over # of years		**Not sure**	**Not sure**	**4**			**5**	**Not sure**
Access technology		**ADSL**	**ADSL**					
Total cost		**$1.28B**	**$2.5B**	**$1.4B**		**$14B**	**Between $2.2 and $4 billion.** *The lower estimate rests on an assumption of significant reductions in the cost of deploying fibre as work crews became more experienced.	**$17.5B**
Cost per premises		**$412**	**$444**	**$311**		**$2,500**	From the lower cost estimate - **$489** From the higher cost estimate - **$889**	**$1,817**

Summary

It has been estimated that the node-related costs of an FTTN build might comprise up to 70% of the total build cost. The above table confirms that this estimate might be an accurate depiction of the break-down of FTTN costs. (see **Telstra**, **G9** and **Analysys**)

FTTP/H information is provided in the blue columns in the above table. FTTP/H costs vary significantly. This can largely be explained by the fact that the Ovum numbers do not comprise 'civil works' costs. Analysys, on the other hand, estimates that civil works comprise 8b from a total of 14b FTTP costs.

- **Ovum comparative costing of FTTH and FTTN (from August 2007)**

As mentioned, a key assumption in this report is that it does not include 'civil works' costs. Its base case estimate was **$1.4 billion** for FTTN. 'Node-related' costs are difficult to extrapolate.

The estimate for FTTH network was between **$2.2 and $4 billion**. The lower estimate rests on an assumption of significant reductions in the cost of deploying fibre as work crews became more experienced.

- **Analysys Comparative Costing of NGN Fibre Access Networks (May 2006)**

For FTTN, Analysys' estimate was around **$2.5 billion (initial cost)**, inclusive of an amount of $500 million for assumed civil works costs (primarily for new ducts where it was not possible to blow the new fibre down existing ducts).

'Node-related' costs are **52 per cent** of overall FTTN cost composition. However, Analysys places line cards in a category of its own. If line cards are considered 'node-related', then the total node-related costs would constitute **76 per cent**.

For FTTP (GPON), the total figure for the initial capital and installation costs in the five major cities is just over **$14 billion (initial costs)**.

Wik has recently reported that a FTTH solution requires roughly 5 times higher investment than FTTC/VDSL. This finding seems (at least partially) confirmed when calculating the cost per premises of Analysys' findings: **$444 for FTTN and $2500 for FTTP.**

- **DCITA FTTN cost model from 2006**

Covering **3,117,966 premises**, the total cost was **$1,284 billion**. 'Node-related' costs comprise **45 per cent of this figure**.

- **DBCDE FTTP numbers**

Main capex expenses are the electronics in the exchange (OLT), cable ducts, and pit and pipe infrastructure. The stand out is the pit and pipe costs, which is a significant expense when considering that DBCDE's table includes only 20% covered be underground cable. Total capex cost is ~17.5b

Main opex expenses are cable ducts and cable aerial. Total opex cost is ~ 831m. Going by this relatively low number, I take it that this is only a year-1 opex cost.

Observations: At 90% covered, costs per premises seem similar to those reported in a presentation by Tellabs, a US vendor, on FTTP costs per household connected.

Other work:

Percy has done some calculations of Australian FTTN cost estimates derived from the Analysys report for the Broadband Stakeholders Group (BSG) in the UK.

- ~ 2.1 billion for band 2
- Extended to 98% the total cost is $4.8 billion. Percy has indicated that at this stage the costs are only really there to sanity check the analysis – rather than as findings.