FTTx network cost estimates

Main issues

The (estimated) ~70% node-related costs of an FTTN build; and the fact that every bit of power and electronics would need to change if FTTN was replaced with FTTP.

The possible costs of a FTTP/H build.

Presently, the key documents in monitoring FTTx costs are:

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

Assumes coverage of **4.5 million premises**. 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.

Analysis Comparative Costing of NGN Fibre Access Networks (May 2006)

Analysis model covers 5.6M premises

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, Analysis 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, the total figure for the initial capital and installation costs in the five major cities is just over \$14 billion (initial costs).

DCITA FTTN cost model from 2006

Covering 3,117,966 premises, the total cost was \$1,284 billion. 'Node-related' costs are 45 per cent.

Tellabs presentation—'Successful FTTP Deployment'—(April 2008)

Main findings:

- Labor is typically the most significant cost for FTTP deployments
- Second highest cost is usually the electronics

All of which are saved to the NBN share drive K:\National Broadband Network\fibre costings

 Verizon estimates \$110 savings per subscriber per year in operational expense under a FTTP scenario.

All of the above cost estimates suggest that (when civil works costs are assumed away) the installation and maintenance of the cabinets ('nodes') account for vast majority of the costs associated with a FTTN network, perhaps as much as 90%. This equipment is network specific, in that it cannot be re-used in a hypothetical future FTTH network. In this sense, a FTTN network is not so much a stepping stone towards a future FTTH network as a distinct network alternative.

Other documents:

- G9 (FANOC's) cost model from 2007 (quite high level)
- Comms Committee paper on Ovum's Ovum comparative costing of FTTH and FTTN (September 2007)