

## **Economuse, 7 December 2007**

### **A new costs model – anyone for TEA?**

**Telstra's new PSTN costing model will inform the debates on network costs with applications beyond interconnection pricing.**

Earlier this week Telstra announced its "Telstra Efficient Access" (TEA) model to replace the PIE II model [1]. Models are built to purpose but this one will do more than its predecessors.

#### **More data, less assumptions**

The original PSTN ingress/egress (PIE) model was mired in debates about the average length of trenches. PIE II solved that issue by including geo-coded location data for all customers and a minimum spanning tree algorithm to optimise cable run lengths and trench distances. My understanding is that TEA goes further by using actual cable and plant records to place pillars instead of an algorithm.

Earlier this year, the mobile cost model built for the ACCC came under severe criticism from Optus on a number of grounds including its reliance on mathematical algorithms. This model generates fewer base stations than are required in Australia because it is not calibrated to actual experience. The more that a model uses real world data, the less room there is for dispute.

#### **Less models, more answers?**

Telstra clearly expects to use the model to cost the USO [2]. This is a good idea. We had the ACA (now ACMA) develop a model for USO costing (subsequently ignored by the responsible Minister) independently of the ACCC (which has not built a PSTN interconnect model since 1999). The Commerce Commission in New Zealand uses one model for both purposes and so should we.

The main purpose is, however, access pricing. A problem is that no model can allocate costs between access and calls (or other services) without some arbitrary assumptions. This is a problem for the line sharing (LSS); whose pricing is being tested in court this week. But, it is not a problem for the unbundled local loop service (ULL).

It will be interesting to see,

- The de-averaged ULL prices that emerge from this model. Telstra's previous estimate for Band 4 was \$144 per month with the ACCC declining to take a view and OPEL's business plan assumption for this price unknown. [3]
- Whether the re-balancing of line rentals to cost is complete; or over-reached.

- How PSTN ingress/egress (interconnection) costs per minute of circuit-switched traffic will move as traffic migrates to mobiles and IP networks.

The new model's approach to costing the transmission network will also enable Telstra to engage in debate on the costs of regional backhaul. The dramatic difference in unit costs between "thick" and "thin" routes is illustrated on page 9 of the Telstra USO submission. As presented, it shows only relativities for each link in the tree and branch transmission network.

### **Fit for broadband?**

The new model will be able to demonstrate that ADSL2+ is more viable for country customers than is commonly supposed. This because the heavier copper used in country areas doubles the reach for ADSL2+ compared with metro areas [4]. But, de-averaged ULL prices and averaged retail broadband prices do not make an attractive business proposition for Optus in country areas.

Broadband services in country areas, whether delivered by ADSL2+ or WiMax, will also be competing with NextG and, where ADSL2+ is used, Telstra's own ADSL2+ services.

The new cost model is not, I think, intended to be a planning tool, but it could provide Telstra's costing of FTTN in metro areas with enhanced credibility.

While some issues can be resolved empirically, there are many other contentious issues which cannot be resolved by the new model. For example, the allowed return on capital (WACC) and de-averaging of wholesale prices are open questions. But, Telstra will get a good return on its investment in the new model.

*John de Ridder is a consulting telecommunications economist with expertise in competition, pricing and regulation. [www.deridder.com.au](http://www.deridder.com.au)*

[1] Tony Warren at CommsDay Conference on 3 December.

[2] "Boggabri – the case for fairness" at <http://www.nowweareretalking.com.au> has a link to Telstra's submission to the current USO review

[3] "Broadband Connect and Opel – poor choices?" in Exchange Vol 19 No. 24, 29 June 2007 and available on my web-site.

[4] Talk by Lawrence Paratz, Telstra, to AFR *Developing Australia's regions Conference*, 18 July 2006