

## Broadband UNE Decision: Where's The Evidence?

Michael Weingarten and Bart Stuck

**W**hen the DC Court of Appeals recently sustained part and overturned part of the FCC's August 2002 Triennial Review Order on local competition, much of the attention focused on who won and who lost, and what the odds were for a successful Supreme Court appeal. But in reading the appeals court ruling, something else struck us: The extent to which the FCC, in its 2002 order, and the appeals court in its ruling, made important decisions about unbundling issues with minimal economic support.

As an example, take a look at the FCC's decision to exempt incumbent local exchange carriers (ILECs) from fiber to the home (FTTH) unbundling obligations, which was based on the following findings:

- If unbundling is eliminated, ILECs will have sufficient incentive to invest in FTTH.
- If unbundling is retained, ILECs will not have incentive to invest.
- Competitive LECs (CLECs) have equal incentives to invest in FTTH as ILECs, and can justify FTTH investment without UNEs (unbundled network elements).

If each of these statements is true, the FCC Order (and Appeals Court sustaining decision) makes sense. So what is the

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supporting evidence used by the commission to reach its conclusion?

The answer is that in a 576-page FCC report, there are exactly *five paragraphs* discussing FTTH economics and ILEC/CLEC incentives. The first of these paragraphs (§178) relates to ILEC incentives to invest in next-generation networks and the need for Section 706 regulatory relief from UNE requirements (i.e., the Telecom Act's mandate to encourage broadband deployment). The FCC notes that each side has submitted supporting studies, and then it says the following:

*"The evidence submitted by both sides is inconclusive. The economic studies presented by each side suffer from flaws that undermine their probative value. Studies submitted by the incumbent LECs are generally simple correlation models or state-to-state comparisons lacking adequate efforts to control for or explain other relevant variables. Studies submitted by the competitive LECs include multiple regression models, but their conclusions relate more to particular market strategies of some competitive LECs rather than the effect on competitive services that would be provided under an alternative unbundling obligation. Neither the overall levels of competitive LEC activity nor the not insubstantial costs associated with unbundling were generally addressed by either the competitive LECs or the incumbent LECs."*

Arguably, this isn't nearly enough to support a 706 ruling:

- If none of the reports were deemed sufficiently reliable, how can the FCC make an important determination? By their own admission, they lack credible economic evidence of any kind.
- Even if the reports were reliable, the studies cited by the FCC are regression analyses of *historical* data. They therefore aren't relevant to a discussion of *future* networks.

### Higher Profitability?

Moving on, paragraphs 274, 275, 276 and 279 of the FCC Order discuss FTTH barriers to entry for ILECs and CLECs, finding that:

- Incremental revenues for FTTH-enabled services such as video and data

will offset high entry barriers related to high infrastructure cost, to make FTTH investment justifiable

- Entry barriers for CLECs and ILECs are equal.

Again, what's the evidence? The strongest cited support for incremental revenue leading to higher profitability is an FTTH Council report (FTTHC) submitted by Corning, stating (according to the FCC) that "through FTTH deployment, carriers could reasonably *earn a return* of \$33 per subscriber, compared to \$18 for ADSL deployment and \$21 for cable modem service" (emphasis added).

To us, "earning a return" means making a profit. So if true, this is an important piece of evidence, arguing that FTTH deployment in a free market environment is justifiable.

Unfortunately, the cited report doesn't actually talk about "earning a return" of \$33. It instead projects *revenues* per subscriber of \$33 compared to \$18 for ADSL service. Offhand, \$15 incremental revenues per month doesn't seem like a "substantial revenue opportunity" to us (as the FCC put it), since it will be offset by non-trivial incremental costs.

Corning also submitted a 2002 study commissioned from Cambridge Strategic Management Group (CSMG), which *does* look at ILEC costs as well as revenues. This study argues that with unbundling relief, ILECs would have a much greater incentive to invest in FTTH. The report's highlight is a slide stating that with free market economics, ILECs would make FTTH available to 31 percent of homes; with continued unbundling requirements, this would drop to 5 percent. The difference in cumulative 10-year capex between the two scenarios would be \$39 billion.

That's an important finding. Is it valid? Not too surprisingly, AT&T doesn't think so. In an FCC submission, AT&T took particular exception to CSMG's assumption that if FTTH unbundling is mandated, ILECs will receive \$20 per subscriber in monthly UNE fees, compared to \$111-181 per sub for retail services without unbundling (a difference easily large enough to sink the UNE case).

AT&T argues that actual UNE rates would be much higher than \$20, because

the applicable TELRIC (total element long run incremental costs) rates for efficient FTTH greenfield builds would be close to generally accepted accounting principles (GAAP) and allow a full recovery of capital investment and costs, plus a return on investment.

We have our own issues with the \$20 number:

- It's based on narrowband UNE averages (1 percent of \$2,000 capex per sub). Based on FCC source numbers, we think the correct ratio is 1.2 percent.

- The 1 or 1.2 percent figure may be appropriate for heavily depreciated plants, but not for greenfield plants. Since ILEC net depreciated plant is 40 percent of gross plant (source: FCC), this suggests a ratio more like 2.5 percent to 3 percent for a greenfield plant.

- CSMG's \$2,000 capital per sub comes from dividing the cumulative capex in year 10 by the subscribers in year 10. Given that most of the capex is incurred in year 0 but most of the subscribers are generated in years 6-10, we instead need to look at capex per sub on a net present value (NPV) basis in order to calculate a levelized UNE rate. If we use CSMG's 15 percent discount rate, we get NPV capex per sub of \$3,520.

- Without going through a detailed TELRIC analysis, if we apply a 2.5-3 percent monthly cost against a \$3,520 capital cost, we get an FTTH UNE rate of \$88-\$106 per month.

AT&T's TELRIC (and other) arguments are non-trivial, and devastate the CSMG conclusions—if correct. So what was the FCC's response? Instead of

pointing out why AT&T's logic is wrong (which would be standard procedure), it ignored the argument entirely—except to deny AT&T's request for a deferral pending a comprehensive review.

**Conclusion**

So in the end, the basis for the FCC's FTTH UNE findings is a misreading of one report and heavy reliance on a second report that suffers from substantial unresolved infirmities. That's not a good basis for making a decision of this importance □

<b>Companies Mentioned In This Article</b>
AT&T ( <a href="http://www.att.com">www.att.com</a> )
Corning ( <a href="http://www.corning.com">www.corning.com</a> )