Rivalrous Telecommunications Networks With and Without Mandatory Sharing

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“Stepping Stone” Theory

Two possible outcomes are likely to be good for consumers. One is that facilities-based competition...emerges from UNE-based entrants. The second is that wireless services make local telephone access competitive...

The third possible outcome is that...most local access competition will take the form [of] resale of the incumbent’s facilities. In this case, consumers are not likely to benefit...

-- Roger Noll & Greg Rosston (9.02)

Stepping Stone Theory I

Voice

- Unbundled Network Elements-Platform (UNE-P)
- Reassemble the network
- No need for capital investment
- Equivalent to Total Service Resale (TSR)
- Total Element Long Run Incremental Cost (TELRIC)
- Prices network access assuming perfect mobility

Stepping Stone Theory II

Internet

- Line Sharing-High Frequency Portion of Loop
  - Collateral to the voice link
    - => capital costs sunk
  - Requires capital investment in a data switch

CLEC Lines by Type
Comm Sector Investment

Cable v. ILEC Investment

Figure 8
Normalized RBOC and Cable Capital Investment
(1996 = 1)

UNE-P Line Growth v. Investment

Broadband Regulation:
An Experiment in Sharing Mandates

- Cable broadband a “closed platform”
- Vertical integration (cableco + ISP)
- No mandatory third party access
- DSL over telco lines an “open platform”
- ILEC must allow colocation for data switch
- ILEC must rent local loop at regulated price

Feb. 20, 2003: Partial DSL Deregulation by FCC

- Ends “line sharing”
- dCLECs pay full cost of local loop
- “High-Speed Service May Cost More”
  --NY Times headline (Feb. 21, 2003)
Changing “Horserace”

"[DSL vs. cable is] a horserace now, but cable has a 10-length lead," said Bruce Leichtman, the market research firm’s president and principal analyst, in an interview. “DSL is now running at par with cable. And, in the future, I [expect] the 50-50 split to continue.”

- TechWeb (Mar. 2, 2005)

Testable Prediction

“We believe UNE-P demise could accelerate broadband deployment – With the potential elimination of UNE-P resale, we believe the spread of broadband could accelerate, as companies would not be as concerned with the loss of telephone subscribers to such companies that do not have to invest in ANY infrastructure. Simply put, where UNE-P is successful, cable telephony has not been.”

Fulcrum Global Partners (March 10, 2004; emphasis orig.).
Cable Telephone Service (millions of Homes Passed)

<table>
<thead>
<tr>
<th>Year</th>
<th>Homes Passed</th>
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<tr>
<td>2003</td>
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Rival Network Platforms