



Sure, FTTP Is Sexy, But Is It Necessary?

By Jason Marcheck ■ *Confluence Consulting*

The benefits associated with deployment of FTTP (Fiber to the Premise) equipment is a subject on which debate continues to rage even as hordes of rural telephone companies, municipalities, foreign carriers, and even American RBOCs have shown clear interest. And rage it should. Even as FTTP is being rolled out across the globe at record pace, the fate of the technology in the US is still very much uncertain. This is due to the fact

tion of last mile fiber instantly became one of the hottest topics in telecom. Since then, BellSouth has all but said that it has no immediate plans to bring FTTP products into its labs for testing, let alone deploy equipment any time soon. SBC, for its part, has muddied the waters, by speaking out of both sides of its mouth in a manner that would make Tommy Lee Jones' character in the Batman movies envious. Consider the following

that SBC has shared its deployment plans with the vendor, but it cannot comment on those plans.

Only Verizon has indicated that it is truly serious about going ahead with FTTP full-speed ahead in 2004, saying that it has designs on passing between 50,000 and 500,000 homes by the end of the year. However, rumors that its chosen equipment supplier, AFC, does not even have products that are field ready has cast the shadow of doubt on those plans too.

What this vacillation has done is sparked a major debate concerning the utility to be gained from installing FTTP equipment. This varies depending on the entity that is undertaking the deployment. In this month's installment, I'll cover the key benefits and considerations for the group that has the potential to make or break FTTP in the U.S.: The RBOCs.

However, before we move on to a discussion about the RBOCs, I feel that it is necessary to make a statement about cable companies, and their role in long-term fiber rollout.

The Cable Company and HFC Networks

It is almost taken for granted that since HFC (Hybrid Fiber Coax) is already in place, and seemingly Jack Nicholson-like in its ongoing potency, that cable companies have somehow avoided the quandary that many local telephone companies now find themselves in. Well, here's the dirty little secret about cable: HFC is a form of FTTx architecture. Generally speaking, it falls into the FTT-Node category (as described by the catalog of FTTx

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that the jury is still out as to the true intentions of the RBOCs (Regional Bell Operating Companies). Despite the impressive number of projects emanating from rural America, without buy-in from Verizon, SBC, BellSouth and Qwest, the vast majority of Americans will not get to experience the bliss of 500+ MB delivered to their front doors.

The odds of this "buy-in" has run the gamut from very uncertain, to highly likely at various points during the past year, with the subject still being far from resolved as we enter 2004. When BellSouth, SBC, and Verizon issued a joint RFP at mid-year, calling for FTTP network element pricing proposals, the no-

actions/statements:

- 6.19.03: SBC announces participation in joint FTTP RFP
- 9.11.03: SBC chairman Ed Whitacre, Jr. makes a speech at a Morgan Stanley investors conference in which he indicates that the company has no plans to build out FTTP because of high deployment costs, and that the RFP is for evaluative purposes only.
- 12.01.03: SBC spokesman Michael Coe is quoted as saying, "We don't think that it's economically feasible to deploy FTTP on a large scale."
- 12.16.03: SBC announces that it has chosen Alcatel as its supplier of FTTP equipment. Alcatel says

acronyms). As the number of cable modem subscribers continues to grow, and as more VoD, and other high-bandwidth cached content is requested, cable companies will be faced with two choices: 1) re-engineer their nodes to support less households per node; 2) replace the last mile coax with fiber. The answer, as always, will come in the form of compromise, where some nodes are re-engineered (that is already happening), and some coax is replaced with fiber. So there you have it folks, the cable companies have been investing in FTTx for the past 15 years and will be spending money on FTTP just like the poor, bumbling RBOCs. If they are to be applauded, it should be for now cap-

it is clear that these companies have taken the lead in the race to become the true "triple-play service provider." For the RBOCs—and indeed all local telcos—to stave off this defection of voice customers, it is imperative that they offer a robust high-speed Internet offering, which tethers the customer to their phone line. By and large, last mile fiber has not only been seen as the way for telcos to ensure that their high-speed offering meets and exceeds the performance level enabled by an HFC architecture, but also as the pathway to offering video services, and thus completing their own triple-play bundle.

A situation, however, has surfaced in the fact that with compression

vices, that they are doomed to slowly, but surely lose their hold in the residential market, and eventually fall prey to the cable and wireless companies who are steadily picking off their voice customers. This line of thinking rations that if telcos are doomed anyway, why spend the money to wire households with last mile fiber.

While it certainly seems that the balance of competitive advantage has shifted away from the RBOCs favor, at least with respect to residential customers, it is folly to believe that they will simply roll over and play dead. RBOCs are typically slow to react to change, and what is happening now is no exception. In the late 1990's, cable beat them to the punch with broadband service offerings. But, when the RBOCs become motivated, they have shown an exceptional ability to rise to the occasion and compete vigorously. Some will argue that video is a whole different ballgame, and that telephone companies simply do not have the know-how to pull it off, even if they wanted to. This is not true. Granted, if they knew how, Verizon and SBC would be offering CATV services today. However, this is not to say that they will be unable

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italizing (at the expense of telcos) on the foresight that the nature of their core business forced them into long ago.

The RBOCs and FTTP

First and foremost, RBOCs are looking at FTTP to remain competitive with the cable companies in terms of high-speed Internet service. Although DSL has proven itself a viable technology, which is able to compete with the services offered by the cable companies, the number of cable modem subscribers continues to grow at a faster rate than the number of DSL subscribers. This indicates that, while the RBOCs are putting up a fight, cable is winning the overall war for this critical service, that in the future, will likely be the factor that determines whether a customer chooses the cable company or the phone company as the sole supplier for their home telecommunications services. As cable companies become more aggressive in competing for residential voice accounts, via VoIP offerings,

rates maturing to the point where DSL service can now adequately deliver multiple MB of bandwidth to most customers, many are wondering if telcos that have spent a war chest of money on DSL will be willing to cannibalize their investment before it has the chance to pay for

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itself. With all due respect to DSL, let's be honest, compress all you want, but no copper based solution will ever be as good as pure fiber (for a plethora of reasons).

That argument aside, to further stoke the flames of doubt in the attractiveness of FTTP, there is an opinion that is gathering steam that says since the RBOCs are nowhere near being ready to offer video ser-

to catch up. With the money there is to be made in VoD, and other content-rich applications appearing on the horizon, the RBOCs must realize that the future of telecommunications is not simply in broadband, but in the ability to make voice, video and data applications sync up and operate as a single, integrated service.

Right now, Verizon is facing the

stiffest competition from cable, and that is why it is going forward with FTTP in the most public manner. As such, Verizon is rightly pursuing the only true, long-term solution. SBC also knows this, but has more wiggle room as a result of its industry leading DSL penetration numbers, and will use that leverage to extract every concession from the FCC and from its FTTP equipment vendors. BellSouth is in the best position, from a competition stand point, and will play FTTP exactly the way it played DSL (which is to say that it will allow SBC to do most of the heavy lifting with Alcatel, and then move on to deploying equipment when the body of knowledge on FTTP rollout is larger and more refined.)

For the time being—meaning the next 6-12 months—all RBOCs will direct the majority of their efforts to shoring up their voice and data offerings to businesses via VoIP and IP-VPN services, while at the same time continuing to extend the reach of fiber in metro networks, and dabbling in last mile fiber projects where it is easiest to do so. Remember, RBOCs will spend money, but they try not to make a habit of throwing it down a hole. Therefore, expect that this debate will not have a definitive resolution any time soon.

In closing, I'll re-ask the question posed in the title. Is FTTP necessary? At this point-in-time, the answer is probably, "No." (Truth be told, I have always preferred FTTx, because I am certain that the deployment of last mile fiber will be an iterative process.) However, it is becoming increasingly apparent that twisted pairs of copper are not equipped to deliver the services that telcos will need to offer in the near future to compete in both the residential and business arenas. Borrowing a technique from writers of the SAT, here's a mental exercise. Of the following three statements, chose the one that does not belong:

- A. FTTP is scary expensive
- B. FTTP is technologically daunting
- C. RBOCs will not survive without FTTx.

Answer: D. None of the Above.

As such, the implications for building owners are tremendous. It is well known that greenfield areas offer the best economics for FTTP deployment. However, on par with new developments, is the MTU market. I don't have to be Nostradamus to predict that the large majority of RBOC FTTP rollouts over the next one-three years will be to greenfield areas, and MTUs/MDUs. This presents an outstanding opportunity for building owners to get on point, and lobby hard on behalf of your prop-

erties. (For more on this subject see: Beyond Broadband: Further Understanding FTTH, October 2003 Broadband Properties magazine) Last mile fiber is in need of a proving ground in urban America. That proving ground will be found. The question readers of this magazine need to be asking themselves is, "What role should my property play?" ■

About the Author

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