Perspectives from FSF Scholars
June 4, 2007
Vol. 2, No. 16

Special Access and Sound Regulatory Principles:
The Market-Oriented Case Against Going Backwards

by

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I. Introduction

The continuing calls to re-regulate “special access” services that the Federal Communications Commission already has determined should be subject to reduced regulation should be viewed with considerable skepticism. Special access services, known before the 1984 AT&T divestiture as “private lines,” are point-to-point dedicated facilities provided by the incumbent local exchange carriers (“ILECs”).\(^1\) They are used principally by large business users and by non-ILEC carriers, such as cellular carriers and competitive local exchange carriers, as components of their network facilities.

Unlike the incumbent telephone companies’ switched access services, which are used primarily to serve residential customers and small business users with ordinary dial-up telephone lines, special access services are high-capacity facilities.\(^2\) Not surprisingly, because the incumbents’ special access facilities carry

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\(^1\) As will be made clear below, alternative facilities comparable to the “special access” facilities provided by the ILECs are available from other providers. But “special access” is the regulatory appellation used in connection with the high-capacity dedicated facilities provided by the former Bell Operating Companies.

\(^2\) Typically special access facilities are offered at the T1/DS1, T3/DS3, and higher capacity levels, such as OC-3. A T1 is equivalent to 24 voice grade channels, and a T3 is equivalent to 28 T1.
higher traffic volumes on a point-to-point basis, special access confronted competition from other providers earlier than did switched access services. (Note the operative word here is “earlier,” as the incumbents’ traditional “switched access” services now face intense competitive pressures from other providers as well). As a matter of conventional network economics, the high concentration of traffic volumes on high-capacity dedicated lines makes special access vulnerable to new competitors.

The purpose of this paper is not to consider the status of competition for particular special access services in particular geographic markets, or, more generally, even to draw definitive conclusions concerning the competitiveness of special access as a particular market segment. While some illustrative competitive developments will be addressed in a general way, the paper’s principal purpose is to put into a broader public policy context the calls for re-regulation of special access services that already are subject to reduced regulation. This broader context is one that should take into account certain fundamental principles concerning the circumstances under which it is appropriate to employ regulatory price controls versus reliance on marketplace forces. Therefore, the paper should be helpful in considering regulatory issues beyond the currently topical case of special access.

II. The Special Access Regulatory Trajectory

Before discussing the guiding regulatory principles, it is useful to briefly recount the regulatory trajectory of special access services since the AT&T divestiture in 1984. Post-divestiture, the FCC basically established two access categories—switched access and special access—and services in both categories were subject to traditional rate of return regulation. Under rate of return regulation rates are set to provide the utility with the opportunity to recover all of its prudently-incurred costs, including a fair return on its capital.

In 1990, the FCC substituted “price cap” regulation for rate of return regulation for the Bell Companies. Under price cap regulation, services are grouped in various baskets, and the prices for services in the baskets, on an...
aggregate basis, are capped. The theory of price cap regulation is simple: Consumers are protected by the capped rates, and carriers are given an incentive to operate as efficiently as possible because they are allowed to retain a portion of any cost savings realized from efficiency gains. Thus, as the Commission has recounted, the price cap regime is “an incentive-based system of regulation that encourages companies to: (1) improve their efficiency by developing profit-making incentives to reduce costs; (2) invest efficiently in new plant and facilities; and (3) develop and deploy innovative service offerings.”

The Commission also has explained that price cap regulation is designed “to act as a transitional regulatory regime until actual competition makes price cap regulation unnecessary.”

Three years after Congress enacted the Telecommunications Act of 1996 the FCC took the next significant step in changing the regulation of special access. In 1999, the agency established what it called a “market-based approach” that grants incumbent LECs pricing flexibility for special access commensurate with the development of competitive alternatives. For purposes of determining whether pricing flexibility is warranted, the Commission assesses the development of competitive alternatives in standard metropolitan statistical areas (MSAs). To simply the competition assessment, the Commission established two “competitive triggers” tied to the extent to which competitors have collocated equipment in the incumbents’ wire centers. The Commission reasoned that collocation of equipment is a reliable indication that competitors have made irreversible sunk investments in facilities, and that this investment will act to constrain whatever market power the incumbents possess.

Upon meeting the lower competitive collocation trigger, the incumbent LEC is entitled to what the FCC calls Phase I pricing relief. This allows the incumbent to offer contracts to customers at discounts off the capped prices. The contract terms must be embodied in tariffs filed with the Commission and any other customer may take service on the same contract terms and conditions. If the higher collocation triggers are met, indicating even greater levels of competitive activity, Phase II pricing relief is available. Phase II relief allows the incumbents to offer special access services outside of price cap regulation, although tariffs must still be filed with the Commission containing the “price-flex” list prices. Contracts can still be offered that make available additional discounts that respond to competitive pressures.

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6 In reality, the mechanics of price cap regulation are more complicated, involving, for example, adjustments for exogenous costs beyond the carrier’s control and productivity adjustments. But for present purposes, these are not relevant.


8 Id. Emphasis supplied.


10 Pricing Flexibility Order, 14 FCC Rcd 14221.

11 Id., at 14263–265.

12 All of this can be found in greater detail in the Pricing Flexibility Order.
The key FCC determinations regarding the special access pricing flexibility regime were affirmed on review by the D.C. Circuit Court of Appeals in *WorldCom, Inc. v FCC.* The court held that the FCC made reasonable policy judgments in determining that the extent of collocation of competitive facilities is an acceptable proxy for market power and that MSAs are appropriate geographic areas for examining the existence of competitive triggers.

### III. A Proper Regulatory Framework for Special Access

#### A. The Telecommunication Act of 1996’s Deregulatory Directive

We have seen that the high bandwidth capacities of special access services facilitate concentration of large amounts of traffic more readily than low bandwidth services, and that this tends to subject special access to competitive pressure from alternative suppliers before low capacity services experience such pressure. Thus, it is unsurprising that special access services were first to be granted pricing flexibility by the Commission. In considering the proper regulatory framework for special access, it is useful to recall that in the first sentence of the 1999 *Pricing Flexibility Order* the FCC declared its actions would “advance the pro-competitive, de-regulatory national policies” embodied in the Telecommunications Act of 1996. The Commission stated that the pricing flexibility revisions were intended “to reform regulation of interstate access charges in order to accelerate the development of competition in all telecommunications markets and to ensure that our own regulations do not unduly interfere with the operation of these markets as competition develops.”

Now, over a decade after passage of the 1996 Telecommunications Act, it is sometimes easy to forget that its framers expressed so explicitly their intent that communications policy should be shifted in a deregulatory direction. In addition to the Conference Report’s “pro-competitive, de-regulatory” language which the Commission invoked in the *Pricing Flexibility Order,* the statute’s preamble directs the agency to “promote competition and reduce regulation.” While there are decisions that the agency has rendered since 1996 that might cause one to question the agency’s deregulatory commitment, to its credit, the trajectory of the agency’s special access decisions, commendably, are consistent with the 1996 Act’s directive.

#### B. Regulatory Principles for a Dynamic Market Environment

To implement faithfully the 1996 Act’s deregulatory directive, policymakers should have in mind, and abide by, certain regulatory principles.

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13 238 F. 3d 449 (D.C.Cir. 2001).
14 14 FCC Rcd 14221.
15 Id.
These principles are relevant to consideration of the special access or any another communications industry market segment. Understood and applied properly, they should guide the FCC in implementing sound regulatory policies consistent with today’s dynamic technological and marketplace changes. They are relevant to decisions concerning whether to deregulate or re-regulate.

Two basic premises are foremost. First, market forces generally are superior to government economic regulation as a means of constraining market power because there are real and non-trivial costs associated with regulation. These costs include the tangible compliance and related direct costs (regulatory fees, professional fees, etc.) imposed on the carriers by the regulatory regime and passed on to consumers. As importantly, they include the less tangible but no less real indirect costs imposed on the public due to the diminishment of investment and innovation incentives attributable to the regulations.

The second, interrelated basic premise, as Professor Dennis Weisman puts it, is that regulation should be presumed unnecessary absent market conditions “that credibly demonstrate that there exists a threat of abuse of market power that poses a substantial and non-transitory risk to consumer welfare and would otherwise be likely to unduly impair the integrity of the competitive process.”

Beyond these two basic premises, subsidiary regulatory principles articulated by Professor Weisman are relevant to considering special access as well as other telecommunications market segments:

- Efficient deregulation policies should be both technology and provider-neutral.

- Deregulation policies should strike the proper balance between allocative, technical, and dynamic efficiency. In effect, this means, for example, that there are often trade-offs between short-term gains for competitors, say, in the form of lower prices for regulated inputs and longer-term societal gains that result from the increased innovation and investment attributable to the opportunity for the incumbent to earn higher returns.

- Policymakers should not rely exclusively, or even predominantly, upon market share to draw inferences about market power in telecommunications markets. As Judge Richard Posner, a leading law

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Professor Weisman’s paper is extremely valuable for those who wish to understand the proper role of regulation in today’s fast-changing communications environment. While I will refer to parts of it, I commend the entire paper to the reader.
and economics scholar has explained: “Competition is not a matter of many sellers or low prices or frequent changes in prices or market shares. It is properly regarded as a state in which resources are deployed with maximum efficiency, and it is not so much the existence of actual rivalry, let alone any specific market structure or behavior, as the potential for rivalry, that assures competition.”

- High price-cost margins, reflective of the scale and scope economies found in the telecommunications industry, often serve to constrain the incumbent’s market power after deregulation. The notion here is that when a firm operates with high price-cost margins, only a relatively small number of marginal customers that are willing to discontinue service or switch to an alternative provider are able to defeat a price increase. These marginal customers discipline the pricing behavior of the incumbent. As Professor Weisman explains, this phenomenon is what we mean when we say, “competition occurs at the margin.”

- In an ideal world, regulators should deregulate at an “appropriate” time based on an objective assessment of market conditions. That is to say that, ideally, the decision to deregulate should occur no earlier and no later than when the incumbent’s market power is reduced to a level such that the incumbent can no longer extract “monopoly” rents. In the real world, however, it is almost impossible for regulators to act with such exquisite timing. Given a choice between “too early” or “too late,” it is generally preferable for regulators to err on the side of too early.

Professor Weisman identifies several reasons, derived from the basic regulatory principles above, why “too early” deregulation is preferable to “too late.” Among those most important for present purposes are:

- The overhang of regulation is likely to bias efficient technology choices and lead to asymmetric regulation and the attendant market distortions.

- Any “rents from incumbency” that the incumbent might enjoy are considerably diminished due to the product market being redefined as a result of shifting technological and market forces.

- The gains from dynamic efficiency (new technologies and services) are likely to dominate any transitory allocative efficiency losses (prices above incremental cost).

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20 *Principles of Regulation*, at 30.
• The incumbents operate with high price-cost margins due to scale and scope economies; provide multiple complementary services over a common technology platform; and incur large losses to joint and common costs from relatively small reductions in demand.\textsuperscript{21}

In evaluating any regulatory regime involving providers in “network” industries, it is important to have the above regulatory principles in mind in order to achieve sound policy results. Special access is no exception. In this instance, the principles point in the direction of allowing the FCC’s pricing flexibility decisions to remain in place, rather than reversing the deregulatory trajectory.

\textbf{IV. Special Access Should Not Be Re-Regulated At This Time}

Application of the above principles does not mean that occasions may not arise, albeit rare ones, when it might be appropriate to re-regulate telecommunications services which have been deregulated or for which regulation has been reduced. It is possible to imagine instances of demonstrable and non-transitory market failure where such re-regulation might be appropriate. But having in mind the basic premises and regulatory principles outlined above, along with current market developments, special access does not present such a case.

The calls for special access re-regulation seem to be driven as much as anything else by the claim that the competitive triggers used by the FCC are inadequate measures of competition. There is also the claim that special access rates have not fallen, or fallen enough, in places where Phase II pricing flexibility has been implemented.\textsuperscript{22} As to the first, there are inevitably disagreements concerning appropriate measurements of market power and competitive status.

More fundamentally, while market share is relevant, in a fast-changing industry such as telecommunications, market share is not as relevant as it is in more static and less technologically-dynamic markets, say, for automobile tires, sofas, steel, or paper clips. As the D.C. Circuit observed in affirming the \textit{Pricing Flexibility Order}, the FCC has long taken the position that:

\begin{quote}
[M]arket shares, by themselves, are not the sole determining factor of whether a firm possesses market power. Other factors, such as demand and supply elasticities, conditions of entry and other market conditions must be examined to define a relevant market,
\end{quote}

\textsuperscript{21} See \textit{Principles of Regulation}, at 36-37.
\textsuperscript{22} See GAO’s Report, Deregulation of Dedicated Access Services, GAO-07-80, November 29, 2006, at 6, where GAO identified these two claims.
and to determine whether a particular firm can exercise market power in the relevant market.\textsuperscript{23}

The rapid pace of technological change in telecommunications markets has much to do with influencing the “conditions of entry” factor mentioned above. Indeed, technological dynamism in the communications field makes entry conditions an important consideration.

One of the leading texts, \textit{Economics of Regulation and Antitrust}, explains the significance of potential entry this way:

Entry conditions are important for two reasons. First, the number of active firms is partially determined by the cost of entry as well as other factors like economies of scale. Thus entry conditions play an important role in determining concentration. Second, entry conditions determine the extent of potential competition. \textit{It is generally believed that a credible threat of entry will induce active firms to compete vigorously. If they do not, so that the industry has a high price-cost margin, entry will take place and drive price down.}\textsuperscript{24}

On this score, in the \textit{Pricing Flexibility Order}, the Commission addressed this very point: “If an incumbent LEC charges an unreasonably high rate for access to an area that lacks a competitive alternative, that rate will induce competitive entry, and that entry will in turn drive rates down.\textsuperscript{25}

Whether or not the rates of the ILECs which have been granted special access pricing flexibility in some areas have been or remain “unreasonably high” in the sense that the Communications Act seeks to prohibit the charging of “unreasonable” rates\textsuperscript{26} is a matter that would be subject to vigorous (and surely

\textsuperscript{23} Worldcom, Inc. v. FCC, 238 F. 3d 449, 458 (D.C. Cir. 2001), quoting, Motion of AT&T Corp. to be Declared Non-Dominant for International Service, 11 FCC Rcd. 17, 963, 17976 (1996). The Department of Justice/Federal Trade Commission Horizontal Merger Guidelines make the point this way: “Market concentration and market share data of necessity are based on historical evidence. However, recent or ongoing changes in the market may indicate that the current market share of a particular firm either understates or overstates the firm’s future competitive significance. For example, if a new technology that is important to long-term competitive viability is available to other firms in the market, but is not available to a particular firm, the Agency may conclude that the historical market share of that firm overstates its future competitive significance. The Agency will consider reasonably predictable effects of recent or ongoing changes in market conditions in interpreting market concentration and market share data.” Section 1.521.


\textsuperscript{25} \textit{Pricing Flexibility Order}, at 14297-98.

\textsuperscript{26} 47 U.S.C. § 201(b).
well- neigh interminable) dispute in a contested rate proceeding. There should be considerably less dispute concerning the trend towards development of a more competitive special access market.

There is evidence of new competitive entry in the special access market, and this entry should help ensure that rates for business users and carriers which acquire high-capacity dedicated services are market-based. For example, FiberTower and FiberTech both claim to operate networks that offer high-capacity access services in competition with the incumbents in many large and mid-size metropolitan areas, and they especially tout the backhaul services they offer that are tailored to wireless carriers.

On its website, FiberTower states: “Wireless carriers, enterprises and government agencies...rely on FiberTower’s backhaul and premise access solutions to deliver mission and business critical performance.” FiberTower claims that its “nationwide spectrum footprint and optimal mix of wireless and fiber technologies enable wireless carriers to raise the overall quality of their networks and deliver new service standards to their customers—all without having to apply additional capital.” FiberTower says it “is entirely focused on designing, deploying and operating facilities-based backhaul networks to deliver superior network quality for major wireless carriers.” It appears that FiberTower now has its own facilities-based networks operating in 14 metropolitan areas. The company claims on its website that during its 2007 first quarter it increased its billing sites, billing customer locations, and sites by 19%, 22%, and 21% over the previous quarter, while adding 1450 T1s, the second highest quarterly number of additions ever.

FiberTech is another relatively new competitor seeking to compete for special access services. For now, FiberTech targets its efforts to mid-size cities where it claims there is a significant shortfall of last-mile fiber connectivity. The company claims its networks are “strategically connecting local Telco central offices, carrier hotels, data centers, office parks, and other high traffic locations.” It asserts it is “unrivaled in its ability to extend its fiber networks cost-effectively into individual business locations to provide high performance, customized network solutions.” FiberTech says it “has built extensive fiber optic networks through mid-size U.S. markets across the Northeast.” FiberTech appears to have operational networks in 20 mid-size cities, and it says it has plans to expand into

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27 The FCC anticipated that, by virtue of having operated under price cap regulation for many years, ILEC rates for some services in some locales would increase rather than decrease. See Special Access Rates for Price Cap Local Exchange Carriers, 20 FCC Rcd 1994, 1999 n. 28 (2005) (“Within these baskets or categories, incumbent LECs are given some discretion to determine the portion of revenue that may be recovered from specific services...[T]his flexibility allows incumbent LECs to alter the rate level associated with a given service.”


46 additional specific markets, many of which are in the Southeast and Midwest.\textsuperscript{30}

Other new competitors are seeking to take special access traffic from the ILECs. Nextlink, a subsidiary of XO Holdings, advertises on its website that it “provides broadband wireless services to the wireless and wireline communications service provider, business and government markets.”\textsuperscript{31} Operating in spectrum in the 28-31 GHz band, Nextlink says its spectrum footprint covers 95\% of the population in 75 of the country’s top markets. Nextlink touts its bypass of the LECs’ wireline facilities, allowing it to provide “carrier-class levels of service and availability.”

Entry by competitors such as FiberTech, FiberTower, and Nextlink does not mean that special access markets are ubiquitously competitive. They are not. Alternatives to the incumbents are generally fewer in less densely populated areas. The FCC’s approach to granting special access pricing flexibility is calibrated to indications of competition developing in individual metropolitan areas, rather than assuming that alternatives develop in rural areas within the MSA as quickly as more densely populated areas. But, as new entrants have sunk investment in building out facilities, they have strong economic incentives to replicate and expand their networks to “connect up” additional customers, especially if the ILECs’ services have high price-cost margins.\textsuperscript{32}

While competition does not develop ubiquitously or at precisely the same rate across geographic or product markets, a recent article in \textit{Business Week} indicates that the special access marketplace is poised to undergo additional change that will further reduce the market power of the incumbents.\textsuperscript{33} The article says that, rather than relying on the incumbent telephone companies, Sprint is planning to use WiMAX technology to carry its “backhaul” wireless traffic from its cell towers to its switching centers. According to an analyst cited in the article, “[b]y using WiMAX over that crucial leg, Sprint Nextel could cut network operating costs by two-thirds.” The article says “[a] slew of companies like Nextlink, a subsidiary of XO Holdings, have emerged in the past year to offer yet another type of wireless backhaul.” The \textit{Business Week} article goes on to say:

\textsuperscript{30} See \url{http://www.fibertech.com/net_future.cfm}.
\textsuperscript{31} All of the quotes and statistics are from Nextlink’s website at: \url{http://www.nextlink.com/about_nextlink.htm}. Last visited on May 21, 2007.
\textsuperscript{32} This is why, apart from the administrative infeasibility and disproportionate regulatory costs imposed, the approach of examining special access on a building-by-building or location-specific approach makes no sense. In order to serve a new customer, often it is not necessary to build-out a completely new link to the customer from the serving wire center. Rather, it is more economic to extend an existing link to the new customer’s location.
\textsuperscript{33} Olga Kharif, “Sprint’s Secret to Cost Cuutting: WiMAX,” \textit{Business Week}, December 27, 2006. All of the quotations and statistics may be found at: \url{http://www.businessweek.com/technology/content/dec2006/tc20061227_904530.htm?chan=se arch}
For these small third-party vendors, the wireless backhaul market could be the ticket to big growth. On Dec. 20, investment bank Jeffries & Co. initiated coverage of Nextlink’s rival, FiberTower (FTWR), with a buy rating. In the latest quarter, FiberTower reported revenue growth of 135% over a year earlier. FiberTower’s customers include Cingular, Deutsche Telekom’s (DT) T-Mobile, and Verizon Wireless.34

The article points out that “wireless backhaul is exploding as cellular service providers start running more bandwidth-thirsty data, such as video and music, over networks.” Once wireless service providers deploy their own WiMAX infrastructure, according to the article, they will be in a position not only to reduce substantially their own network costs, but “deal telcos and other rivals yet another blow by competing with satellite TV, cable TV, and telco TV providers to deliver video channels to neighborhoods and to individual homes.”

A March 2007 article in Telecommunications Magazine quotes Sprint Nextel CEO Gary Foresee declaring, “[w]e are rapidly deploying the fastest and broadest broadband network (and) we’re making considerable progress on our WiMAX plan.”35 To the same effect, an April 2007 article in the same publication declared: “If 2007 is, as some have suggested, the year WiMAX enters the telecom fray for real, then Sprint Nextel is carrying the banner onto the battlefield. With plenty of 2.5 GHz spectrum and the initiative to use it, the carrier could change the telecom landscape.”36

V. Conclusion

The developments recited above relating to new entrants are not intended to be a complete catalogue of recent events that bear on the competitiveness of the special access market. Indeed, in today’s dynamic marketplace, it is increasingly difficult even to aspire to completeness. It is this very dynamism that would make it exceedingly difficult for regulators to determine with any degree of confidence the “reasonable” level of prices.

When the Commission issued its most recent rulemaking review of special access in 2005, it explained that “because regulation is not an exact science,” it is not able to “time the grant of pricing flexibility relief to coincide precisely with the introduction of interstate special access alternatives for every end user.”37 In

34 All quotes may be found at: http://www.businessweek.com/technology/content/dec2006/tc20061227_904530.htm?chan=search
that event, “the costs of delaying regulatory relief outweigh[...] the risks of granting relief too soon.” 38

This is the “too early/too late” question referred to above which is addressed by Professor Weisman. 39 The same considerations relevant to a decision to deregulate are relevant to a decision concerning re-regulation. In this instance, re-regulation likely would bias technology choices going forward. New entrants would be less likely to invest in more efficient facilities that use new fiber, satellite, cable, or spectrum-based technologies, if they believe that the ILECs’ rates may be capped or rolled back. In other words, re-regulation likely would have the perverse effect of discouraging new entry that would provide the additional competition the re-regulation proponents claim to want. Similarly, the ILECs themselves will be discouraged from replacing their existing facilities with new, more efficient technologies if their opportunity to earn greater returns is capped by regulation.

The second consideration, diminishment of any “rents from incumbency” as a result of the product market being redefined as a result of shifting technological and market forces, also points away from re-regulation. As discussed above, “special access” is a regulatory category created at the time of the AT&T divestiture. Increasingly, it is a construct that has less relevance in today’s marketplace in which substitutable and converging services using new technologies are becoming available. With respect to the third consideration, while it is possible (but not easily determinable) that, in the short-term, prices for special access are higher than incremental costs in particular markets, 40 if so, it is likely that the ultimate gains to consumers beyond this transitory period from pricing flexibility are likely to outweigh any short-term allocative efficiency losses.

Finally, as is sometimes the case in other contexts, there have not been suggestions with regard to special access that the incumbents are using whatever remaining market power they may possess to employ predation strategies to deter new entry. The claim is the opposite—that the rates are “too high.” As pointed out above, the incumbents generally tend to operate with high price-cost margins due to scale and scope economies and the provision of multiple complementary services over their networks. But this makes them vulnerable to suffering meaningful revenue losses from even relatively small reductions in demand attributable to price increases. This phenomenon should deter price increases.

In sum, as the transition to an increasingly competitive telecommunications marketplace continues, the Commission, of course, should

38 Id.
39 See pages 6-7 supra.
40 Note that this may be true regardless whether the ILECs have been granted pricing flexibility in these markets because when the price cap regime was instituted the Commission did not conduct rate proceedings to determine the “reasonableness” of rates.
continue to monitor developments and gather relevant information. This is consistent with its ongoing regulatory oversight responsibilities. But having acted rather cautiously thus far in implementing the deregulatory intent of the Telecommunications Act, it would be a mistake for the FCC at this time to take a backwards step by re-regulating special access markets it already has found competitive.

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