ings to review by competitors, and providing competitors with the opportunity to bring similar services to market before LECs have obtained regulatory approval.

It is useful to compare the LEC price cap plan to the price cap plan applicable to the American Telephone and Telegraph Company (AT&T).[16] First, AT&T's price cap plan is far less tied to cost-based rate of return regulation than is the LECs' plan.[17] For example, AT&T's plan has never had earnings sharing which, as noted above, has substantially negated the LECs' efficiency incentives. Second, under the LEC plan, the most restrictive pricing regulation

---

[16] Although the Commission recognizes that the "LEC plan does . . . differ from the AT&T plan in substantial ways" (NPRM, ¶ 16), the Commission fails to appreciate how those differences affect the incentives provided to the LECs and AT&T under their respective plans.

[17] See Policy and Rules Concerning Rates for Dominant Carriers, CC Docket No. 87-313, Report and Order and Second Further Notice of Proposed Rulemaking, 4 FCC Rcd 2873 (1989) (AT&T Price Cap Order), modified on recon., 6 FCC Rcd 665 (1991). USTA recognizes that AT&T has already undergone its first price cap review, and that some of the differences between AT&T's and the LECs' plans are the result of that review and the conclusions reached by the Commission based on factors relevant to AT&T's market. See Price Cap Performance Review for AT&T, CC Docket No. 92-134, 8 FCC Rcd 6968 (1993). As discussed below, however, from the start the Commission has approached AT&T's price cap regulation differently than it has the LECs' in several significant respects. Moreover, although the nature of the competition now faced by LECs in their access markets is different than the competition faced by AT&T in its interexchange market, the LECs' competition is both real and substantial.

is applied to the LECs' most competitive services.[18] Even at the inception of its plan, AT&T's most competitive services were afforded significantly greater pricing flexibility. In short, the LEC price cap plan has been closely tied to cost-based regulation from the start and, with limited exception,[19] has become increasingly restrictive as competition has entered LEC markets. In contrast, AT&T's plan has always resembled pure incentive regulation, and has moved closer to that ideal as the Commission has found AT&T's markets to be more competitive.

Finally, the Commission's rules have permitted AT&T to introduce new services far more easily than the LECs. Thus, AT&T has been able to justify prices for new services under price caps using a net revenue test, while the Commission has eliminated the use of a net revenue test under the LEC plan.[20] Instead, LEC new service offerings have been sub-

---

[18] DS1 and DS3 service prices are each subject to separate pricing bands, pricing zones, a high capacity services pricing band, and a trunking basket price cap index. Moreover, LECs cannot offer volume discounts for switched trunking services without showing a certain number of cross-connects in the applicable central office.

[19] See Expanded Interconnection with Local Telephone Company Facilities, Report and Order, CC Docket No. 91-141, 7 FCC Rcd. 7369, 7454-55 (1992) (Density zone pricing applied to special access); Transport Phase I, Second Report and Order and Third Notice of Proposed Rulemaking, FCC 93-379, released September 2, 1993 (Density zone pricing applied to switched access).

[20] See AT&T Price Cap Order; supra at 3124-27; Part 69/ONA Recon Order, supra. AT&T does not have to file any (continued...)

ject, at various times, to complex cost showings, overhead allocation tests, risk premiums, technology-based cost models, ARMIS data comparisons, and pricing objectives designed to yield specific pricing results in a number of important LEC new service markets. Moreover, the Commission has continued to require waivers for, and sometimes has denied approval of, new services that do not fit into the existing access charge rate structure.[21] No such restrictions and waiver process have ever applied to AT&T's services.

In sum, the LEC price cap plan - in contrast to the AT&T plan - has evolved from a simple concept to a complex regulatory mechanism that frustrates full attainment of many important objectives, particularly efficient network use, innovation, and the development of full and fair competition in access markets. Nevertheless, despite its shortcomings, the LEC price cap plan has produced more favorable results than would have been realized under full rate of return regulation over the past 3 1/2 years. The issue facing the Commission, however, is how to provide the necessary incentives in the future in order to achieve the Commission's goals in a rapidly changing telecommunications industry.

---

[20](...continued)
cost support for services that have been removed from price caps.

[21] See, e.g., Ameritech Operating Companies, 6 FCC Rcd 746 (1991).

B. LEC Performance Under Price Caps.

1. Universal Service - Baseline Issue 1b.

In recent testimony before the Senate Committee on Commerce, Science and Transportation, Chairman Hundt reaffirmed "our national commitment to universal service in order to ensure that all Americans can participate in the information economy."[22] This important goal has been furthered under price caps.[23] In particular, the Commission's most recent monitoring data shows that telephone penetration levels for several key demographic groups have increased faster than for the general population while price caps have been in effect. Thus, between November 1990, shortly before LEC price cap regulation took effect, and November 1993, overall telephone penetration in the US increased 0.9%, from 93.3% of total households to 94.2%.[24] In comparison, telephone penetration for African-American households increased

---

[22] Statement of Reed E. Hundt, Chairman, Federal Communications Commission, before the Committee on Commerce, Science and Transportation, United States Senate, on S. 1822, the "Communications Act of 1994" and "Telecommunications Equipment Research and Manufacturing Competition Act of 1994," February 23, 1994, p. 2 (Hundt Statement).

[23] Because price cap LECs account for approximately 93% of all access lines, any negative impact of price caps on universal service goals would have been reflected in the universal service data which includes results for both price cap and non-price cap LECs.

[24] "Telephone Subscribership in the United States," Industry Analysis Division, Common Carrier Bureau, Federal Communications Commission (March 1994), p. 6.

1.7%, from a 1990 annual average of 83.5% to 85.2% in 1993.[25] For Hispanic households, the penetration level increased 4.0% over the same period, from 82.7% to 86.7%.[26]

2. Infrastructure Development - Baseline Issue 1a.

LECs have continued, and in some instances have accelerated, the development of network infrastructure while under price caps. As the Commission observes, under rate of return regulation, the price cap LECs were replacing electromechanical switches with digital switches at the rate of about 5% of total lines per year.[27] Under price caps, the conversion rate has been about 12% of total lines per year.[28] The deployment of ISDN increased from 6% of total price cap lines in 1989, to 26% in 1992, and SS7 lines increased from 17% of total lines in 1989 to 65% in 1992.[29] During this same period, fiber optic transmission facilities

---

[25] Id. at 16-17. These figures are for telephones in the living unit. 88.3% of African-American households in 1993 had a telephone available to them, in or out of the living unit.

[26] Id.

[27] NPRM, ¶ 29.

[28] Id. During the first two years of price caps, LECs installed 3,130 digital switches, increasing to 76% the percent of switches that are digital stored program controlled. These switches served 59% of the access lines of price cap LECs at year-end 1992, up from 49% at the end of 1990.

[29] Id.

have grown from less than 4.5 million equipped channels to over 10.4 million.[30]

3. LEC Pricing.

The Commission notes that LEC interstate access rates are currently $1.5 billion lower than at the start of price caps.[31] The Commission states that of this amount, $373 million, or 25%, is the result of LEC pricing below the cap.[32]

The Commission's observations are based on 3rd Quarter 1993 data, and do not take into account the impact of compounding under the price cap formula. End-of-year 1993 data, with the compounding effect included, shows consumers actually gained over $2.9 billion through the price cap formula,[33] plus an additional $564 million as a result of LEC pricing below the cap.

---

[30] Id. Price cap LECs added approximately 87,000 kilometers of fiber during 1991-92. By year-end 1992, approximately 95% of the LECs' carrier circuit links were digital.

[31] NPRM, ¶ 25.

[32] Id. Actually, the $373 million amount is consumer savings in addition to the $1.5 billion figure.

[33] Transport and High Capacity Services have realized the greatest overall price decreases. For example, the average Service Band Index (SBI) for Transport (now included in the Trunking Basket) decreased more than 22% from January 1, 1991, to October 1, 1993, while the average Price Cap Index (PCI) for Traffic Sensitive decreased by less than 13% during that same period. The average SBIs for both DS1 and DS3 services decreased by more than 15% during that period. In contrast, the average PCI for Special Access/Trunking decreased by approximately 9%.

4. LEC Profitability - Baseline Issue 3b.

The Commission states that the overall interstate rate of return for price cap LECs was 12.25% in 1992.[34] The LECs' overall interstate return last year was 12.93%. These earnings would have been in excess of 300 basis points lower - in the 9 to 10 percent range - if more realistic depreciation rates, such as those used by AT&T, had been in effect during the monitoring period.

LEC earnings under price caps compare favorably to AT&T's total interstate earnings under its price cap plan, which reflect far more favorable depreciation rates. As set forth in its annual Interstate Rate of Return Report, AT&T earned 13.73% in 1990, 13.41% in 1991, 12.77% in 1992, and 13.49% in 1993. The Commission has found AT&T's earnings under price caps to be reasonable.[35] USTA believes that particularly when viewed in light of the consumer benefits achieved during the initial price cap period, the LECs' earnings levels have also been reasonable.

---

[34] NPRM, ¶ 26. The overall interstate rate of return for price cap LECs in 1992 was just 100 basis points above the 11.25% rate of return initially targeted in January 1991, and only 75 basis points above what would have been the maximum allowable rate of return for all access categories of a LEC under the Commission's rate of return rules. See 47 CFR § 65.700(b).

[35] See Price Cap Performance Review for AT&T, 8 FCC Rcd 6968, 6969 (1993).

Further, given that the prospect for enhanced LEC profitability is the engine which powers price cap incentives, USTA submits that the LECs' earnings do not provide a "good case" for an increase in the productivity factor, or a one-time decrease in rates.[36] Indeed, if such adjustments were made each time the LECs demonstrated short-term productivity gains, the price cap plan would be vitiated, and there would be insufficient incentives to achieve important Commission goals, such as development of a National Information Infrastructure that will require substantial capital investment over an extended period.[37]

5. Service Quality.

The Commission states that based on service quality monitoring data, "service quality under price caps has been similar to levels under rate of return regulation."[38] The Commission observes, however, that a rise in the number of residential service complaints between the first and fourth quarters of 1991, "show the possibility of some problem."[39]

---

[36] NPRM, ¶ 45.

[37] See NERA at 27-28.

[38] NPRM, ¶ 27.

[39] Id., n. 19. The Commission also notes that from the first quarter of 1992 through the first quarter 1993, the average number of complaints ranged from 39 to 45 per million access lines.

USTA notes that the complaint rates cited by the Commission are exceedingly small by any standard - less than one-half of one-thousandth of one percent. Changes in such small percentages are virtually meaningless unless sustained over a period of time. As the Commission reports, the average number of service quality complaints dropped substantially during the second quarter of 1993.[40] These circumstances do not indicate any "possibility of some problem" with residential service quality.[41]

6. New Service Introduction - Baseline Issue 8c.

The Commission notes that the "LECs have initiated a range of new services under price cap regulation."[42] Indeed, between January 1991 and April 1994, price cap LECs filed approximately 440 new services with the Commission.[43] As discussed below, however, the Part 69 rate structure requirements that are incorporated into the LEC price cap regime, and the new service pricing rules, present substantial barriers to the introduction of new services which,

---

[40] Id.

[41] These exceedingly low complaint levels were achieved during a period marked by frequent natural disasters (*e.g.*, hurricanes, floods, earthquakes) and civil disturbances (*e.g.*, Los Angeles).

[42] NPRM, ¶ 30.

[43] Of the new service filings, approximately 140 were related to the Commission's Open Network Architecture requirements.

unless changed, will seriously impede new service introduction in the future.

C. The Price Cap Plan and The Commission's Goals.

The existing LEC price cap plan demonstrates that incentive regulation can work. Customers have enjoyed lower access rates, infrastructure development has continued, and service quality and universal service goals have not been compromised. All of this has been accomplished with modest increases in LEC earnings that have rewarded carrier efficiency during the plan period.

The Commission's focus, however, must now shift from a backward-looking review of price caps to a forward-looking assessment of whether the existing plan can accomplish a new and aggressive set of goals for the future. For example, the Commission believes that "telecommunications will increase in importance to society and the domestic economy, provided that regulation facilitates the deployment of the facilities and services consumers and business will need."[44] Price caps must, therefore, be modified in order

---

[44] Id. at ¶ 33. See Harris, Appendix A, for an expanded discussion on the importance of telecommunications in the U.S. economy. Professor Harris also makes clear the importance of LECs to the U.S. telecommunications sector. Id. at A-5 - A-7.

to ensure that it will reflect telecommunication's expanded role in the economy.[45]

Further, the Clinton Administration has indicated its intention to develop a National Information Infrastructure that will be the information equivalent of the interstate highway system.[46] To achieve this goal, price caps must send the correct market signals to all service providers (whether they be the LECs or new market entrants), and must provide the proper incentives to help generate the massive capital investment required by such an effort.[47] The price cap plan must also be able to accommodate modified definitions of universal service as society's notion of what constitutes a minimum level of service that should be made

---

[45] Chairman Hundt, in commenting on pending bill S. 1822, recently endorsed the creation of a "flexible and adaptive regulatory model that is likely to promote substantial investment and lead to economic growth and job creation." Hundt Statement, supra. Professor Harris notes that "[e]levating the importance of infrastructure investment as a policy objective can improve the performance of telecommunications industries and the nation's economy." Harris at 15.

[46] See NPRM, ¶ 24; Speech by Vice President Gore at the University of California at Los Angeles, January 11, 1994 (the Gore Speech).

[47] Private investment is critical to the construction of the National Information Infrastructure. Professor Harris notes that "[a]s important as the NII is to the nation's economic and social welfare, . . . it is widely recognized [that] the government cannot, and should not, expend large sums of scarce public funds to build the information superhighway." Harris at 1.

available to all Americans changes as we move forward in the Information Age.[48]

Finally, a price cap plan must reflect the rapid and momentous changes in technology, customer demand and markets that are taking place in the telecommunications industry.[49] A plan which limits LEC response to these changes - whether it be in the form of responding to new customer demand or to new market entry - will frustrate both innovation and network investment, and will deprive consumers of the full benefits of competition.

Simply put, the current price cap plan is ill-suited for achieving all of the Commission's objectives over the next several years. This is due to several factors. First, the current plan, most notably through its sharing feature, continues to be tied to cost-based rate of return regulation which significantly dampens the efficiency and investment incentives that are vital to the Commission's economic growth and infrastructure objectives. Second, the plan's out-dated and rigid rate structure, and the new service pricing rules, make it difficult for LECs to respond to both customer needs and competition, and frustrate the intro-

---

[48] Chairman Hundt shares the "view that it is imperative to redefine the term 'universal service' periodically over time, as technology advances." Hundt Statement, supra at 15.

[49] These changes are discussed in Section III below.

duction of new service offerings. Third, the existing plan does not reflect the varying degrees of competition in access markets, and it distorts the investment decisions of all market participants.

The plan's ties to cost-based rate of return regulation, including the sharing feature, run counter to the efficiency, investment and innovation incentives of pure price regulation. For example, in evaluating an investment that will enable it to offer a new service over its network, a LEC must determine whether the expected return is sufficient in light of market conditions and other risk factors. While all firms competing in access markets must make the same return versus risk evaluation, only LECs must consider the limited returns and disincentives created by the sharing mechanism, and the increased risks associated with rigid rate structures and rules which make it difficult for LECs to introduce new services and respond to competition. In short, by limiting the estimated return on any project the LEC may consider, and by increasing the expected risks of undertaking the project, the price cap plan seriously skews LEC investment decisions. In doing so, the plan fails to replicate the incentives of a competitive market, thereby dampening the incentives for LEC investment in advanced telecommunications infrastructure, in large-scale productiv-

ity initiatives, and in new service development and deployment.[50]

The existing pricing and new service rules, and the Part 69 access charge rate structure, will also prevent attainment of the Commission's objectives by limiting the LECs' ability to meet customer demand with new and innovative services and pricing plans, and to respond to growing competition. The impact of these rules is two-sided. First, the rules make it very difficult for LECs to provide complex and customized services made possible by new technologies and demanded by increasingly sophisticated customers. Second, because LECs often cannot meet this demand under the existing rules, and because the rules impede the timely introduction of new service offerings, the rate structure and pricing rules provide a disincentive for LECs to innovate, invest in the network and undertake substantial productivity initiatives.[51]

The rules also make it impossible to achieve balanced and fair competition between LECs and new market entrants

---

[50] Commissioner Barrett suggests that the Commission should consider severing price caps from earnings-based regulation in order to provide incentives to invest in more risky endeavors through high returns that are commensurate with the increased risks. See Barrett Speech, p. 11.

[51] If services are provided, they may not be timely, or they may be offered at prices which preclude market success. All of these factors increase risk and reduce expected return, thus discouraging LEC investment.

which are not subject to these rules. This has important consequences because expectations regarding the LECs' ability to compete will affect investment decisions by all firms in the market. While the rules provide disincentives for LECs to make infrastructure investment, other firms may make inefficient investments as a result of their expectation that the incumbent LECs will be unable to respond to their entry.[52]

The Commission may have viewed these disincentives and inefficiencies as tolerable during the first four-year price cap period when the Commission was cautiously implementing a new regulatory scheme, and competition was far less extensive than it is now. Such caution, however, should not be allowed to encumber the LEC price cap plan in future years. As the Commission's goals evolve, and a far greater emphasis is placed on infrastructure development, economic growth and innovation,[53] any rules or policies that frustrate attainment of those goals are unacceptable.

Finally, the price cap plan must recognize that competition exists in LEC markets today. The plan must be flexible enough to accommodate full competitive price responses by LECs where warranted by market conditions. Without this

---

[52] See Harris at 16. ("Policies that treat competitors differently can artificially bias customer's choices and distort entry and investment decisions.")

[53] See NPRM, ¶¶ 33, 34.

flexibility, the benefits of balanced competition will never be achieved, and universal service goals could be significantly compromised.

In sum, the existing price cap plan proves that incentive regulation can work. Now that the initial price cap period is almost over, the Commission must reassess the plan in light of its refined objectives, and must make whatever changes to the plan are necessary to achieve those objectives. USTA submits that this reassessment requires the Commission to decouple price cap regulation from the last remaining vestiges of rate of return regulation, to reform its rate structure and pricing rules so that LECs are free to innovate and meet customer demand, and to provide LECs with pricing flexibility needed to respond to their increasingly competitive markets. How all of this should be accomplished, and other details of USTA's proposal, are set forth in Section IV below.

III. THE COMMISSION'S RULES MUST RECOGNIZE AND ACCOMMODATE RAPIDLY EVOLVING AND CONVERGING TECHNOLOGIES, INCREASINGLY SOPHISTICATED CUSTOMER NEEDS AND THE EXPLOSIVE GROWTH OF COMPETITION IN LEC MARKETS.

The Commission asks for an assessment of the current state of competition for local exchange and interstate access.[54] As discussed below, competition in LEC markets exists today, and can be expected to increase at a fast pace

[54] NPRM, ¶ 95; Transition Issue 1a.

as a result of the rapid convergence of technologies, changing customer demand, and new regulatory/legislative initiatives. The growth in competition requires substantial revision of the Commission's price cap plan and access pricing rules in order to allow competitive forces to replace regulation where warranted by market circumstances.

A. Technology is Evolving and Converging at a Rapid Pace.

The rapid evolution and convergence of telecommunications technologies and media has been one of the most significant trends since adoption of price cap regulation less than 4 years ago. This trend has important consequences for competition in the local access market.

After several decades of steady, but incremental, technological innovation, "there has been a virtual explosion of technology in the provisioning of telecommunications services...."[55] The application of integrated circuits and other microelectronics in telecommunications equipment, and the widespread deployment of fiber optics, has dramatically reduced switching and transmission costs, improved service quality and generated a host of new services and capabilities in the telephone network.[56] In addition to changes in wireline technology, developments in radio communications,

---

[55] Harris at 3-4.

[56] See id. at 4.

including microwave, satellite, and cellular and micro-cell telephony, have dramatically lowered the cost, improved the quality, and proliferated a wide range of wireless communications services.[57] Moreover, there is every indication that rapid technological changes in both wireline and wireless telecommunications will continue into the indefinite future.[58] These technological advances lower the cost of entry into telecommunications, thus facilitating increased LEC competition.[59]

Professor Harris notes several implications of rapid technological innovation that are relevant to this proceeding. First, rapid technological change has drastically reduced the expected lives of telecommunications investments.[60] This increases business risk and necessitates much quicker amortization of capital investments.[61] Second, the unpredictable course of technological change also increases business risk due to the threat of early technological obsolescence, or the sudden entry of unexpected competitors utilizing a technological breakthrough. LEC managers must account for these risks when making capital

---

[57] See id.

[58] Id. at 4.

[59] See Harris at 8.

[60] Id. at 5.

[61] Id.

budgeting decisions, and weigh them against the expected returns on the investment alternatives.[62] Third, while regulators cannot stop technological advances, they can influence the path of these developments. Regulators must avoid "policies that distort competitive dynamics or technological developments by handicapping incumbent regulated firms *vis-a-vis* entrants using new technologies."[63] Finally, because public policies tend to lag behind market and technological developments, a "wait and see" approach by regulators will guarantee that public policies will never catch up, much less keep up, with changing conditions. Thus, rapid technological change makes it "imperative that regulators adopt policies that are forward-looking, technology-neutral and pro-competitive."[64]

In addition to rapid technological innovation, the Commission recognizes that "[m]arkets and services are converging as telecommunications technology improves and enlarges the capabilities of the telecommunications networks."[65] Convergence is being driven principally by digitalization of the telecommunications signal and by the ubiquitous deployment of microprocessors in telecommunica-

---

[62] Id.

[63] Id.

[64] Id. at 5-6.

[65] NPRM, ¶ 33.

tions networks. These developments, along with high-capacity fiber optic facilities, are transforming previously separate telecommunications media into a common, universal telecommunications bit stream that can be stored, processed, transported between two or more points, and ultimately delivered to the end user. As the telecommunications industry moves into broadband Integrated Services Digital Network (ISDN) and adopts Asynchronous Transfer Mode (ATM) technology, the same switches and transport facilities will be able to provide virtually any combination of voice, data, image or video services.[66]

What does this mean for competition? Well, traditionally competition has involved new entrants, sometimes of modest size, who have competed for the LECs' voice-grade, circuit-based telecommunications services.[67] This big incumbent versus new competitor scenario has shaped public policy thinking in ways which have limited the competitive response of LECs and which have provided unique advantages to the new market entrants with rules that have been highly asymmetrical in their application.[68]

---

[66] See Richard Calkins, "Its All the Same Stuff: Our New Digital 'Anymedia' Industry," *Teletimes*, Fall 1993, pp. 12, 26.

[67] These competitors have included some of the early competitive access providers (CAPs) and information service providers.

[68] Calkins at 26.

Convergence changes the old paradigm. Instead of start-up competitors, large long-established firms, which traditionally served separate markets, are finding themselves with both the ability and incentive to provide access and other LEC services. This is, perhaps, most evident with cable television systems. Almost every "observer and analyst in the country, from the Vice President on down, has recognized that voice and video are converging, and that the convergence will redefine the economics of both markets."[69]

Thus, cable operators that deploy fiber optic facilities to distribute video are finding these facilities suitable for providing private line and access services. Network equipment suppliers like AT&T are promoting architectures such as Cable Integrated Services Network (CISN), which enable cable systems to subdivide their video broadband capacity to image, data and voice channels.[70] It is no wonder that large cable operators, either directly or

---

[69] Peter Huber, "The Enduring Myth of the Local Bottleneck," placed on the record in this proceeding by letter dated March 15, 1994, to William F. Caton, p. 31 (cites omitted)

[70] See Calkins at 26; David P. Reed, "The Prospects for Competition in the Subscriber Loop: The Fiber-to-the-Neighborhood Approach," FCC, Office of Plans and Policy, September 1993, p. 14 ("New technological developments such as the hybrid fiber/coaxial cable architecture appear to be increasing the likelihood of local competition.")

through their ownership interests in CAPs, are among the most prominent LEC competitors.[71]

The Commission recently stated that "as the cable and telephone industries converge, it is important to treat them with as much regulatory parity as possible."[72] That convergence is well under way. While USTA is not advocating that LECs be placed under the same regulatory scheme applicable to cable systems, LECs must be permitted the same pricing and service flexibility afforded cable operators and others in access markets.

B. Customers are Demanding New Features and Service Attributes.

The evolution and convergence of technology has been accompanied by rapidly changing customer demand patterns.[73] Unless LECs are provided with sufficient flexibility under the Commission's rules, LECs will be limited in their ability to compete for this new demand. Indeed, the LECs' access customers, including the large IXCs and other sophisticated

---

[71] See discussion at Section III.C below.

[72] Implementation of Sections of the Cable Television Consumer Protection and Competition Act of 1992: Rate Regulation, Second Order on Reconsideration, Fourth Report and Order, and Fifth Notice of Proposed Rulemaking, MM Docket NO. 92-266, FCC 94-38, released March 30, 1994, ¶ 24.

[73] Professor Harris notes that "[t]echnological change is dramatically reshaping the use and users of telecommunications services, as the industry moves rapidly from predominantly voice applications to data, image and video applications." Harris at 6.

business entities, have already shown their willingness to utilize alternative technologies and suppliers to meet their needs.

Customer demand is changing from both a qualitative and functional standpoint. Qualitatively, customers are requiring not just reasonable rates, but also flexible pricing arrangements to meet individual circumstances. Customers also want complex circuit configurations to facilitate network diversity and redundancy, and to better utilize new telecommunications service options. Additionally, they are demanding increased customer control over network features and service parameters. All of this creates the need for customized pricing and service arrangements that often cannot be accommodated under a Commission-prescribed rate structure and the current pricing rules.

From a functional standpoint, LEC access customers are demanding new transport, switching, broadband and signalling services: from voice communications to the transmission and processing of information (*i.e.*, voice, data, image) among terminals and data bases; from point-to-point applications to multipoint network services; from standardized offerings to market or customer-specific services; and from local to global services. This demand creates the need for LECs to develop and deploy new offerings. If the Commission's rigid access rate structure, and complex and constantly changing

new service rules, continue to delay or prohibit the delivery of these LEC offerings, customers will seek out other service providers to meet their needs, and the benefits of competition, including lower rates, will be lost.

It is important to note that LEC access demand is highly concentrated - a small percentage of customers, lines and geographic areas account for a very large share of revenues in most service categories.[74] Thus, an access service provider does not need to serve all geographic or customer segments to effectively compete with the LEC.[75] Instead, a market entrant need only target the small number of LEC customers which account for the largest share of revenues.[76]

C. Competitive Alternatives to LEC Access Services are Growing at a Rapid Rate - Transition Issues 1a and 1d.

The Commission recognizes that there is accelerating competition within the local exchange.[77] Moreover, the Commission's regulatory policies continue to encourage

---

[74] See Harris at 7. For example, 30% of total business telephone revenues in ten of the largest states is generated by customers located in geographical areas comprising only 1% of the land mass of those states. Id.

[75] See id.

[76] Id.

[77] NPRM, ¶ 22.

competitive entry by new service providers.[78] As shown below, significant LEC access competition exists now and can be expected to increase rapidly in the near-term.[79]

LECs face access competition from a variety of sources.[80] Competitive access providers (CAPs) provide special access, private line and switched services, to customers in the central business districts of most major metropolitan areas, and even in many so-called secondary markets.[81] Currently, over 25% of CAPs offer some form of switched service, and the trend toward increased provision of switched service is expected to continue.[82] For example, Teleport Communications Group has installed AT&T ESS switches across the country, and Metropolitan Fiber Systems (MFS) has introduced MFS Intelenet as a full service phone company

---

[78] See, e.g., Expanded Interconnection with Local Telephone Company Facilities, CC Docket No. 91-141, Report and Order and Notice of Proposed Rulemaking, supra; Amendment of the Commission's Rules to Establish New Personal Communications Services, GEN Docket No. 90-314, Second Report and Order, FCC 93-451, released October 22, 1993.

[79] Under USTA's proposal, pricing and regulatory flexibility will be based on the extent of competition within defined market areas. (See Section IV.C.1 below.) It is not USTA's intent to demonstrate the degree of competition within any particular market area; that showing is to be made by individual LECs under USTA's proposal.

[80] See Harris at 8-9.

[81] Harris, Appendix B, pp. B-4, B-5, Figure B-3.

[82] Id. at B-4.