# DIRECT TESTIMONY OF

## JOSEPH GILLAN

## ON BEHALF OF AT&T COMMUNICATIONS

## OF THE SOUTHERN STATES, INC.

## Docket No. 960833-TP

## I. QUALIFICATIONS AND PURPOSE OF TESTIMONY

**Q. PLEASE STATE YOUR NAME AND BUSINESS ADDRESS.**

A. My name is Joseph Gillan. My business address is P. O. Box 541038, Orlando, Florida 32854.

**Q. WHAT IS YOUR OCCUPATION?**

A. I am an economist with a consulting practice specializing in telecommunications. My clients span a range of interests and have included state public utility commissions, consumer advocate organizations, local exchange carriers, competitive access providers and long distance companies.

**Q. *PLEASE BRIEFLY OUTLINE YOUR EDUCATIONAL BACKGROUND AND RELATED EXPERIENCE.***

A. I am a graduate of the University of Wyoming where I received B.A. (1978) and M.A. (1979) degrees in economics. My graduate program concentrated on the economics of public utilities and regulated industries.

In 1980 I joined the Illinois Commerce Commission where I had responsibility for policy analysis relating to the emergence of competition in regulated markets, in particular the telecommunications industry. While on the staff of the Commission, I served on the staff subcommittee for the NARUC Communications Committee and was appointed to the Research Advisory Council overseeing NARUC's research arm, the National Regulatory Research Institute.

In 1985 I left the Commission to join U.S. Switch, a venture firm organized to develop interexchange access networks in partnership with independent local telephone companies. At the end of 1986, I resigned my position of Vice President-Marketing to begin a consulting practice. I currently serve on the Advisory Council for New Mexico State University's Center for Regulation. A complete listing of my background, publications and prior testimony is included as Exhibit JPG-1.

**Q. WHO IS SPONSORING YOUR TESTIMONY IN THIS PROCEEDING?**

A. My testimony is being sponsored by AT&T Communications of the Southern States, Inc. ("AT&T"). Although sponsored by AT&T, the perspective that I will emphasize is that of competition in general, and most importantly, the intended beneficiary of competition, consumers. Competition is, after all, a process of consumer-empowerment.

**Q. IS YOUR TESTIMONY PROMOTING COMPETITION FOR THE BENEFIT OF CONSUMERS OR FOR THE BENEFIT OF AT&T?**

A. Primarily it is for the benefit of consumers. Competition now resides at the heart of the nation's telecommunications policy. This is not because it benefits competitors, but because it is the best mechanism to provide consumers with the lowest prices and greatest choices -- and because where competition flourishes, regulation and government intervention are unnecessary.

The fact that the parties before this Commission are large companies should not be confused with the nature of their debate. In one corner, you have BellSouth, a monopoly whose incentive is to do as little as possible to open its markets. In the other corner, you have AT&T, an entrant with the desire to offer local services broadly throughout Florida. Certainly, each party is primarily motivated by its own self-interest, but the public-interest embodied in the Telecommunications Act of

1996 ("the Act") is providing consumers with choice. In this regard, AT&T's desire to successfully compete with BellSouth and the public interest align.

**Q. PLEASE SUMMARIZE THE PRINCIPAL CONCLUSIONS OF YOUR TESTIMONY.**

A. This proceeding represents a watershed event in the evolution of Florida's telecommunications markets. Unlike earlier proceedings addressing local competition, this arbitration is the first proceeding to *comprehensively* consider *each* of the tools contemplated by the Act. The full mosaic of entry tools are needed if AT&T (or any other carrier) is to broadly approach the market, offering service to non-specific customers, residential and business alike. Because AT&T needs and is requesting a full range of entry options -- options to which it is entitled under the Act -- the Commission will be establishing not only conditions necessary for AT&T's entry, but more significantly, the conditions of entry for the entire industry. The purpose of my testimony is to emphasize the significance that this Commission's decision in this proceeding will have on the future of competition. In short, this Commission will be deciding whether Florida consumers in fact will have choices, both now and well into the next decade.

Specifically, my testimony concludes that:

* The fundamental intent of the Act is a transition to an industry structure where lines between carriers, services and markets disappear to the maximum extent possible. The threshold predicate to this change is the emergence of local competition -- not on a limited scale, or for a few fortunate customers -- but on a broad scale to all residential and business subscribers.

* The key factor that will determine the price that consumers pay for local

telephone services will be the price that competing carriers pay BellSouth for wholesale local exchange services which are then resold to customers, as well as the price carriers pay to BellSouth for unbundled network elements and local interconnection.

* Resale of wholesale services and unbundling of network elements will accelerate the deployment of alternative local networks and yield a far more competitive environment at the end of the entry process than can otherwise exist.

* Consumers will consider local competition a failure unless operational support systems accommodate consumer movement from one local exchange carrier to another on a level comparable to the process used to move customers among long distance carriers. Implementing automated systems that support broad-scale local competition requires that both entrants (which have the incentive) and incumbents (which do not) design, test, and implement these systems.

Finally, two precautionary notes concerning how rapidly the market will change after the Commission reaches its decision in this proceeding. The correct decision here should provide the *foundation* for competition and consumer choice. But local competition will not be instantaneous. Implementing this Commission's decision will take time. It is for this reason that the Commission should order each of the comprehensive elements requested by AT&T so that competition can begin as soon as possible.

Second, this proceeding concerns only half of the Act's fundamental equation: opening BellSouth's monopoly in the local exchange market to competition. The second half of the equation, allowing BellSouth to provide long distance services in

its territory -- while useful to understand the full impact of the Act -- is a question that is relevant only *after* local markets become competitive. This single-minded focus on opening the local exchange market to competition is appropriate because establishing the right local entry conditions, by itself, is a substantial undertaking that requires the Commission's undivided attention. The proverbial cart and horse each has its role, but at this stage of the process, the issue is designing the cart.

**Q. HOW DOES YOUR TESTIMONY RELATE TO THE TESTIMONY OF OTHER AT&T WITNESSES?**

A. My testimony describes the interrelationship among the requests in AT&T's arbitration petition and how these requests fit within an overall strategy to implement the Act. Other witnesses will provide detailed explanations of AT&T's requests for wholesale services, unbundling of network elements and local interconnection; the appropriate economic pricing principles to apply; as well as the particular dimensions of the operational support systems being requested. My role is to explain how these carrier-to-carrier issues can be expected to yield tangible benefits in the prices and choices experienced by consumers.

**Q. HOW IS YOUR TESTIMONY ORGANIZED?**

A. In testimony sections which follow, I:

* describe the competitive environment envisioned by the Act, with particular emphasis on its effect on consumer prices and choices (Section II);
* explain the particular importance of local services resale to achieving broad customer choice and accelerated entry (Section III);
* present the fundamental role of unbundled network elements to achieving the competitive structure contemplated by the Act

(Section IV);

- conclude with a discussion of the importance of operational changes needed to provide consumers with the widest choices with the least disruption (Section V).

## II. ACHIEVING THE COMPETITIVE ENVIRONMENT OF THE TELECOMMUNICATIONS ACT

### A. *The Competitive Environment*

**Q. PLEASE DESCRIBE THE LONG-TERM COMPETITIVE ENVIRONMENT ENVISIONED BY THE ACT.**

A. The long-term competitive environment contemplated by the Act is an industry structure unseen since the divestiture of the Bell System in 1984: the emergence of the full service provider, or, in other words, a single firm offering local and long distance services. Of course, this time around, the goal is *multiple* full service providers, and not the reemergence of the Bell monopoly. Contemporary labels such as interexchange carrier ("IXC"), competitive local exchange carrier ("CLEC") and local exchange carrier ("LEC"), that today distinguish carriers, will disappear in the eyes of consumers.

The threshold condition necessary to achieving this competitive environment is a system of arrangements between carriers for the resale of wholesale services, the use of network elements and reciprocal compensation. These basic tools will foster robust competition where consumer benefits will arise relatively quickly while the much slower process of duplicating networks moves forward.

Importantly, Congress took the steps necessary to effect the transition to a fully competitive environment by adopting a completely new framework to govern the relationship between incumbent local exchange carriers ("LECs")and other carriers.

This *carrier-to-carrier* framework provides entrants quite different entitlements -- and imposes on incumbent LECs quite different obligations -- than have existed in the past. This carrier-to-carrier framework enables entrants to use the incumbent's existing network to fashion their own local exchange and exchange access services on an economic basis comparable to BellSouth.

**Q. WHAT ARE THE CORE ELEMENTS OF THE CARRIER-TO-CARRIER FRAMEWORK OUTLINED BY THE ACT?**

A. The core provisions describing these new carrier-to-carrier relationships are contained in Sections 251 and 252 of the Act. In simple terms, these Sections impose on incumbent LECs, like BellSouth, the obligation to permit the resale of its retail services at wholesale prices, to unbundle its network and sell these elements to entrants at cost-based rates, and to implement a system of reciprocal compensation for the termination of traffic. It is important to understand that these items when added together form the backbone of the relief AT&T seeks and are not options which BellSouth may, or may not, fulfill at its whimsy. Rather, these are clear obligations which Congress adopted in order to effect a fundamental change in the industry by promoting robust local competition.

**Q. WHY WOULD CONGRESS HAVE ADOPTED CARRIER-TO-CARRIER ARRANGEMENTS WHICH PROVIDE ENTRANTS THESE RIGHTS?**

A. The Act fundamentally recognized that full retail competition would be seriously delayed, if not effectively foreclosed, if it first required the building of new competitive exchange networks -- networks which, in some areas, may never be constructed. The Act removed this impediment by making the existing LEC networks available to rivals, so as to provide consumers choices more quickly and to stimulate competition in order to accelerate the building of new competitive local

exchange networks.

**Q. WHY DON'T CARRIERS SIMPLY CONSTRUCT THEIR OWN LOCAL NETWORKS?**

A. While some limited local networks are under construction, no carrier can construct ubiquitous local networks capable of supporting broad competition. No one knows this better than BellSouth. The BellSouth exchange network in Florida is massive, connecting nearly 3.3 million residential housing units (Source: BellSouth USF Submission, 1993 data) and essentially every commercial enterprise in its territory. Although BellSouth has sometimes sought to paint these statistics as a disadvantage -- implying that its network is the result of a "governmental obligation" as opposed to its own financial self-interests -- the ubiquity, reach and capacity of this network is enormous.

**Q. IS LOOP CAPACITY THE MOST SIGNIFICANT MEASURE OF THE DOMINANCE OF BELLSOUTH'S EXCHANGE NETWORK?**

A. No. Measuring the network solely in terms of loops (i.e., the last connection to the customer) significantly understates the enormous (in fact, unprecedented) investment that would be necessary for even a single provider -- much less, the multiple providers necessary for a fully competitive environment -- to duplicate BellSouth's network. In addition to the loop plant to each and every premise in its territory, BellSouth's exchange network (as of 1993) encompassed nearly 214 local switches (including remotes) interconnected by a vast web of interoffice facilities. Overall, the BellSouth network represents more than $10 billion in investment in Florida alone (Source: 1995 ARMIS 43-01, Total Plant in Service). In contrast, AT&T's *worldwide* investment is approximately $23 billion. (Source: AT&T 1994 Form M.) Because of the size and geographic reach of BellSouth's network, local

competition would develop at a snail's pace unless this network can be used by other carriers to provide local exchange and exchange access services.

**Q. IS THE ACT INTENDED PRIMARILY TO PROVIDE CARRIERS WITH NEW BUSINESS OPPORTUNITIES?**

A. No. In my opinion, the Act's ultimate purpose is to provide consumers with local choices as they now enjoy in long distance, to eliminate confusion caused by the divestiture of the Bell System (separate providers of intraLATA and interLATA services) while retaining all of the divestiture's competitive benefits, and to set the stage for less regulation of consumer prices. However, the path to lower consumer prices, newer services and increased convenience is through the tools contemplated by these new carrier-to-carrier arrangements. The purpose of the Act will not be fulfilled unless comprehensive carrier-to-carrier arrangements are implemented.

**B. *The Competitive Environment And Consumer Prices***

**Q. HOW CAN FULL IMPLEMENTATION OF THE ACT BE EXPECTED TO BENEFIT CONSUMERS?**

A. The Act is fundamentally about choice. Choice for consumers is made possible through the carrier-to-carrier arrangements that will underlie the service offerings of new competitors. This is why correctly arbitrating carrier-to-carrier arrangements is so important -- these agreements ultimately translate to the choices and price levels that consumers experience. Much as the visible contours of the earth's surface (its mountains, valleys and plains) are determined by underlying geographic conditions, so too will consumer choices and prices be decided by the underlying conditions of these carrier-to-carrier arrangements.

**Q. HOW WILL PRICES FOR UNBUNDLED NETWORK ELEMENTS AND INTERCONNECTION INFLUENCE RETAIL RATES?**

A. BellSouth's competitors will use unbundled network elements and interconnection to provide local exchange services to consumers and exchange access services to other carriers. With correctly priced network elements and interconnection (which is to say, prices based on economic cost), these entrants will be able to offer -- and competition will force them to offer -- local exchange services at prices no higher than today's prevailing (i.e., BellSouth's) rates.

Importantly, once competition is established through unbundled network elements and interconnection, the existence of multiple providers of local exchange services will constrain BellSouth's own pricing behavior. BellSouth will not be able to raise local exchange prices to consumers because these consumers will have a choice of other providers. There is simply no consumer protection stronger than the ability to "take your business elsewhere."

This logic, while simple, is so important that it bears repeating. As entrants first approach the market, they are constrained by BellSouth's retail prices. The entrant must provide service at prices no higher than the prices of the incumbent LEC in order to attract and retain customers. Cost-based network elements and interconnection rates should provide this ability because both the entrant and BellSouth would incur the same cost for the underlying network used to provide service. If BellSouth profitably can provide service at today's rates, then so too should the entrant. Having entered the market, these entrants then become the constraint on BellSouth's prices, limiting BellSouth's ability to raise rates in the future.

However, the entire basis for the above conclusion is that unbundled network elements and interconnection arrangements used by the entrant are priced at economic cost. If so, then the entrant and BellSouth each will face the same

underlying cost of the facilities needed to provide service. So long as these carrier-prices facilitate profitable initial entry, then competition should provide sustained pressure on price levels in the future.

**Q. WHAT WOULD HAPPEN IF THESE PRICES ARE INFLATED ABOVE THEIR COSTS?**

A. The result would be higher consumer prices and fewer choices. BellSouth would be able to increase the costs of its rivals, limiting their ability to compete with lower prices.

**Q. IS THIS WHY THE COMMISSION SHOULD MAKE SURE THAT UNBUNDLED NETWORK ELEMENTS AND INTERCONNECTION PRICES ARE ESTABLISHED CORRECTLY?**

A. Yes. The Act represents a fundamental shift in regulatory focus from *directly* setting retail prices and service dimensions (such as the size of local calling areas) of local exchange carriers, to *indirectly* influencing retail services through the review of the underlying carrier-to-carrier arrangements. If unbundled network elements and interconnection prices are correctly established, then both BellSouth and other providers will be able to compete upon a common foundation, at least with respect to the cost of the underlying network.

**Q. WHAT WILL HAPPEN TO THE RESIDENTIAL LOCAL EXCHANGE SERVICE THAT BELLSOUTH CLAIMS IS PRICED BELOW COST?**

A. The answer to this question has both a short and long run component. For the sake of discussion, *assume* that residential local exchange prices do depend upon the excessive pricing of other services, principally access charges. (This is a claim that I do not necessarily accept, but I will not dispute here).

In the short-run, entrants are likely to provide services either through resale or

through a heavy, perhaps complete, reliance on network elements obtained from BellSouth. In the resale scenario, BellSouth *retains* all access revenues, even those of the reseller's customers. This arrangement seriously undermines the usefulness of resale to the entrant (discussed in more detail in Section III below), but at least it eliminates any claimed pressure by BellSouth to increase its local rates.

In the scenario where the entrant provides local services using unbundled network elements, the entrant fully compensates BellSouth for the economic cost of the facilities and the entrant provides the access service. If BellSouth is correct that local rates are below cost, then both BellSouth and the entrant (who has paid BellSouth for the cost of its facilities) will have a revenue shortfall. But, in this scenario, both BellSouth and the entrant have the respective access revenues from their own customers to offset any revenue shortfall, again eliminating any alleged need for local rates to increase.

However, in the long run, the competitive environment envisioned by the Act (if not the plain language of the Act itself) requires that all carrier-to-carrier prices be nondiscriminatory and cost based. This means that the excessive revenues currently embedded in access charges must end. If long term support to local rates is determined to be needed, then such support must be explicitly provided through a universal service fund. Of course, any such funding must be equally available to both the entrant and BellSouth so as to not disrupt the consumer's choice of provider. The Act requires that any universal service mechanism be nondiscriminatory.

### *C. The Importance of Quickly Reducing Local Entry Barriers*

**Q. WHY IS IT IMPORTANT TO REDUCE LOCAL ENTRY BARRIERS QUICKLY?**

A. As noted earlier, the fundamental balance of the Act is to establish the tools needed for other carriers to offer local services and, once effective competition is firmly established, to permit BellSouth to offer long distance services in its territory. Unlike the very real obstacles to local competition faced by rivals, the barriers confronting BellSouth essentially can be eliminated "at the stroke of a pen." Once legal restrictions are removed, BellSouth will be able to offer long distance services quickly and completely.

Barriers to entry in the long distance market are low because there is competition at *both* the retail and wholesale levels. At the wholesale level, a variety of companies compete to provide the central ingredients of long distance services -- transmission, switching, and billing. In effect, the long distance equivalents to unbundled network elements and resale of wholesale services already are in place. A new entrant to the long distance market need not construct its own network or wait for the development of back-office systems to offer its services. The long distance industry already has developed the necessary infrastructure to support a multi-vendor, competitive environment.

**Q. WILL BELLSOUTH BENEFIT FROM THIS MULTI-VENDOR INFRASTRUCTURE WHEN IT IS PERMITTED TO PROVIDE INTERLATA SERVICES IN ITS TERRITORY?**

A. Yes. BellSouth is in a position to capitalize on the fruits of the long distance industry's history with competition. Once legal authority is granted, BellSouth could begin offering long distance services without investing in a single switch or strand of optical fiber, obtaining a single right of way, or negotiating a single interconnection agreement with a recalcitrant monopolist. BellSouth simply would need to choose an underlying interexchange network supplier -- indeed, it has

already chosen AT&T for just this purpose -- and begin marketing long distance services to its preexisting base of local customers, which today, is the *entire* market in its exchanges.

BellSouth's path to becoming a long distance carrier is well-established, tested and routine. It is a feat accomplished by thousands of firms since divestiture. Assisting BellSouth in its task of adding long distance service is a competitive long distance market with four national networks (plus a number of regional networks). Local exchange company operational systems (i.e., presubscription processes) already are sized to process large numbers of consumer requests to change long distance carriers. Moreover, consumers are accustomed to changing long distance providers. Further, there is the issue of excess capacity in BellSouth's extensive interLATA "official services" network that was investigated, but never resolved, in the last Bell rate proceeding (Docket 920260-TL). Merrill Lynch estimates that 50% of the long distance traffic completes in region and could be carried on these facilities if regulators permit BellSouth to convert its "official services" network to commercial purposes.

In contrast, the steps to local competition -- even competition which rests substantially or entirely on the use of BellSouth's existing network -- remain more theory than reality. This Commission must ensure that this theory turns into reality.

**Q. WHAT WOULD BE THE EFFECT OF BELLSOUTH'S ENTRY INTO THE LONG DISTANCE MARKET WITHOUT FIRST ESTABLISHING WIDE-SCALE LOCAL COMPETITION?**

A. If a large portion of the market prefers to obtain its telecommunications services as a package -- and there is general consensus that this is the case -- then the absence of competition for *any* element of the package (i.e., local exchange service) would

distort competition for *all* services that are, or, more precisely, will be, sold as a package. Because local exchange service will likely be seen as a compulsory element of the package in the eyes of many (if not most) consumers, local service *must* become competitive or competition for other services, such as long distance, will suffer.

The re-creation of the Bell System monopoly is not what Congress intended or consumers deserve. The Bell System divestiture was successful. Barriers to long distance entry were greatly reduced, AT&T lost its monopoly, fiber and digital technology was rapidly deployed, prices fell, and consumers enjoyed choice in virtually every market. The Act essentially extends the pro-competitive policies of the Bell System divestiture to all services. Just as divestiture provided AT&T's competitors with access to the local network on equal terms in order to originate and terminate long distance calls, the Act makes the local exchange network available to competitors on equal terms for every purpose, including to originate and terminate local calls.

***D. The Tools of Comprehensive Entry: Resale and Network Elements***

**Q. HOW WILL COMPETITION PROCEED DESPITE THE DOMINANCE OF BELLSOUTH'S NETWORK?**

A. Congress recognized the massive dominance of the incumbent LEC's network and the reality that it will take many years for the local transmission (especially loop) market to become as competitive as the interexchange transmission market. Alternative networks will take time to develop. As a result, the Act provides for a number of entry strategies that rely, to one extent or another, on the immediate use of the incumbent's facilities and services by other providers, so that local competition may develop quickly.

Each of these strategies can be found in the central components of AT&T's requests that led to this arbitration. These key components include AT&T's request to:

* resell wholesale equivalents of BellSouth's retail services,
* provide local exchange and exchange access services using network elements obtained from BellSouth as basic ingredients to AT&T's services, and
* terminate traffic under reciprocal compensation arrangements.

In later sections of my testimony, I address more extensively the importance of wholesale services (Section III) and network elements (Section IV) to providing exchange services. The point that I would like to emphasize here is the significance of *comprehensively* establishing the basic conditions of local competition as raised by this arbitration.

**Q. WHY IS AT&T'S REQUEST SO COMPREHENSIVE?**

A. The most important characteristic of the instant arbitration is its breadth. It addresses *each* of the entry options contemplated by the Act: namely, the resale of wholesale services, unbundled network elements, and reciprocal compensation for traffic termination. Previous entrants before the Commission were either niche entrants with little or no market presence or, in the case of a cable television company, a potential entrant that intended to leverage a preexisting network. However, at this point, cable entry remains largely a theoretical event.

No carrier has approached the market with the desire to serve a broad cross-section of consumers scattered widely across a large, multi-state geographic region. No carrier, that is, until AT&T. AT&T already serves a geographically scattered customer base. If consumers do prefer to buy local and long distance service as a package, AT&T's continued success in the long distance business depends upon its

ability to provide local service. The same is true for other long distance carriers.

**Q. HOW DO THE ISSUES OF COMPREHENSIVE ENTRY DIFFER FROM THOSE IN PRIOR REQUESTS?**

A. There are at least three features of AT&T's request that differ from previous dockets: the (1) intended *scale* of entry, (2) *applicability* to other entrants, and (3) the need for systems to support customer choice with a *convenience* already accepted in the market.

First, by scale of entry I mean AT&T's ability to broadly address its existing base of subscribers. No single entry vehicle is best suited for every customer and geographic consideration. Some strategies -- loop resale for instance -- are particularly ill-suited for mass application because they either require physical circuit rearrangements as customers move between providers or presuppose the extensive deployment of alternative networks which do not now exist. Broad entry requires that the full range of entry strategies be available so that a carrier may tailor its offerings to particular conditions.

Second, because AT&T's request is so comprehensive, its value extends beyond this single entrant to an entire industry. By encompassing all possible entry strategies, AT&T's request necessarily includes the individual approaches that other carriers will use to address their markets. This observation is particularly important. By deciding the AT&T arbitration, the Commission is establishing the conditions of entry not just for AT&T, but effectively defining the entry conditions for any entrant that will use all (or part) of BellSouth's network to provide local services.

Third, just as the development of meaningful long distance competition required new systems to support a multi-vendor environment, meaningful local competition will not succeed without a similar commitment of industry resources to operational

support. Consumers will widely perceive local competition -- and the Congressional action upon which it relies -- as a failure if changing local telephone companies is associated with extended delays, high costs, periods of outage, unreliable bills, or disrupted services. Operational systems are absolutely critical to robust competition in the local exchange market.

The process with which consumers are familiar -- and which BellSouth will use to enter the long distance market -- allows consumers to change long distance carriers (i.e., their primary interexchange carrier, or "PIC") with a simple telephone call or stroke of the pen. It is an easy, streamlined process. The operating standards of this process, in terms of cost, speed and accuracy, should become the standard for judging systems used to change local service providers as well.

### *E. Entry and Facilities Deployment*

**Q. IF CARRIERS CAN OFFER SERVICES USING BELLSOUTH'S NETWORK, WILL THEY ALSO CONSTRUCT COMPETING NETWORKS?**

A. Certainly, but local facilities deployment is a longer-term proposition. It took the Bell operating companies more than 100 years to achieve the present state and the Commission should not expect entrants to deploy comparable networks overnight. No company employing sound business judgment would expend the type of capital it will take to deploy extensive local networks without strong evidence that it can succeed in this market. In this respect, wholesale services and unbundled network elements permit carriers to begin operation and gain needed experience to more efficiently design and plan investment strategies.

In addition, entry using BellSouth's network will permit entrants to build the necessary revenue streams to justify the massive investment necessary to construct

even relatively modest local networks. It is useful to remember that the gross plant of the RBOCs is more than $ 200 billion, nearly *10 times* that of AT&T (Source: FCC Statistics of Communications Common Carriers, 1993/94). This buildup of local plant also took place over decades, not overnight.

As entrants build their base of customers using wholesale services and unbundled network elements, only then will they be able to make rational investment decisions concerning where to construct networks, invest in switching, add new capabilities, etc. Teleport, in fact, has publicly stated that its business strategy is to win customers first and then build facilities in an efficient way to serve them (Telecommunications Reports, October 16, 1995, page 20). With tangible market experience and a strong customer base, entrants are more easily able to raise capital, and just as importantly, convince their shareholders of the wisdom of their actions, thereby accelerating the deployment of alternative networks.

**Q. DOES THIS PROCESS PARALLEL THE DEVELOPMENT OF FACILITIES COMPETITION IN THE LONG DISTANCE MARKET?**

A. Yes. In the long distance market, early entrants like MCI were able to expand their services and customer base by reselling services off of AT&T's network. This growth financially justified the deployment of their own networks providing internal investment capital and shareholder confidence, and encouraged the entry of others, including (what is now) the third major network provider, Sprint. Later, the continued growth of the resale market resulted in the construction of the fourth national network (WilTel) for the express purpose of providing wholesale carrier - to-carrier services, as opposed to retail services, for use by the "resale" industry.

**Q. WILL THE RESALE OF WHOLESALE SERVICES AND ACCESS TO NETWORK ELEMENTS SPUR NETWORK CONSTRUCTION?**

A. Yes. These tools are essential for local competition to proceed and to provide the appropriate foundation for the network construction that will continue for the indefinite future. The Department of Justice recently reached the identical conclusion, noting in its comments to the FCC (Docket 96-98, page 37) that:

> Reducing entry barriers into local markets by permitting resale [of wholesale services] and cost-based access [to network elements] is much more likely to lead to the greater development of facilities-based competition than would occur absent such access and resale opportunities.

It also should be recognized that the Act provides a strong, potentially threatening, incentive for local network investment, that is, BellSouth becoming a long distance company. This single action will transform BellSouth from the long distance industry's principal *supplier* to its principal *rival*. Long distance companies will not want to be as dependent upon BellSouth as they are today once BellSouth becomes their main competitor. Each will construct, and encourage the construction by others, of other networks in as short a time as possible.

**Q. DO YOU EXPECT CARRIERS WILL REPLICATE THE ENTIRE BELLSOUTH NETWORK?**

A. No. It is likely that some portions of the network may never see a competitive alternative, certainly in the next several years. For instance, it is easy to visualize significant resistance on the part of residential homeowners to multiple network interface boxes being installed on their premises to reflect previous, and future, competitive choices in local services. Other elements of the network may best be provisioned by a sole network vendor (for instance, the loop and local switching in many areas). The point is not simply to encourage new construction -- the goal is to

encourage efficient facilities deployment. Wholesale services and correctly priced unbundled network elements, that is to say economically priced unbundled network elements, are key elements of this transition.

## III. LOCAL SERVICES RESALE

### *A. The Role of Local Services Resale*

**Q. WHAT IS LOCAL SERVICES RESALE?**

A. Local services resale is the purchase of an incumbent LECs services by a competing local service carrier on a wholesale basis with the intent to resell these services to consumers. Wholesale local services are expressly designed, supported, and *priced* to be resold by another carrier in the retail market. These wholesale local services provide multiple entrants a simple means to begin offering local exchange services and attract customers. BellSouth is required to offer its local services for resale at wholesale rates under Section 251(c)(4) of the Act.

**Q. WILL LOCAL SERVICES RESALE PROVIDE IMMEDIATE CONSUMER BENEFITS?**

A. Yes. In the long distance marketplace today, many carriers buy long distance services at wholesale rates for purposes of reselling them to customers, and compete by differentiating their billing systems, customer support and other elements of services. This same strategy can be extended to the local marketplace, with carriers using their marketing and customer skills to resell services obtained from the incumbent LEC.

The utility of local services resale as a means to support broad entry has been verified by the Rochester Telephone Company experiment. The Rochester experiment is best known for exposing the importance of operational support systems and the need for a viable discount. AT&T experienced a number of

problems attempting to offer local services on a mass market basis, and the experimental 5% discount showed the importance of correct pricing. Ultimately, AT&T had to stop soliciting customers until these problems could be corrected. The deficiencies in the Rochester experiment are well documented and widely understood. But there are other, more subtle lessons, from the Rochester experiment that should not be overlooked. Foremost is that Rochester did prove the usefulness of local resale as a way to enter a market quickly and offer customers a choice of local providers. AT&T was able to offer service throughout the territory, while other entrants remained confined to multi-tenant buildings. Equally telling, however, is that the operational and pricing problems caused AT&T to terminate its marketing, demonstrating that establishing conditions that will sustain competition is just as important as permitting the entry itself.

**Q. WILL LOCAL SERVICES RESALE PROVIDE AN EFFECTIVE CHECK ON BELLSOUTH'S PRICING?**

A. Only in small ways. Requiring BellSouth to provide wholesale local exchange services will limit its ability to discriminate between classes of customers, except where the Commission has blessed such discrimination to satisfy a unique public need (such as, for instance, preventing lifeline services from being offered outside the targeted class).

Wholesale services, however, will not police the overall level of rates as effectively as the pricing of unbundled network elements and interconnection as discussed earlier in this testimony. This is because the wholesale price is calculated off the retail rate. As retail prices move up, so too do wholesale rate levels, and price competition is constrained by the differential. As a result, only limited price competition is made possible by reselling wholesale services. Thus, the need to

regulate BellSouth's retail rates remains unchanged.

**Q. SHOULD ALL RETAIL SERVICES HAVE A WHOLESALE EQUIVALENT?**

A. Yes. There are a number of strategies that BellSouth could use to limit the usefulness of the wholesale option. Several of the agreements which have been reached recently -- importantly, with carriers that have little or no interest in reselling BellSouth's services -- expose this strategy. In particular, BellSouth proposed to AT&T the following exclusions to its wholesale pricing and resale obligations:

- Grandfathered and Obsoleted services
- Promotional rates
- Contract Service Arrangements
- Installment Billing
- Special Billing Arrangements

Any *one* of these exclusions could be used by BellSouth to effectively evade its wholesale obligation by selectively targeting customers for special pricing, rolling promotions, and grandfathering, which is a more polite phrase for warehousing, large sections of the market. Together, these exclusions could eliminate the wholesale option as an entry option.

***B. A Simple Model to Estimating Avoided Costs***

**Q. WHAT IS THE BASIC APPROACH TO CALCULATING THE WHOLESALE PRICE FOR LOCAL SERVICES?**

A. The basic approach is to remove from the retail price an *estimate of the retail-related* costs that will be avoided by BellSouth as a wholesaler of services.

**Q. WHAT WOULD OCCUR IF THE COMMISSION DOES NOT FULLY**

**REMOVE THESE RETAILING COSTS WHEN ESTABLISHING THE WHOLESALE RATE?**

A. Failing to fully remove retail costs would create a wholesale rate level that is too high. This would distort competition and artificially depress entry. The effect would be to deny consumers the benefits of competition -- lower prices, more choices and the ability to vote their dollar between rivals vying for their attention. It is useful to remember that although the immediate recipient of a wholesale discount is the local reseller, *the ultimate beneficiaries* are consumers. An artificially low wholesale discount will not lead to lower retail prices. In other words, the smaller the discount, the less competitive pressure to lower prices.

**Q. HAVE YOU DEVELOPED A SIMPLIFIED AVOIDED-COST METHODOLOGY?**

A. Yes. I have developed a very simple model, based on BellSouth's publicly available accounting data, to estimate the percentage of its costs that are retail-related. The purpose of offering this model is to provide an independent check on the discounts suggested by AT&T and BellSouth. While the model is simple, I believe that it reasonably estimates BellSouth's retail-related costs, and is certainly adequate as a validation tool.

**Q. PLEASE DESCRIBE YOUR MODEL.**

A. The model recognizes that BellSouth's cost accounts can be assigned into three categories:

I. Retail-Only Accounts

This category consists of accounts that comprise costs that are *clearly* retail-related. These accounts are customer operations marketing and customer operations service, and include expenses such as marketing, sales, customer

services. Source: Source 1995 ARMIS 43-01 Customer Operations/Marketing and Customer Operations/Service Expenses.

II. Mixed Accounts

This category consists of accounts that mix costs that are retail-related with expenses that are not. For example, this category includes the expenses associated with functions such as executive planning, accounts and finance, and external relations. (Source: 1995 ARMIS 43.01 Corporate Operations Expenses). Obviously, some portion of these expenses are directly caused by retailing activity, but the accounting system does not identify the retail-related portion separately.

III. Non-Retail Accounts

This category consists of all accounts not assigned to categories I or II above.

Before proceeding, I acknowledge that even the categories that are identified as exclusively retail (or non-retail) may be slightly contaminated. Attempting to chase every penny, however, is not the point. Just as there may be some non-retail costs in a retail-category, there are surely retail-costs in the category considered non-retail in nature. For example, the simple model treats *all* depreciation expenses as non-retail even though there are obviously retail-related assets being depreciated, such as, for example, the desk and office of the director of marketing. The point is that the imprecision of the simple model works both ways and, as a result, is likely to yield an unbiased estimate.

The relatively easy issue is identifying the accounts that are exclusively one thing or the other. The more difficult issue is determining the *portion* of the expenses in the mixed category that should be considered retail-related.

**Q. HOW DOES THE SIMPLE MODEL ESTIMATE THE RETAIL-PORTION OF THE MIXED CATEGORY?**

A. The model uses a statistical technique (linear regression) to estimate the relationship between the level of expenses in the mixed category (corporate expenses) and retail revenues (revenues less access) using 1995 actual data for the nine BellSouth states. This relationship then is used to estimate the level of corporate expenses that would occur even if no retail revenues existed. When these "unavoidable" corporate expenses are subtracted from the actual amount, the remainder is the "avoidable" amount attributable to retail activity.

The approach is graphically depicted in Figure 1 (attached as Exhibit JPG-2). Figure 1 shows that the "modeled" relationship (the line in Figure 1) closely predicts the actual data (depicted as squares). In fact, the "correlation" in the model is 90% (a perfect "fit" would be 100%).

**Q. WHAT WHOLESALE DISCOUNT IS SUGGESTED BY THE SIMPLE MODEL?**

A. The simple model provides a estimated wholesale discount of just over 39% (39.4% to be exact). This discount is the sum of the retail-only accounts and the portion (from the above analysis) of the mixed-accounts that are associated with retail activity, divided by retail sales. This simple approach provides independent confirmation that the discount estimated by AT&T Witness Lerma's more sophisticated model (41.7%) is reasonable.

**Q. ARE THERE OTHER STANDARDS TO JUDGE THE REASONABLENESS OF THE PROPOSED DISCOUNTS?**

A. Yes. In the long distance market there is a competitive wholesale market that actively solicits retail carriers with attractive wholesale pricing and operational

systems specifically designed for resale. It is useful to consider the discounts that the RBOCs have trumpeted to Wall Street analysts to place the local wholesale discounts discussed in this proceeding into context.

For instance, NYNEX recently indicated to Wall Street analysts that it anticipated a 80% discount on the long distance services it buys at wholesale. (Source: Dean Witter, November 6, 1995.) Further, Merrill Lynch (Merrill Lynch, August 24, 1995) states:

> ... reseller spreads in long distance are already huge (50%) given the existence of four fiercely competitive long distance networks.

Merrill Lynch also predicts that:

> For calls terminating outside an individual RBOC's franchise area, that RBOC will be able to bargain for volume discounts given that its volumes are likely to exceed that of any other long distance customer in that region -- *discounts that are likely to grow over time as RBOC long distance shares and thus negotiating leverage grows.*

Emphasis added.

The point here is simple: where *competition* decides the wholesale discount, that discount is large and is expected to increase.

### *C. The Dilutive Effect of Access Charges on the Wholesale Discount*

**Q. DO YOU BELIEVE THAT THE DISCOUNT ESTIMATED BY AT&T WILL BE SUFFICIENT TO FOSTER LOCAL ENTRY?**

A. No. Even though a discount of this level would apparently comply with the avoided-cost standard of the Act, the Commission should be aware that the interplay between local resale and access service (i.e., the charges BellSouth imposes on long distance companies) will significantly reduce the viability of local resale. This is

because BellSouth would continue to charge a reseller-entrant carrier access charges, even to originate or terminate traffic to the reseller's own customers. As explained below, this arrangement diminishes the attractiveness of local resale.

**Q. PLEASE DESCRIBE THE RELATIONSHIP BETWEEN ACCESS CHARGES AND THE WHOLESALE PRICES.**

A. With local resale, BellSouth remains the access provider even to the customers that have "left" and become customers of the reseller. Because access charges are priced above cost, BellSouth is able to retain much of the profits from a customer, even after it has lost its retail business. In effect, this means that the reseller markets the relatively less profitable service (local service), while BellSouth retains the cream (access service). This situation is somewhat analogous to agreeing with Gillette to market its razor handles, while Gillette retains a monopoly on the blades. Sound competition cannot proceed on this basis.

**Q. WHAT IS THE EFFECT OF BELLSOUTH'S RETAINING AN ACCESS MONOPOLY TO THE RESELLER'S CUSTOMERS?**

A. One way of measuring the impact of this arrangement is to calculate an "effective" wholesale discount that not only considers what the interexchange carrier/local reseller pays for the wholesale local exchange service, but also includes the access charges that the interexchange-carrier/local-reseller continues to pay BellSouth. This "effective" discount can then be compared to the nominal discount; i.e., the discount that considers only the price paid for the wholesale local exchange service. When access changes are included in the equation, the effective discount is reduced substantially. For instance, if the nominal discount is 50%, BellSouth does not receive 50% less revenue for each customer that moves to a reseller because it continues to receive access revenues. For the *average* customer, if the nominal

discount is 50% the effective discount is only 24%. This comparison understates the effect of access, however, since it is calculated for the average customer. The dilutive effect increases as the average toll usage of the reseller increases because higher toll users cause higher access charges to be paid by the long distance carrier to the incumbent LEC. Consequently, even when nominal wholesale discount levels appear large, the realized differential remains relatively small once access charges are taken into consideration.

The magnitude of this problem should not be underestimated. For the purpose of comparison, consider the combined effect of a 40% wholesale discount (as suggested by AT&T) and current access charges. On average, the reseller would gain approximately $9.00 for each subscriber line it attracted, while BellSouth would retain approximately $5.00 per month in access revenues, even from the customers that it lost.

No matter how diligently the Commission removes retail-related costs from BellSouth's wholesale prices, the above-cost pricing of access will distort a reseller's ability to compete with BellSouth. BellSouth recovers its costs in the price of *both* local/retail service and access service, while its competitors must recover all their costs solely through the wholesale discount. As the Department of Justice noted (CC Docket No. 96-98, page 39):

> The economics of a competitive [local] marketplace would not support entry solely on the revenues derived from local exchange service.

Similarly, local competition based on the resale of wholesale services will not succeed so long as the access charges which the local exchange carrier continues to receive from the reseller are a principal source of local profit. Real competition

requires that both the entrant and incumbent face the same cost for the facilities used to provide service and have the same opportunity to recover those costs.

**Q. HOW CAN THE COMMISSION CORRECT THE DISTORTION CAUSED BY THE ABOVE-COST PRICING OF CARRIER ACCESS?**

A. The Commission has two choices. First, the Commission can correctly price access charges so that the source of the distortion is eliminated. As I noted earlier, the competitive environment that the Act intends to ultimately achieve cannot occur unless all carrier-to-carrier arrangements are cost-based and non-discriminatory, including access service. Consequently, addressing access pricing head-on would, in my view, be the preferred approach. In the absence of access reform, however, an alternative approach would be to increase the wholesale discount to recognize that access revenues are retained by the incumbent. In no event should the discount fall below the level justified by the avoided cost.

## IV. UNBUNDLED NETWORK ELEMENTS

### *A. The Nature of Unbundling*

**Q. PLEASE DEFINE "UNBUNDLING."**

A. Unbundling refers to the offering of discrete elements of the incumbent's network as generic functionalities, not as finished services. These network elements are "unbundled," both from each other and from the retail services of the incumbent LEC.

A useful metaphor for unbundling is that of the "Chinese Restaurant." Chinese restaurants typically have extensive menus, detailing dozens of selections. Yet, in the kitchen, only a few basic ingredients are used to create all these choices. Similarly, telecommunications services are typically constructed from a limited number of key ingredients (switching and transmission are the most basic), but the

variety of services (from the consumer's perspective) can be quite extensive. Unbundling represents the availability of the incumbent's network elements as ingredients to other providers so that they may combine these ingredients (sometimes adding their own, sometimes not) to provide their own finished services.

**Q. IS UNBUNDLING THE SAME AS RESALE?**

A. No. Resale involves the purchase of *finished services* by the reseller from the incumbent LEC (albeit at wholesale rates) which are then resold by the reseller. Unbundling is the purchase of underlying *network elements* -- which may be facilities, functions or capabilities -- that can be combined to offer services, either equal to, or different from, the services of the incumbent LEC.

**Q. WHAT ARE THE POTENTIAL BENEFITS FROM UNBUNDLING?**

A. There are three primary benefits. First, opening the incumbent's network to other carriers as a menu of generic ingredients will make robust competition possible despite the dominance, if not complete monopoly, of the incumbent LEC's network. New entrants could fashion service packages not now available, providing consumers additional choices.

Second, unbundling allows carriers to sequentially replace individual components of BellSouth's network as competitive networks slowly develop. The enormity of BellSouth's network necessarily implies that the process of facilities deployment will take time, and will occur unevenly throughout its region. However, through unbundling, carriers will have an opportunity to develop markets, establish services, and attract consumers on a timely basis in the *entire* market, with the process of facilities-deployment following wherever economic.

Third, with unbundling there will be substantially more choices at the end of the process than would result if each individual entrant had to construct network

facilities in order to offer services. Unbundling prevents local network deployment from becoming a prerequisite to offering service, both for today's entrants and new providers that may form in the future. By creating an open entry environment, investment capital can be directed to developing new services and applications, rather than used exclusively to replicate transmission and switching facilities. By reducing, and then keeping, barriers to entry low, the most diverse competitive environment will develop.

Thus, unbundling has the potential for *immediate*, *transitional* and *long lasting* benefits for the market and Florida consumers. What matters most at the end of the process is that multiple carriers have the opportunity to broadly approach the Florida marketplace, designing services which they believe best satisfy the needs of their customers, on an economic basis similar to that of the incumbent LEC, and fully supported by operational systems which will easily accommodate choices by consumers.

A full description of the most fundamental elements that should be unbundled immediately is identified in the testimony of AT&T Witness James Tamplin.

### *B. Network Element Pricing*

**Q. HOW SHOULD NETWORK ELEMENT PRICES BE ESTABLISHED?**

A. Network element prices set at direct economic costs will yield the greatest choice and benefits to Florida consumers. To maximize competition -- that is, to promote an environment that will present Florida consumers with the greatest diversity of pricing plans, calling options, and service features -- it is important that the underlying exchange network be available to *all* retail providers of local exchange services on the same terms, conditions and prices.

There are only two ways to assure that all providers have access to the exchange

network on equivalent terms. The first is to prohibit the network owner from offering competitive services at all. This was the basic approach that underlaid divestiture; for obvious reasons I am not recommending that action here.

In the absence of such structural protection, the only viable mechanism is to establish prices of the underlying network components at their economic resource cost. The key is to make the network available to all providers on equivalent terms. For the incumbent LEC, this is the element's economic cost, i.e., its total service long run incremental cost ("TSLRIC"). So that all providers face the *same* effective cost for the use of a network component, the *price* charged other carriers must be equal to the economic *cost* of the element in question. Dr. Kaserman's testimony provides additional details concerning the appropriateness of TSLRIC pricing for network elements.

**Q. DOES PRICING NETWORK ELEMENTS AT TSLRIC IMPLY THAT BELLSOUTH WOULD NOT BE ALLOWED TO EARN A PROFIT OR COVER ALL OF ITS COSTS?**

A. No. First, economic pricing includes a return on investment sufficient to attract and retain capital. Although commonly referred to as "profit," the "cost of capital" is a legitimate economic cost and is included in TSLRIC.

Second, the economic cost of network elements would include costs associated with planning, engineering and operating BellSouth's network, including costs which are shared by more than one network element (such as the salary of the Operations Director). In the context of retail services, these costs would be viewed as "common," and would not be included in the economic cost of any particular service. Because of this historical context, the Commission may mistakenly assume that the economic costing of network elements would leave a number of "costs"

unrecovered.

Importantly, however, perceptions concerning common costs derived in an environment of *retail* costing are not applicable to the costing of *network elements*. For example, consider the salary of a switch technician. In a typical *retail* cost analysis, this cost would be considered common to each of the BellSouth's retail services that rely (to one extent or another) on the use of local switching. Yet, when calculating the cost of the local switching *element*, the technician's salary is a direct cost and is included in TSLRIC.

Finally, there is a category of common costs -- the costs associated with product development, marketing, and advertising that support BellSouth's retail operations, as well as financial and managerial costs, that would be incurred whether BellSouth owned and managed its network or not. These have no relevance to the costing of network elements because these costs are not incurred to provide network functions. However, this does not mean that these costs will go unrecovered. It only means that BellSouth must be as efficient as its rivals, who must also recover these costs in the prices of their services.

### C. *Access and Local Call Termination*

**Q. ARE ACCESS AND CALL TERMINATION IDENTICAL?**

A. Yes. The functionality to terminate a call is the same whether the call is classified as a "local" call or a "long distance" call. A pricing issue arises, however, because the charges to long distance carriers to terminate toll traffic (i.e., access) are far above cost.

**Q. WHY ARE CALL TERMINATION PRICES SO IMPORTANT?**

A. The prerequisite to any form of telecommunications competition is the ability to complete calls to other subscribers, virtually all of whom (within BellSouth's

exchanges) are served by BellSouth's network. In this regard, the introduction of local competition is not unique. Whether a call is labeled local, or long distance, it still must be terminated to the customer.

**Q. WHY IS IT IMPORTANT THAT RATES FOR TRAFFIC TERMINATION BE THE SAME FOR "LOCAL" AND "LONG DISTANCE" TRAFFIC?**

A. One of the potential benefits of full service competition is competitively determined "local" calling areas. In a competitive market, the "local" calling area should become an important dimension of product differentiation, with carriers offering a variety of price and boundary packages to consumers.

For BellSouth to charge a different price for terminating "long distance" calls and "local" calls, BellSouth would need to require that all competitors adopt the same definition of local calling *and* BellSouth would need to implement auditing systems to correctly assess its charges. Such systems are not only unnecessary, but they would be used solely to accomplish an unreasonable result -- the continued discrimination between local and long distance calling, and to maintain the payment of access charges far above costs to the incumbent LEC.

The preferable approach is to establish non-discriminatory termination rates that do not attempt to differentiate between types of calls. In this way, carriers would be free to decide the scope of their own local calling areas, sizing these areas to match their own perception of the market and to reflect their own pricing and marketing strategies. In this way, the market -- which is to say, *consumers* -- will decide the size and shape of the local calling area as carriers compete along this important dimension of service.

**Q. DOES BELLSOUTH AGREE THAT INTERCONNECTION PRICES SHOULD BE NON-DISCRIMINATORY?**

A. Yes. In BellSouth's Comments to the FCC on these same issues (CC Docket No. 96-98, page 63), BellSouth recommends that:

> The [Federal Communications] Commission should take a comprehensive view leading to a common model for interconnection that is not based on classification of carriers as LECs, IXCs, CMRS providers, or ESPs.

Similarly, this Commission should implement a comprehensive cost-based pricing system which does not discriminate between types of calls or carriers. To the extent that some portion of today's access rates are needed to subsidize particular consumers or services, then that subsidy should be specifically identified and explicitly recovered through a competitively neutral universal service fund.

**Q. IF TERMINATING LOCAL CALLS AND TERMINATING LONG DISTANCE CALLS ARE IDENTICAL, WHY SHOULDN'T THE COMMISSION APPLY ACCESS CHARGES TO LOCAL CALLS?**

A. The problem is that access charges are significantly inflated over cost. Using these inflated charges to establish charges for local termination would simply adopt a "poison both wells" pricing strategy. While the services might be equivalent, the consequences from the excessive rate levels would not be.

Long distance competition has survived despite high access prices for two reasons. First, incumbent LECs could not provide long distance services and, as a result, retail price levels reflected that all providers faced the same (albeit high) cost for this input. Second, long distance prices and access charges are both measured. Therefore, access costs and revenues both grow or diminish with traffic volumes. Neither of these conditions holds true in the local exchange marketplace. Entrants will have to compete with BellSouth on day one, and BellSouth's cost to offer local

service is the economic cost of network usage, not the access charge. Second, local exchange prices in Florida are flat-rated, and imposing on BellSouth's rivals a cost-structure directly at odds with retail rates will place them at a disadvantage when serving consumers with relatively high local calling patterns.

**Q. HOW SHOULD THE COMMISSION ESTABLISH LOCAL CALL TERMINATION RATES UNTIL IT IS ABLE TO CORRECTLY ESTABLISH ACCESS CHARGES?**

A. The Commission should establish cost-based termination rates for local traffic as outlined in AT&T Witness Ellison's testimony. and require that such charges be reciprocally applied. These cost-based termination charges should then become the target rate levels for all access services. In the interim, the Commission should rely on a bill and keep system.

## V. OPERATIONAL BARRIERS TO ACHIEVING CUSTOMER CHOICE

**Q. HOW DO OPERATIONAL ISSUES AFFECT CUSTOMERS AND THEIR ABILITY TO BENEFIT FROM LOCAL COMPETITION?**

A. There are two ways that operational questions directly will impact consumer perceptions concerning local competition. In order for local competition to be viewed as a success:

* it must be easy for *consumers* to change local carriers, at least as easy as the PIC-change process they are now familiar with, and
* it must be easy for *carriers* to serve consumers quickly and with a minimum of network disruption.

Only if these conditions are satisfied will the market changes contemplated by the Act roll out smoothly in the eyes of consumers.

*A. Supporting Customer Choice*

**Q. WHY IS IT IMPORTANT FOR OPERATING SYSTEMS TO BE ABLE TO EASILY ACCOMMODATE CONSUMER CHOICES?**

A. When the Act is fully implemented, today's familiar separation between local and long distance companies will be replaced with many consumers choosing a full service provider for both their local and long distance needs. A primary motivation for full service (i.e., one-stop shopping) competition will be convenience. This may seem obvious, but the benefits of full service competition cannot be realized if *moving* to a full service provider is inconvenient and disruptive.

With this in mind, it is useful to compare the relative ease and convenience that consumers would experience when choosing between BellSouth and any other full service provider, including their existing long distance carrier. This is the most relevant comparison, because these carriers today share the *same* customer base and thus are most likely to approach these customers with the goal of becoming their full service provider.

**Q. ARE THE EXISTING PROCESSES USED TO IMPLEMENT CONSUMER CHOICES AMONG LONG DISTANCE PROVIDERS AT ALL COMPARABLE TO LOCAL SERVICES?**

A. No. The process used to transfer a customer to a new long distance company, the PIC-change process, is automated, inexpensive and sized to handle large demands. Significantly, it is also well tested, having been used for more than a decade, through countless product introductions, advertising campaigns, and marketing initiatives. In contrast, the "process" used to change local providers is unknown and, in any environment where a physical circuit rearrangement is necessary, inherently more complicated and problematic.

One measure of comparison is the charge imposed on a customer selecting between two full service providers -- its existing local exchange carrier now offering long distance services, and its long distance carrier now offering local services. If a customer leaves its long distance carrier to obtain a full service package from BellSouth, BellSouth would charge $1.49 per line (the PIC-change fee). Conversely, under the agreement BellSouth recently announced with ICI, if the same customer shifted its local service to its long distance carrier for a full service package, BellSouth would impose a non-recurring charge of $140.00 just for the unbundled loop. If other network elements are needed (and, in most cases, they would be) this non-recurring charge would increase.

**Q. WHAT MUST OCCUR FOR COMPETITION TO SUCCEED?**

A. Consumers must be able to move between local service providers with the same ease that they now move between long distance carriers. This is necessary both for consumers to perceive this market change as beneficial, and to assure that both local and long distance carriers have a fair opportunity to become the consumer's full service provider.

Second, however, a PIC-like customer migration process must be available both for local services resale *and* the unbundled network element approaches. Without the ability to honor customer changes inexpensively, the network element option could only be used to serve selected customers and the advantages of this option would be limited to the few.

***B. Ordering Combinations of Unbundled Network Elements***

**Q. HOW CAN UNBUNDLED NETWORK ELEMENTS BE USED TO PROVIDE LOCAL SERVICES WITH THE LEAST DISRUPTION TO CONSUMERS?**

A. In order for consumers to benefit from competition, carriers must be able to easily

obtain and configure the unbundled network elements that they will use to provide services. The key to rapid competition and easy customer choice is the ability of entrants to provide service using unbundled local switching, frequently in combination with other elements. With unbundled local switching, customers can be moved between different providers without physically reconfiguring the service to the customer.

**Q. CAN THE UNBUNDLED LOOP, BY ITSELF, PROVIDE THIS FLEXIBILITY?**

A. No. Unbundled loops, while important, are unlikely to support broad-scale, mass-application, entry into the local services market.

First, the unbundled-loop configuration is viable only where a collocated network exists. Even where these networks are economically attractive, they now do not exist and it will take time for them to be constructed and made operational.

Second, and more permanently, the unbundled-loop configuration easily cannot effect large changes in market share between alternative providers because physical changes in the network will be necessary -- i.e., the actual loop to the customer must be reconfigured from BellSouth's local switch to a competitor's every time a customer changes a local service provider.

As a result, unbundled loops (by themselves) are unlikely to foster a fully competitive environment. Instead, carriers will need to order combinations of network elements, typically involving unbundled local switching, to provide competitive services to consumers.

**Q. HOW WILL CARRIERS BE ABLE TO MOVE CUSTOMERS MORE RAPIDLY USING UNBUNDLED LOCAL SWITCHING?**

A. The answer is using the network to move customers without manual changes in the

physical connections to these customers. This condition is satisfied by a network configuration which combines several network elements, including local switching, to provide service. Customers can easily change among local carriers who are providing services using the incumbent LEC's unbundled local switching element, because the customer's lines need not be reconfigured to a different switch for service. This arrangement is sometimes referred to as the "platform" configuration.

**Q. WHAT IS THE "PLATFORM" CONFIGURATION?**

A. The platform configuration is the combined purchase of unbundled switching and an unbundled loop (frequently in combination with transport and signaling) to form a basic exchange platform to offer local exchange and exchange access services. The critical element is correctly defining unbundled local switching to enable the new entrant to: (a) activate (more precisely, to *order* that the incumbent LEC activate) the various features on the customer's loop that defines its local services, (b) define traffic routing as alternative networks become available (although, initially, it is likely that local traffic would be terminated using the incumbent LEC's network), and (c) create the records to bill the end-user for local exchange service and other carriers for exchange access and interconnection service. By providing services using a combination of unbundled loops and switching, several of the operational barriers presented by utilizing unbundled loops alone can be overcome. Again, the basic definition of unbundled local switching is provided in more detail in the testimony of AT&T Witness James Tamplin.

**Q. HOW DOES THIS CONFIGURATION OVERCOME THE LIMITATIONS ASSOCIATED WITH THE UNBUNDLED LOOP ELEMENT DESCRIBED EARLIER?**

A. First, the platform configuration efficiently uses the existing network to obtain

switching and call termination. As a result, its value is not artificially limited to central offices where a carrier has established a collocated network node, nor does it require a duplication of BellSouth's preexisting interoffice and local switching matrix as a prerequisite to entry.

Second, customers can easily shift between local providers using the platform configuration because the existing exchange line does not need to be reconfigured to provide service. Because the underlying facility arrangement is unaffected, operational systems should be able to accommodate market changes with an ease comparable to the PIC-change process used in the long distance industry.

Third, one of the benefits of the platform configuration is that it solves (at least temporarily) the entry barrier presented by the absence of number portability. Because the new entrant's customers would continue to be served by the incumbent's local switch, there is no need for consumers to change phone numbers as they move between local providers.

**Q. ARE THERE OTHER BENEFITS FROM THIS ARRANGEMENT?**

A. Yes. The platform approach provides every carrier an ability to design its own services, constrained only by its own imagination and the inherent ability of the network. Unbundled local switching enables a carrier to purchase switching capacity as a generic ingredient and then determine which features and capabilities of the switch it will offer as part of its finished local services. The advantages of this approach will become even more pronounced as the "Advanced Intelligent Network" ("AIN") call processing model is introduced.

AIN uses a system of "triggers" to access remote databases for call processing instruction. For instance, the "off-hook trigger" automatically suspends call processing at the switch when the customer lifts its receiver. The trigger then

queries a service control database for additional instructions. One way of looking at AIN is that it takes the *intelligence* out of the network switch, and uses the switch simply to execute call processing. In an AIN environment, each entrant will be able to define unique new services for their particular customers, even if they all use the same local switch to provide dial-tone and provide the first point of switching.

In addition, the platform configuration allows each carrier the flexibility to provide its own local exchange services to end-user customers, and exchange access services to other carriers, achieving the same status and opportunities as any other local telephone provider. Competition across all prices and services would then be possible.

Of course, as noted at the beginning of this Section, none of these benefits are possible unless consumers are able to easily implement a choice in carriers. That is why it is so important to implement the operating systems that are described further in the testimony of AT&T Witness James Tamplin.

## VI. SUMMARY

**Q. PLEASE SUMMARIZE YOUR TESTIMONY.**

A. The Commission's decision in this proceeding may be the most significant in its history as a regulator of telecommunication services. The Act has the potential of bringing substantial competitive benefits to Florida consumers, providing them, for the first time, direct say in the services they are offered through the power of choice. Realizing these benefits, however, can occur only if the entry tools described in the Act become practical, working vehicles that entrants may use to provide that choice. This, in a sentence, is the fundamental objective of this arbitration -- to provide AT&T (and other entrants) the tools they will need to provide local exchange services in competition with BellSouth. That AT&T's request encompasses the full

range of entry tools provided by the Act increases the complexity of the proceeding, but it also promises to provide greater and broader benefits than the limited requests that have come before the Commission to date.

What do entrants need? Simply this: the ability to resell wholesale equivalents of BellSouth's retail services at wholesale rates; the ability to purchase and combine a core list of unbundled network elements, correctly priced at economic cost; and the ability to terminate traffic at cost-based, reciprocally applied, charges. Each supported by an operational infrastructure designed for a multi-vendor local marketplace. This is what the Act provides for, this is what the entrant is entitled to, and this is what the Commission must see gets implemented.

Why? First and most obviously, to give consumers choice. But also, because the Act portends BellSouth's eventual entry into the long distance market. There, BellSouth will have access to wholesale long distance services and network elements at competitive prices. There, BellSouth will find an operational infrastructure specifically designed to support a multi-vendor market, including systems to easily implement customer choices. In short, BellSouth will find the long distance equivalent to all that the Act now requires that BellSouth offer others.

The Commission has long recognized its role as a surrogate for competition. Historically, this role has been limited to the retail market. However, under the Act, the Commission's role as a competitive surrogate shifts to the wholesale level, because it is there that BellSouth's network monopoly poses the greatest risk. The Commission's role now includes making this network available so that multiple carriers may use it to offer retail services to consumers.

It is this final linkage to consumer prices that the Commission should not lose sight of as it approaches the issues in this arbitration. Establishing the correct carrier-to-

carrier arrangements is complex, but, again, the ultimate beneficiaries will be Florida consumers.

**Q. DOES THIS CONCLUDE YOUR TESTIMONY?**

A. Yes.