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**DIRECT TESTIMONY OF  
JAMES A. TAMPLIN, JR.**

**AT&T COMMUNICATIONS OF THE SOUTHERN STATES, INC.  
BEFORE THE  
FLORIDA PUBLIC SERVICE COMMISSION  
DOCKET NO. 960833-TP**

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

A. My name is James A. Tamplin, Jr. My business address is 1200 Peachtree Street, NE, Atlanta, Georgia, 30309-3579.

**Q. PLEASE DESCRIBE YOUR EDUCATIONAL AND PROFESSIONAL BACKGROUND AND EXPERIENCE.**

A. I graduated from the United States Naval Academy with a degree of Bachelor of Science in Engineering. I also have a Masters of Science Degree in Management from the United States Naval Postgraduate School in Monterey, California and a Masters of Science Degree in Information Technology from the George Washington University in Washington, D.C. I began my career with AT&T Long Lines in 1979 as a Supervisor in the Corporate Communications organization. In this assignment, I was responsible for the data and voice communications for the Southern Region Network Operations Center, three Engineering and Administrative Data Acquisition System Centers, and the 4ESS locations throughout the Southeastern United States. I became an Operations Supervisor responsible for all private line service, including DDS and 800, within the state of Mississippi in 1980. In 1982, I joined the Interstate Tariff group located in New Jersey and was involved in the planning of AT&T's interstate tariffs for dedicated services. In 1983, I joined AT&T's Southern Region Engineering Staff and functioned as the expert technical witness for all of the nine

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1 Southeastern states in hearings before the various state public service commissions on  
2 AT&T's intrastate certification and on the equal access tariff. I assumed  
3 responsibility for the planning of AT&T's dedicated network in the fourteen Southern  
4 states in 1985. In this role, I became intimately involved in the network planning  
5 (facility and 5ESS switch) for the Department of Defense's Defense Commercial  
6 Telecommunications Network (DCTN), followed by the General Service  
7 Administration's Federal Telecommunications System (FTS2000). In 1988, I joined  
8 the project management group in AT&T's FTS2000 implementation group, and I  
9 eventually had responsibility for the eastern half of the United States, including  
10 Puerto Rico and the U.S. Virgin Islands. In the period 1990 to 1994, I transitioned  
11 through a number of jobs on the FTS2000 project, including responsibility for the  
12 facility and switch engineering of the entire network, establishing and managing the  
13 combined order receipt, engineering and provisioning work center, and finally  
14 establishing and managing the process engineering/management group for the project.  
15 In 1994, with the staffing of AT&T's organization to bid on the replacement contract  
16 for DCTN, I established the process and operations systems engineering/management  
17 group. In this capacity I became a member of AT&T's core team in developing its  
18 initial SONET backbone ring deployment plan. In January of 1996, I assumed my  
19 present responsibilities in Atlanta, Georgia.

20 **Q. PLEASE DESCRIBE YOUR CURRENT EMPLOYMENT AND THE SCOPE**  
21 **OF YOUR RESPONSIBILITIES.**

22 **A.** Currently, I am responsible for managing a group of AT&T technical specialists who  
23 are a part of AT&T's Local Infrastructure and Access Management organization.  
24 Our primary function is to assist AT&T's Local Services Division by providing  
25 technical support, including the introduction of testimony in regulatory proceedings;

1 chairing industry workshops; and briefing/training individuals internal and external to  
2 AT&T who are involved in regulatory, legislative, or judicial proceedings.

3 **Q. HAVE YOU TESTIFIED PREVIOUSLY BEFORE ANY STATE PUBLIC**  
4 **SERVICE COMMISSIONS; AND, IF SO, BRIEFLY DESCRIBE THE**  
5 **SUBJECT(S) OF YOUR TESTIMONY.**

6 **A. I have testified before state commissions in Florida, Georgia, Alabama, Mississippi,**  
7 **Louisiana, North Carolina, South Carolina, Tennessee, and Kentucky on the issue of**  
8 **AT&T's certification for the provisioning of intraLATA/interLATA services and on**  
9 **the issue of equal access tariffs in the 1983 to 1985 time period. I also have filed**  
10 **testimony in at least one of these states on AT&T's ability to provide intraLATA**  
11 **services under the FTS2000 contract.**

12 **Q. WHAT IS THE PURPOSE OF YOUR TESTIMONY IN THIS**  
13 **PROCEEDING?**

14 **A. The purpose of my testimony is to describe the unbundled network elements that**  
15 **AT&T has requested that BellSouth make available to AT&T, and which BellSouth,**  
16 **as incumbent local exchange carrier ("LEC"), must make available to satisfy the**  
17 **requirements of the Federal Telecommunications Act of 1996 (the "Act").**  
18 **Specifically, I will: (1) describe unbundling and its role under the Act; (2) identify the**  
19 **twelve elements of BellSouth's network which AT&T has requested be unbundled and**  
20 **explain why AT&T needs the functionalities of these unbundled network elements in**  
21 **order to be competitive in the provision of local services; (3) explain why AT&T**  
22 **must be allowed to combine unbundled network elements as needed to provide**  
23 **consumers with choices for local service; and (4) identify those network elements and**  
24 **other requirements that BellSouth has refused to make available to AT&T, and**  
25 **discuss why each is technically feasible and necessary to effectuate the Act's**

1 procompetitive purpose.

2 I. INTRODUCTION

3 Q. WHY DID AT&T REQUEST ARBITRATION ON UNBUNDLED  
4 NETWORK ELEMENTS?

5 A. AT&T requested arbitration on unbundled network elements because BellSouth  
6 refuses to provide access to all of the unbundled network elements and combinations  
7 that AT&T requested in its proposed Interconnection Agreement. AT&T's proposed  
8 Interconnection Agreement is Attachment 4 to AT&T's Petition For Arbitration, filed  
9 July 17, 1996. BellSouth's position rests in large part on its belief that access to most  
10 of these network elements is not "technically feasible." As I explain in detail below,  
11 BellSouth's position is incorrect because it mistakes logistical and operational  
12 concerns for technical infeasibility. In addition, BellSouth will not permit AT&T to  
13 combine network elements in the manner required by AT&T to offer consumers  
14 choices in telephone services. This restriction not only is contrary to what the Act  
15 explicitly requires of BellSouth, but also, in many ways, would deny consumers the  
16 ability to choose AT&T. Lastly, BellSouth refuses to provide AT&T with several  
17 additional requirements AT&T needs to utilize these unbundled network elements.  
18 In summary, BellSouth's position will result in a scenario that is wholly insufficient  
19 and inadequate to meet the business needs for the provision of services AT&T seeks  
20 to offer. AT&T intends to buy unbundled network elements and to use those elements  
21 either alone, or together with services purchased for resale, or with AT&T's own  
22 facilities or with third party-owned facilities, to provide retail services in Florida.  
23 Were the Commission to adopt BellSouth's position on unbundled network elements,  
24 it would make it impossible for AT&T to compete fully in the local market, leaving  
25 consumers without the benefits Congress intended.

1 Q. WHAT DOES "UNBUNDLED NETWORK ELEMENT" MEAN?

2 A. Under the Act, BellSouth is obligated "to provide, to any requesting  
3 telecommunications carrier for the provision of a telecommunications service,  
4 nondiscriminatory access to network elements on an unbundled basis at any  
5 technically feasible point on rates, terms and conditions that are just, reasonable and  
6 nondiscriminatory." 47 U.S.C. § 251(c)(3). This section further directs BellSouth to  
7 "provide such unbundled network elements in a manner that allows requesting carriers  
8 to combine such elements in order to provide such telecommunications service." Id.  
9 The Act defines a network element to be " a facility or equipment used in the  
10 provision of a telecommunications service," including the "features, functions, and  
11 capabilities that are provided by means of such facility or equipment, including  
12 subscriber numbers, databases, signaling systems, and information sufficient for  
13 billing and collection or used in the transmission, routing, or other provision of a  
14 telecommunications service." 47 U.S.C. § 153(29).

15 An unbundled network element results from identifying and disaggregating the local  
16 exchange network into a set of elements or basic network functions, which can be  
17 individually provided, costed, priced, maintained, and combined in such a way as to  
18 provide service offerings. The unbundled network elements either can be physical  
19 facilities and/or features, functions, and capabilities provided by those facilities.  
20 Unbundled network elements are the piece parts of the network whose functionality is  
21 required to provide AT&T the network features and capabilities it needs to offer  
22 competitive services for the benefit of consumers.

23 Q. WILL THE DESCRIPTION OF UNBUNDLED NETWORK ELEMENTS  
24 PROVIDED IN THIS TESTIMONY CHANGE OVER TIME?

25 A. Yes. While AT&T's present minimum set of network elements are described below,

1 unbundling is not a static concept. As local competition develops, specific carrier  
2 needs, market developments, or advances in technology used to provide services will  
3 create additional circumstances warranting further unbundling. Thus, AT&T's list of  
4 unbundled network elements is not meant to be exhaustive, but instead should be  
5 viewed as the "baseline" unbundling immediately required under the Act.

6 **II. AT&T'S REQUESTS FOR UNBUNDLED NETWORK ELEMENTS**

7 **Q. WHAT ARE THE UNBUNDLED NETWORK ELEMENTS THAT AT&T**  
8 **HAS REQUESTED FROM BELLSOUTH?**

9 **A. AT&T has requested that BellSouth make the following unbundled network elements**  
10 **available under the terms of AT&T's Interconnection Agreement. Attached as**  
11 **Exhibit JAT-1 to my testimony is a schematic depicting the local network. Attached**  
12 **as Exhibit JAT-2 is a series of graphic representations of the twelve requested**  
13 **unbundled network elements and the use of each in providing local services to**  
14 **consumers. Today, these elements are available exclusively or almost exclusively**  
15 **from BellSouth, and must be unbundled and made available for use by AT&T either**  
16 **individually or in a combination with other elements:**

- 17 1. Network Interface Device
- 18 2. Loop Distribution
- 19 3. Loop Concentrator/Multiplexer
- 20 4. Loop Feeder
- 21 5. Local Switching
- 22 6. Operator Systems
- 23 7. Dedicated Transport
- 24 8. Common Transport
- 25 9. Tandem Switching

- 1                   10.    Signaling Link Transport  
2                   11.    Signal Transfer Points  
3                   12.    Service Control Points/Databases

4   **Q.    PLEASE DESCRIBE THE LOCAL LOOP FACILITY.**

5   **A.    The Local Loop Facility provides a transmission pathway between the subscriber's**  
6           **residence or business and his or her local serving wire center. The Local Loop**  
7           **Facility can be subdivided into four sub-loop network elements: (1) the Network**  
8           **Interface Device, (2) Loop Distribution, (3) the Loop Concentrator/Multiplexer, and**  
9           **(4) the Loop Feeder.**

10                   1.    **NETWORK INTERFACE DEVICE**

11   **Q.    PLEASE DEFINE THE NETWORK INTERFACE DEVICE AND ITS**  
12           **FUNCTION.**

13   **A.    The Network Interface Device ("NID") is the physical location where facilities from**  
14           **the customer's local service provider of choice connect to the inside wiring at the**  
15           **customer's premises. The NID also provides a protective ground connection for the**  
16           **Loop. For further description and the technical and interface requirements for the**  
17           **NID, see AT&T's Interconnection Agreement, § 30.9.1.1, and Attachment 2, § 4.1.**

18   **Q.    PLEASE EXPLAIN THE NEED FOR UNBUNDLING THE NID.**

19   **A.    AT&T requires access to the NID to connect efficiently with the inside wiring at the**  
20           **customer's premises. Without access to BellSouth's NID, AT&T and other new**  
21           **entrants will not be able to make use of any existing spare terminals in BellSouth's**  
22           **NID, or lift BellSouth's Loop Distribution wire within the NID in order to ground that**  
23           **wire, thereby making terminals available for use by the new entrants. Without**  
24           **unbundling the NID, AT&T and other new entrants that provide their own Loop**  
25           **Distribution facilities would be required to install their own NID on the customer's**

1 premises (including hanging a new box and fishing for the wires in the walls) each  
2 time the customer changed his or her local service provider. Access to the unbundled  
3 NID also is necessary to connect AT&T with the electrical grounding of the  
4 telecommunications interface to the customer's premises.

5 **2. LOOP DISTRIBUTION**

6 **Q. PLEASE DEFINE LOOP DISTRIBUTION AND ITS FUNCTION.**

7 **A. Loop Distribution is the network element that connects the customer to the local  
8 network by connecting the customer's NID to either the Feeder Distribution Interface  
9 or the Loop Concentrator/Multiplexer. The Feeder Distribution Interface is a device  
10 that terminates the Loop Distribution and the Loop Feeder, and cross-connects them  
11 in order to provide a continuous transmission path between the NID and a telephone  
12 company central office. For loop plant that contains a Loop  
13 Concentrator/Multiplexer, the Loop Distribution may terminate at the Feeder  
14 Distribution Interface (if one exists), or at a termination and cross-connect field  
15 associated with the Loop Concentrator/Multiplexer. This termination and cross-  
16 connect field may be in the form of an outside plant distribution closure, remote  
17 terminal or fiber node, or an underground vault. The Loop Distribution may be  
18 copper twisted pair cable, coax cable, or single or multi-mode fiber optic cable. For  
19 further description and the technical and interface requirements for Loop Distribution,  
20 see AT&T's Interconnection Agreement, § 30.9.1, and Attachment 2, § 4.2.**

21 **Q. EXPLAIN THE NEED FOR UNBUNDLING LOOP DISTRIBUTION.**

22 **A. AT&T requires unbundling of Loop Distribution, for example, where AT&T deploys  
23 local fiber rings and its own switches, but does not own the facilities to span the "last  
24 mile" to the customer's premises. In this scenario, AT&T could use its fiber rings to  
25 transport traffic between its switch and BellSouth's Loop Distribution, in conjunction**



1 with a Loop Concentrator/Multiplexer, to deliver traffic between AT&T's switch and  
2 the customer's premises. In addition, in some settings, particularly apartment  
3 developments and office buildings, the Loop Concentrator/Multiplexer is located in  
4 the building itself. Accordingly, use of BellSouth's Loop Concentrator/Multiplexer  
5 and Loop Distribution plant may be the most efficient way for AT&T to reach  
6 individual customers in these situations.

7 **3. LOOP CONCENTRATOR/MULTIPLEXER**

8 **Q. PLEASE DEFINE THE LOOP CONCENTRATOR/MULTIPLEXER AND**  
9 **ITS FUNCTION.**

10 **A.** The Loop Concentrator/Multiplexer is the network element that provides several  
11 functions needed to assist in transmitting calls across the network. It converts analog  
12 signals coming in from customers to digital signals that are sent across the network.  
13 It also concentrates the traffic from the many lines coming in from end-users to fewer  
14 lines going out to the switch. Lastly, to accommodate large volumes of traffic using  
15 fewer facilities, the Loop Concentrator/Multiplexer intersperses the digital signals  
16 from calls into one high speed digital signal. For further description and the technical  
17 and interface requirements for the Loop Concentrator/Multiplexer, see AT&T's  
18 Interconnection Agreement, § 30.9.2, and Attachment 2, § 5.

19 **Q. EXPLAIN THE NEED FOR UNBUNDLING THE LOOP**  
20 **CONCENTRATOR/MULTIPLEXER.**

21 **A.** AT&T needs access to BellSouth's unbundled Loop Concentrator/Multiplexer  
22 because it provides capabilities that are crucial to AT&T's ability to efficiently access  
23 its customers in various circumstances. In order to assure that carriers which need  
24 only the concentrator/multiplexer and feeder functionality (for example, where AT&T  
25 buys distribution from a cable television provider) do not pay for the loop distribution

1 functions, and also to assure that carriers which need only the  
2 concentrator/multiplexer and loop distribution functions (for example, where AT&T  
3 uses its fiber rings to transport traffic between its switch and the customer) are not  
4 required to pay for the loop feeder functions, BellSouth should be required to  
5 unbundle the Loop Concentrator/Multiplexer element from each of the other loop  
6 elements. This will effectively permit AT&T to purchase only the specific functions  
7 required to provide local services to consumers.

8 **4. LOOP FEEDER**

9 **Q. PLEASE DEFINE THE LOOP FEEDER AND ITS FUNCTION.**

10 **A.** The Loop Feeder connects the customer lines at the Feeder Distribution Interface or  
11 the Loop Concentrator/Multiplexer, if one is in place, with the local switch. For  
12 further description and the technical and interface requirements for the Loop Feeder,  
13 see AT&T's Interconnection Agreement, § 30.9.3, and Attachment 2, § 6.

14 **Q. EXPLAIN THE NEED FOR UNBUNDLING THE LOOP FEEDER.**

15 **A.** AT&T needs unbundled access to the Loop Feeder to gain access to its customers in  
16 situations where it has deployed its own distribution plant or has purchased that  
17 functionality from another vendor, but will use BellSouth's Feeder capabilities (with  
18 or without BellSouth's Loop Concentrator/Multiplexer) to transport traffic to and  
19 from BellSouth's central office. This might occur, for example, where AT&T wires  
20 a new housing subdivision or corporate campus complex, but does not have its own  
21 switch or its own transmission facilities to that switch.

22 **5. LOCAL SWITCHING**

23 **Q. PLEASE DEFINE LOCAL SWITCHING AND ITS FUNCTION.**

24 **A.** Local Switching is the network element that provides many of the fundamental  
25 functionalities of the local network. Among other key functions, it provides the

1 customer with dialtone for each line; provides customer features such as call waiting  
2 and call forwarding; provides for the proper routing of a call; provides access to  
3 Advanced Intelligence Network ("AIN") triggers to customize call processing; and  
4 creates data necessary to compile a customer's bill. Local Switching also provides the  
5 functionality to connect the appropriate originating lines or trunks wired to a desired  
6 terminating line, platform, or trunk. Local Switching thus includes all of the features,  
7 functions, and capabilities that any BellSouth switch is capable of providing.

8 In addition to this voice transmission capability, the Local Switching network element  
9 also provides a second capability -- data switching. Data switching is used to  
10 terminate, concentrate, and switch data traffic from customer premises equipment in a  
11 digital format to its final destination. Access to the unbundled Local Switching  
12 network element includes the freedom for AT&T, as needed, to buy access to either of  
13 the two capabilities this element provides. For further description and the technical  
14 and interface requirements for Local Switching, see AT&T's Interconnection  
15 Agreement, § 30.9.4, and Attachment 2, § 7.

16 **Q. EXPLAIN THE NEED FOR UNBUNDLING LOCAL SWITCHING.**

17 **A.** Unbundled Local Switching is key to the efficient creation of new and improved  
18 services for consumers. Local Switching is the entity within the network that holds  
19 many of the functionalities that will allow AT&T to provide innovations to consumers  
20 and differentiate itself from its competitors. Therefore, AT&T needs the option either  
21 to buy this unbundled network element from BellSouth or, alternatively, to provide its  
22 own local switch element when building such a facility is the most efficient solution.

23 **6. OPERATOR SYSTEMS**

24 **Q. PLEASE DEFINE OPERATOR SYSTEMS AND ITS FUNCTION.**

25 **A.** Operator Systems provides operator and automated call handling and billing, special

1 services, customer telephone listings, and optional call completion services. Operator  
2 Systems provides two types of capabilities: Operator Services and Directory  
3 Services, each of which are described in detail below.

4 Operator Services provides: (1) operator handling for call completion (for example,  
5 collect, third number billing, and manual credit card calls); (2) operator or automated  
6 assistance for billing after the customer has dialed the called number (for example,  
7 credit card calls); and (3) special services including, but not limited to, Busy Line  
8 Verification and Emergency Line Interrupt, Emergency Agency Call, Operator-  
9 assisted Directory Assistance, and Rate Quotes.

10 Directory Services includes storing and maintaining customer information and  
11 providing local customer telephone number listings with the option to complete the  
12 call at the caller's discretion. For further description and the technical and interface  
13 requirements for Operator Systems, see AT&T's Interconnection Agreement, §  
14 30.9.5, and Attachment 2, § 8.

15 **Q. EXPLAIN THE NEED FOR UNBUNDLING OPERATOR SYSTEMS.**

16 **A.** Unbundled Operator Systems will benefit consumers by allowing AT&T to create  
17 new services (such as foreign language dependent services and innovations based on  
18 voice recognition capabilities) as well as by combining AT&T's world-class operator  
19 services platform with BellSouth's switches. In order for AT&T to attract customers,  
20 it must provide a full complement of local services, including services that rely upon  
21 Operator Systems. Many new entrants may not be able to duplicate the entire range  
22 of BellSouth's Operator Systems functionality and therefore would require the use of  
23 BellSouth's unbundled Operator Systems platforms. At the same time, some new  
24 entrants, such as AT&T, that have already invested or will choose to invest in  
25 Operator Systems should be permitted to maximize the value of such investments and

1 not be required to purchase the use of BellSouth's Operator Systems when using the  
2 unbundled BellSouth Local Switching element.

3 **Q. PLEASE DESCRIBE THE TRANSPORT NETWORK ELEMENTS.**

4 **A.** The next three network elements are Transport elements. Transport elements provide  
5 the functionality to connect, for example, an end office or Tandem Switch with  
6 another end office, Tandem Switch or a long distance carrier's Point of Presence. The  
7 end offices, Tandem Switches and Points of Presence may belong to the subscribing  
8 new entrant, other entrants, long distance carriers, and/or the incumbent LEC. This  
9 allows subscribers to reach each other even when they are not served out of the same  
10 switch or by the same carrier. There are three Transport network elements that must  
11 be made available on an unbundled basis -- Dedicated Transport, Common Transport,  
12 and Tandem Switching.

13 **7. DEDICATED TRANSPORT**

14 **Q. PLEASE DEFINE DEDICATED TRANSPORT AND ITS FUNCTION.**

15 **A.** Dedicated Transport is an interoffice transmission path between AT&T designated  
16 locations, such as BellSouth's central offices or other equipment locations, AT&T  
17 network components, other carrier network components, or customer premises.  
18 Dedicated Transport is used exclusively by a single carrier for the transmission of its  
19 traffic. For further description and the technical and interface requirements for  
20 Dedicated Transport, see AT&T's Interconnection Agreement, § 30.9.7, and  
21 Attachment 2, § 10.

22 **8. COMMON TRANSPORT**

23 **Q. PLEASE DEFINE COMMON TRANSPORT AND ITS FUNCTION.**

24 **A.** Common Transport is an interoffice transmission path that links together unbundled  
25 network elements and carries the traffic of more than one carrier. It provides this

1 path only for the duration of the connection. For further description and the technical  
2 and interface requirements for Common Transport, see AT&T's Interconnection  
3 Agreement, § 30.9.6, and Attachment 2, § 9.

4 9. TANDEM SWITCHING

5 **Q. PLEASE DEFINE TANDEM SWITCHING AND ITS FUNCTION.**

6 **A. Tandem Switching is the network element that establishes a communications path**  
7 **between two switching offices through a third switching office (the Tandem Switch).**  
8 **This path lasts only for the duration of the connection. Tandem switching is used**  
9 **when it is either impractical or uneconomical to connect multiple end offices and/or**  
10 **Points of Presence directly to each other. For further description and the technical**  
11 **and interface requirements for Tandem Switching, see AT&T's Interconnection**  
12 **Agreement, § 30.9.11, and Attachment 2, § 14.**

13 **Q. EXPLAIN THE NEED FOR UNBUNDLING THE TRANSPORT NETWORK**  
14 **ELEMENTS.**

15 **A. Unbundling the three Transport network elements described above will benefit**  
16 **consumers by allowing AT&T and other new entrants to make economically efficient**  
17 **decisions concerning investment in network interconnections and facilities needed to**  
18 **exchange traffic with BellSouth, other local exchange carriers, and long distance**  
19 **carriers. AT&T and other new entrants may use the various Transport network**  
20 **elements to connect any two network components to one another, be they BellSouth's**  
21 **unbundled network elements, AT&T facilities, or third-party facilities. The choice**  
22 **AT&T will make between buying Dedicated Transport, on the one hand, and**  
23 **Common Transport and Tandem Switching on the other, will be driven by the relative**  
24 **cost of the options and the amount of traffic that will be carried.**

25 **Q. PLEASE DESCRIBE THE SIGNALING NETWORK ELEMENTS.**

1 A. Signal System 7 ("SS7") signaling is used in the call set-up process to pass  
2 information on the routing and billing of calls within a carrier's network and between  
3 carriers. For example, signaling systems are used to provide validation and other  
4 information for calling card and other operator services calls, and to route 800  
5 number calls to the correct carrier and end user. Signaling systems also enable  
6 carriers to efficiently create and provide AIN services which will add calling features  
7 and value to consumers. Network signaling is provided through the use of three  
8 network elements that should be made available on an unbundled basis -- Signaling  
9 Link Transport, Signal Transfer Points, and Service Control Points/Databases.

10 **10. SIGNALING LINK TRANSPORT**

11 **Q. PLEASE DEFINE SIGNALING LINK TRANSPORT AND ITS FUNCTION.**

12 A Signaling Link is a set of dedicated transmission paths which carry signaling  
13 messages between carriers' switches and signaling networks. For further description  
14 and the technical and interface requirements for Signaling Link Transport, see  
15 AT&T's Interconnection Agreement, § 30.9.8.1, and Attachment 2, § 11.

16 **11. SIGNAL TRANSFER POINTS**

17 **Q. PLEASE DEFINE SIGNAL TRANSFER POINTS AND THEIR FUNCTION.**

18 A. Signal Transfer Points are signaling message switches that interconnect Signaling  
19 Links to route signaling messages between switches and databases. For further  
20 description and the technical and interface requirements for Signal Transfer Points,  
21 see AT&T's Interconnection Agreement, § 30.9.9, and Attachment 2, § 12.

22 **12. SERVICE CONTROL POINTS/DATABASES**

23 **Q. PLEASE DEFINE SERVICE CONTROL POINTS/DATABASES AND**  
24 **THEIR FUNCTION.**

25 A. Databases are the network elements that provide the functionality for storage of, and

1 access to, information required to offer a particular basic telecommunications service  
2 and/or capability. A Service Control Point (SCP) is a specific type of database that  
3 contains customer and/or carrier-specific routing, billing, or service instructions to be  
4 acted on by carriers' switches and operator systems. The SCP executes the services  
5 application logic in response to SS7 queries sent to it by a local switch. SCPs also  
6 provide operational interfaces to allow for provisioning, administration, and  
7 maintenance of subscriber data and service application data (e.g., an 800 database  
8 stores customer record data that provides information necessary to route 800 calls).  
9 For further description and the technical and interface requirements for Service  
10 Control Points/Databases, see AT&T's Interconnection Agreement, § 30.9.10, and  
11 Attachment 2, § 13.

12 **Q. EXPLAIN THE NEED FOR UNBUNDLING NETWORK SIGNALING.**

13 **A. SS7 signaling is critical in the provision of modern telecommunications services**  
14 **because it enables different providers' networks to set up calls to one another, thereby**  
15 **allowing a customer on one provider's network to communicate with a customer on**  
16 **another provider's network. Unbundling the Signaling network elements will allow**  
17 **AT&T to provide signaling capabilities using combinations of BellSouth's, AT&T's,**  
18 **and potentially, third-party owned signaling elements to support AT&T's end user's**  
19 **originating and terminating traffic and advanced features. The unbundled Signaling**  
20 **network elements are particularly important to consumers in the competitive local**  
21 **services market because they permit efficient interconnection and calling between**  
22 **networks without Post Dial Delay and will enable AT&T to introduce innovative,**  
23 **competitive services with shorter development and delivery time.**  
24 **AT&T must be able to determine how it will obtain its signaling network. Because of**  
25 **the high costs of deploying, maintaining and interconnecting a signaling network,**



1 AT&T requires the option to purchase these elements, either alone or in combination,  
2 from BellSouth or from other suppliers.

3 **III. USE OF UNBUNDLED NETWORK ELEMENTS**

4 **Q. SHOULD THERE BE ANY RESTRICTIONS ON AT&T'S ABILITY TO**  
5 **COMBINE BELLSOUTH'S UNBUNDLED NETWORK ELEMENTS IN**  
6 **AT&T'S PROVISION OF LOCAL SERVICES?**

7 **A. No. BellSouth must not be allowed to place any restrictions on AT&T's use of**  
8 **BellSouth's unbundled network elements, either alone, in combinations, or in**  
9 **conjunction with services purchased for resale or with AT&T's or a third-party's**  
10 **facilities. The Act mandates that BellSouth "shall provide such unbundled network**  
11 **elements in a manner that allows requesting carriers to combine such elements in**  
12 **order to provide such telecommunications service." 47 U.S.C. § 251(c)(3).**  
13 **Consistent with the Act, AT&T must have the greatest possible flexibility in using**  
14 **BellSouth's unbundled network elements to address the features, functions, and**  
15 **services needs of its customers. This is so for several reasons.**

16 **First, AT&T must have the ability to provide a former BellSouth customer with the**  
17 **same services that customer received from BellSouth, if the customer so chooses.**  
18 **The most efficient way to accomplish this may be for AT&T to combine the**  
19 **functionality of several of BellSouth's unbundled network elements to provide such**  
20 **services.**

21 **Second, AT&T must be able to purchase and combine BellSouth's unbundled**  
22 **network elements to foster innovation in the provision of services to consumers. By**  
23 **combining functionalities of these elements, AT&T may be able to create new and**  
24 **improved services that BellSouth was unable or unwilling to provide to its customers.**

25 **Third, AT&T must be able to purchase individual unbundled network elements and/or**

1 combinations of elements to supplement its own network with the network  
2 functionality AT&T cannot yet provide economically itself or through a third party.  
3 The purchase of the functionality of these unbundled network elements will allow  
4 AT&T to compete in a given market without the expenditure needed to duplicate  
5 BellSouth's network capabilities.

6 Lastly, restrictions on AT&T's ability to combine BellSouth's unbundled network  
7 elements are unnecessary because existing industry standards will be utilized in  
8 combining these elements. Thus, there are no technical impediments to combinations  
9 of technically feasible elements.

10 **Q. PLEASE PROVIDE SOME EXAMPLES OF COMBINATIONS OF**  
11 **BELLSOUTH'S UNBUNDLED NETWORK ELEMENTS AT&T MAY**  
12 **CHOOSE TO UTILIZE.**

13 **A.** One example of a combination of unbundled network elements AT&T may utilize to  
14 bring the benefits of competition to consumers is the Loop/Switching combination,  
15 sometimes called the "platform." The Loop/Switching combination is made up of the  
16 four sub-loop elements (the Network Interface Device, Loop Distribution, the Loop  
17 Concentrator/Multiplexer, and the Loop Feeder), the Local Switching element, and  
18 selected Signaling and Transport elements. AT&T will order this combination of  
19 contiguous network elements on an individual line/customer basis. AT&T must have  
20 the option to purchase or not purchase BellSouth's Operator Systems network element  
21 as warranted.

22 For existing BellSouth customers who simply want AT&T as their local service  
23 provider, the Loop/Switching combination will allow the change without requiring  
24 any physical change in the existing BellSouth network infrastructure. In addition, use  
25 of the Loop/Switching combination will not require AT&T to collocate any

1 equipment in BellSouth's central office.

2 A second example of a combination of unbundled network elements AT&T may  
3 choose to purchase from BellSouth is the combination of the four sub-loop elements  
4 (a "contiguous loop"). This combination will allow AT&T to reach the customer's  
5 premises when, for example, AT&T is providing its own switch, transport, and  
6 signaling. Another combination that AT&T may need to purchase would include the  
7 NID, Transport, and Signaling elements. This combination would be needed where  
8 AT&T provides its own loop and switch.

9 **IV. ISSUES IN DISPUTE**

10 **Q. PLEASE DESCRIBE THE DISPUTE BETWEEN AT&T AND BELLSOUTH**  
11 **REGARDING AT&T'S ACCESS TO BELLSOUTH'S UNBUNDLED**  
12 **NETWORK ELEMENTS.**

13 **A. BellSouth's position is that the Act does not require BellSouth to provide AT&T with**  
14 **access to all twelve network elements requested by AT&T, either alone or in**  
15 **combinations, or with the additional requirements AT&T needs to utilize those**  
16 **elements. BellSouth's principal objection is that it is not "technically feasible" to**  
17 **unbundle all of the network elements requested by AT&T.**

18 **The fallacy in BellSouth's position lies in its definition of technical feasibility, which**  
19 **appears to be that providing access to unbundled network elements is technically**  
20 **feasible only when BellSouth can provide such access without doing anything. Thus,**  
21 **in BellSouth's view, the need for BellSouth to make any logistical, procedural, or**  
22 **operational adjustment to its routine practices in order to provide AT&T access to an**  
23 **unbundled network element renders that access technically infeasible.**

24 **Q. WHAT IS THE CORRECT DEFINITION OF TECHNICAL FEASIBILITY?**

25 **A. In my opinion, the definition suggested by the Federal Communications Commission**

1 in its recent Notice of Proposed Rulemaking ("NPRM") is correct: "interconnection  
2 at a particular point will be considered technically feasible [under the Act] if an  
3 incumbent LEC currently provides, or has provided in the past, interconnection to any  
4 other carrier at that point . . . ." NPRM, para. 57. Thus, historical precedent is a key  
5 factor in defining technical feasibility, and where BellSouth has previously unbundled  
6 a particular network element or provided a specific point of interconnection to any  
7 other carrier, the technical feasibility of that action has been established. In addition,  
8 the technical experience of one incumbent LEC should demonstrate technical  
9 feasibility for another incumbent LEC with similar equipment. Thus, for many of the  
10 elements requested by AT&T, corroboration of technical feasibility exists in the fact  
11 that BellSouth currently provides these elements under tariff.

12 Where neither BellSouth nor another incumbent LEC provides or has provided an  
13 element, technical feasibility is properly defined by reference to existing technical  
14 standards that define each element and specify how they interconnect with each other.  
15 The existence of these standards published by Bellcore, ANSI, and other authorities,  
16 and their uniform acceptance by the industry, are evidence that the elements are, or  
17 can be, separately provisioned and operated. Thus, these standards constitute one  
18 level of proof that the unbundling requested by AT&T is technically feasible. I will  
19 address below the technical feasibility of each network element to which BellSouth  
20 objects.

21 **Q. HOW DID AT&T ADDRESS TECHNICAL FEASIBILITY IN SELECTING**  
22 **THE UNBUNDLED NETWORK ELEMENTS IT REQUESTED FROM**  
23 **BELLSOUTH?**

24 **A.** Aside from being the basic building blocks required to provide customers with a local  
25 network, AT&T recognized the need to develop a list of unbundled network elements

1 that would meet the test of technical feasibility, and be uniform across networks and  
2 consistent with existing network architectures. Accordingly, AT&T used the  
3 following requirements to identify the network elements:

- 4 1. Each network element must be measurable and billable or have the  
5 potential to be measurable and billable.
- 6 2. Each network element must utilize transmission or switching protocol  
7 and physical interconnection standards, either existing or under  
8 development, that are recommended by an acknowledged industry body.
- 9 3. Each network element must have the potential to be provisioned by a  
10 competitive service provider -- that is, they represent discrete, stand-alone  
11 physical or logical elements.
- 12 4. Each network element must have the potential to be ordered in  
13 combination with any other network elements to facilitate the  
14 development of a competitive service offering.

15 **Q. WHICH UNBUNDLED NETWORK ELEMENTS DOES BELLSOUTH**  
16 **REFUSE TO PROVIDE TO AT&T?**

17 **A. The following are the elements, capabilities, or combinations of elements BellSouth**  
18 **refuses to provide to AT&T, along with BellSouth's reasons for its refusal, and**  
19 **AT&T's position with respect to each:**

- 20 1. Loop/Switching Combination: BellSouth refuses to allow AT&T to  
21 purchase the Loop/Switching combination not because of any alleged technical  
22 infeasibility, but because BellSouth claims that such a combination would be an  
23 impermissible substitution for local service that BellSouth is making available to  
24 AT&T via resale. BellSouth's position is without basis. Just as AT&T has the right  
25 under the Act to purchase wholesale services from BellSouth, it has the separate and

1 distinct right to purchase combinations of BellSouth's network elements. The Act  
2 clearly provides for a range of opportunities for local market entry -- including both  
3 resale and network element combinations -- that can be used by a variety of firms,  
4 consistent with their respective business strategies and available resources.

5 2. Local Loop Facility: BellSouth claims that it is not technically  
6 feasible to provide AT&T access to the four sub-loop unbundled network elements.  
7 Unbundling each of these network elements is technically feasible. The technical  
8 specifications for establishing interconnection with the sub-loop network elements are  
9 documented in various existing industry technical publications. See AT&T's  
10 Interconnection Agreement, Attachment 2, § 4.1.3. As I discussed above, BellSouth's  
11 position is based upon its mistaking of logistical, operational, and procedural  
12 concerns for technical infeasibility. Thus, AT&T believes that unbundling the NID is  
13 technically feasible and has offered a solution to overcome BellSouth's concerns  
14 about grounding, which are procedural rather than technical in nature. The solution  
15 would allow AT&T to make use of any existing spare terminals in BellSouth's NID,  
16 or, if none exist, it would allow AT&T to lift BellSouth's Loop Distribution wire  
17 within the NID in order to ground that wire.

18 With respect to Loop Distribution and the Loop Concentrator/Multiplexer, BellSouth  
19 similarly claims that unbundling each of these network elements is not technically  
20 feasible until such time as operations systems enhancements are accomplished that  
21 would eliminate the requirement for manual "workarounds." AT&T believes that it is  
22 technically feasible to unbundle both Loop Distribution and the Loop  
23 Concentrator/Multiplexer for the reasons cited in the NID discussion above, and that  
24 such enhancements and workarounds are not relevant to establishing technical  
25 feasibility under the Act. In addition, BellSouth claims that even if these operational

1 and procedural issues concerning the Loop Concentrator/Multiplexer did not exist, it  
2 would not be technically feasible to provide AT&T access to this unbundled network  
3 element when Integrated Digital Loop Carriers ("IDLCs") are utilized in BellSouth's  
4 facilities.

5 AT&T has proposed several solutions that will overcome BellSouth's concern in this  
6 situation as well. First, when a universal Digital Loop Carrier System precedes  
7 deployment of the IDLC, BellSouth would make the Loop Concentrator/Multiplexer  
8 element available via the universal system. Second, where new IDLCs are deployed  
9 that support Virtual Remote Terminal ("VRT") capability, AT&T's needs can be met  
10 by these systems. The VRT capability allows a portion of the IDLC to be set up in a  
11 universal mode and thereby meet AT&T's needs. Lastly, where sufficient demand for  
12 this element exists and AT&T and BellSouth equipment is compatible, AT&T would  
13 consider purchasing an entire IDLC's Loop Concentrator/Multiplexer functionality.  
14 BellSouth has offered limited agreement to only the second proposal. AT&T is  
15 seeking full agreement to all feasible proposals to make this element as widely  
16 available as possible. Otherwise, AT&T may be unable to provide service in some  
17 multi-customer residential and business settings.

18 At the time AT&T filed its Petition for Arbitration, BellSouth did not agree that  
19 access to the Loop Feeder is technically feasible. It now appears that BellSouth does  
20 agree with AT&T's position. However, although BellSouth has agreed that it can  
21 provide AT&T with access to the Loop Feeder, BellSouth's position is that AT&T's  
22 must pay special access tariffs to gain such access. AT&T believes that this pricing  
23 of an unbundled network element is not proper under the Act. For a complete  
24 discussion of this issue, see the testimony of AT&T witness Ellison.

25 3. Contiguous Loop: Not only has BellSouth refused to provide AT&T

1 access to the individual unbundled sub-loop network elements, but again, relying on  
2 an incorrect definition of technical feasibility, BellSouth also will not offer AT&T  
3 access to the entire unbundled Local Loop Facility (i.e., a contiguous combination of  
4 all four sub-loop elements) when IDLCs, which are prevalent in many local networks,  
5 are utilized in BellSouth's facilities.

6 AT&T must have the ability to serve all of BellSouth's current customers, not just  
7 those served by facilities other than IDLCs. AT&T has proposed four alternative  
8 solutions that will make this possible. First, where copper loop facilities remain in  
9 place after deployment of an IDLC, BellSouth would provide AT&T with contiguous  
10 loops via these facilities. Second, where a universal Digital Loop Carrier system  
11 preceded deployment of the IDLC, BellSouth would make the contiguous loops  
12 available via the universal system. Third, where new IDLCs are deployed that  
13 support VRT capability, AT&T's needs for contiguous loops can be met by these  
14 systems. The VRT capability allows a portion of the IDLC to be set up in a universal  
15 mode and thereby meet AT&T's needs. Fourth, where sufficient demand for this  
16 element exists and AT&T's and BellSouth's equipment is compatible, AT&T would  
17 consider purchasing an entire IDLC's complement of contiguous loops. BellSouth has  
18 offered limited agreement to only the first and third proposals. AT&T is seeking full  
19 agreement to all feasible proposals to make contiguous loops as widely available as  
20 possible, with as few limitations on their service-providing capabilities as possible.

21 4. Local Switching: BellSouth claims that unbundling this network  
22 element is not technically feasible unless it also includes access to BellSouth's  
23 operator services, directory assistance, repair service, and inter-office common  
24 transport (BellSouth's "port" offering). Local Switching is an unbundled element and  
25 is independent of the other unbundled network elements BellSouth claims must be



1 appended to it. For example, the Act explicitly requires that local switching be  
2 unbundled from transport. 47 U.S.C. § 271(c)(2)(B)(vi). BellSouth's position would  
3 preclude AT&T from meeting its customer's needs by preventing AT&T from  
4 combining AT&T's own operator systems and transport facilities with the  
5 functionality of BellSouth's Local Switching element.

6 Moreover, BellSouth's position is not only overinclusive (forcing AT&T to buy from  
7 BellSouth more than it needs to provide its customers with local service), it is also  
8 underinclusive. That is, under BellSouth's "port" offering, AT&T, in addition to  
9 purchasing the "port," would also have to purchase from BellSouth as "services"  
10 defined by BellSouth, on an "a la carte" basis, other features and capabilities  
11 contained in BellSouth's local switch which AT&T requires to serve its customers.  
12 These features and capabilities are provided by software that is resident in BellSouth's  
13 local switch and thus, are a part of the functionality of the switch. This is contrary to  
14 the Act, which includes "features, functions, and capabilities" in the definition of a  
15 network element. 47 U.S.C. § 153(29).

16 Unbundling Local Switching would involve nothing more than requiring BellSouth to  
17 provision AT&T's end user customers on BellSouth's switch, based on a service order  
18 received from AT&T that includes all the customer specific information needed by  
19 BellSouth to provision the customer. Unbundling Local Switching does not require  
20 any partitioning of the switch for each new entrant; it simply requires BellSouth to  
21 provision the switch in the same manner it does today, except that the service order  
22 will come from AT&T's service center.

23 BellSouth also claims that unbundling Local Switching is not technically feasible  
24 because its switches are not capable of routing calls to AT&T operator systems,  
25 transport facilities, and other AT&T-provided facilities. BellSouth has claimed that

1 such routing is precluded by the lack of indicators in its switches which direct the  
2 switch as to how to route certain types of calls for individual customers and carriers.  
3 Thus, an AT&T customer dialing zero, when served via the BellSouth Local  
4 Switching element, would be sent to BellSouth's Operator System rather than to  
5 AT&T's. Setting the indicator for that customer, known as a Line Class Code, to  
6 route this dial zero traffic to AT&T would use another of a finite number of such  
7 codes within the BellSouth switch.

8 AT&T and BellSouth studies indicate the presence of many unused Line Class Codes  
9 in most of BellSouth's switches today. BellSouth claims these would be exhausted if  
10 only a few new entrants utilize BellSouth's Local Switching element and require the  
11 same Line Class Code structure as BellSouth. This last assumption of equality of  
12 Line Class Code usage is the fallacy in BellSouth's argument of technical  
13 infeasibility. AT&T will not require the same set of Line Class Codes that BellSouth  
14 utilizes today in the provision of BellSouth's retail services. Thus, Line Class Codes  
15 are conserved and BellSouth can provide the necessary customized routing to multiple  
16 competing local exchange carriers on most of BellSouth's switches.

17 For the long term, AT&T has proposed that the software of local switches be updated  
18 to provide an enlarged capacity for such carrier-specific routing. Informal  
19 discussions with switching system manufacturers indicate this capacity expansion  
20 could be available in about two years. This two-fold approach of short-term  
21 conservation, combined with longer term expansion, is reminiscent of the industry's  
22 response to the requirement to provide equal access compliance on switching systems  
23 and is just as feasible.

24 5. Operator Systems: BellSouth claims that Operator Systems is not a  
25 network element that BellSouth is required to unbundle under the Act. BellSouth also

1 claims that unbundling Operator Systems is not technically feasible because  
2 BellSouth is not capable of routing an AT&T's customer's call from the BellSouth  
3 switch to AT&T's operator services platform. Contrary to BellSouth's belief,  
4 Operator and Directory Assistance Services each is a "capability" under the Act.  
5 Network elements consist of "features, functions, and capabilities . . . used in the  
6 transmission, routing or other provision of a telecommunications service." 47 U.S.C.  
7 § 153(29) (emphasis added). Without question, the BellSouth Operator System is  
8 such a network element.

9 Additionally, as discussed above, there is no technical reason why routing of traffic to  
10 AT&T's operator services platform cannot be unbundled. The fact that BellSouth  
11 and other incumbent LECs provide unbundled operator services to other carriers  
12 today demonstrates that it is technically feasible to unbundle Operator Systems. For  
13 example, the Woodbury Telephone Company (an independent telephone company)  
14 and TCG (a competitive access provider) both purchase Operator Services from  
15 Southern New England Telephone ("SNET"), and SNET has agreed to provide such  
16 services to AT&T. These services also are provided to local exchange carriers under  
17 contract with long distance carriers such as AT&T and MCI. Finally, most  
18 incumbent LECs provide directory assistance to independent local telephone  
19 companies and long distance carriers.

20 Interfaces with the incumbent LEC's Operator Systems can be obtained merely by  
21 purchasing interconnecting trunks and setting up routing. In addition, the FCC has  
22 required in CC Docket No. 91-115 that various types of information which support  
23 LEC Operator Services functions must be made available to long distance carriers.  
24 Thus, there should be no technical difficulty in making BellSouth's Operator Systems  
25 available on an unbundled basis to new entrants. AT&T has proposed development of

1 a solution to the routing issue described above under Local Switching.

2 6. Common Transport: BellSouth claims that Common Transport is  
3 not an unbundled network element and that the functionality is available to AT&T as  
4 part of BellSouth's "port" offering. As previously discussed, AT&T believes that  
5 Common Transport must be a separate unbundled element to allow AT&T flexibility  
6 in its provisioning of services to customers. BellSouth also claims that, even if  
7 Common Transport is an unbundled element, unbundling this network element is not  
8 technically feasible because of the same routing issue related to Local Switching. As  
9 discussed above, AT&T has proposed a solution to the routing issue.

10 7. Dedicated Transport: BellSouth claims that unbundling Dedicated  
11 Transport is not technically feasible when utilized in conjunction with BellSouth  
12 switching because of the same routing issue related to Local Switching. Again, as  
13 discussed above, AT&T has proposed a solution to the routing issue.

14 8. Advanced Intelligent Network: BellSouth refuses to unbundle access  
15 to its AIN in such a way that AT&T can achieve parity in the creation and offering  
16 of AIN based services. AIN will allow AT&T to offer consumers a variety of  
17 innovative, competitive advanced features and services independent of BellSouth. See  
18 AT&T's Interconnection Agreement, Attachment 2, § 12.2.10. For example, AIN  
19 triggers would enable a carrier to offer "voice recognition," a service that allows a  
20 customer to dial a call by speaking the name of the party the customer wishes to call.  
21 AT&T's access to BellSouth's AIN triggers will provide AT&T with call control  
22 capability within the BellSouth switch that would allow AT&T to customize offerings  
23 without having to duplicate BellSouth's network. Such access is critical to AT&T's  
24 ability to provide competing services to its customers now and in the future.  
25 Specifically, in the near term, BellSouth proposes to provide AT&T with access to

1 BellSouth's service creation environment, which is a tariffed service. In the long run,  
2 BellSouth also proposes to provide AT&T access to BellSouth's AIN via a "gateway"  
3 or mediation device when AT&T has its own service creation environment. The use  
4 of such a device will directly affect consumers by increasing Post Dial Delay (the  
5 amount of time a caller must wait after entering the last digit of the destination  
6 telephone number before hearing a valid audible network response) by an estimated  
7 20% over that of a similar BellSouth AIN call. The gateway solution will also  
8 increase the time and cost of implementing services to the customer, and will add  
9 additional points of potential failure to the network required to provide services.  
10 AT&T believes that the existing SS7 network can maintain network integrity,  
11 eliminating the need for the gateway device. Given the experience with providing  
12 network interconnect for 800 Portability, the industry is capable of establishing  
13 necessary testing and certification procedures to ensure that both network  
14 performance and reliability are not compromised by interconnection of multiple  
15 service providers' SS7 networks.

16 **V. ADDITIONAL REQUIREMENTS**

17 **Q. IS THE FUNCTIONALITY OF THE BELLSOUTH'S UNBUNDLED**  
18 **NETWORK ELEMENTS ALL THAT AT&T REQUIRES TO COMPETE IN**  
19 **THE LOCAL MARKET?**

20 **A. No. The unbundling of BellSouth's network elements, and allowing AT&T to**  
21 **combine the functionality of these elements in any manner necessary to meet customer**  
22 **needs, will expedite robust competition in the marketplace. Without it, the barriers to**  
23 **entry are too substantial to ever envision competition thriving anytime in the near**  
24 **future. However, the unbundling of network elements, while necessary to the**  
25 **development of local competition, is not by itself sufficient to ensure the development**

1 of a competitive local market that will benefit consumers. There are a variety of  
2 additional requirements and capabilities that BellSouth must provide AT&T. See  
3 AT&T's Interconnection Agreement, Attachment 2, § 15.

4 **Q. ARE ANY OF THESE ADDITIONAL REQUIREMENTS IN DISPUTE?**

5 **A. Yes. The following are those that BellSouth refuses to provide to AT&T:**

6 1. Access To Rights Of Way, Conduits, and Pole Attachments: AT&T  
7 is entitled to access to rights of way, conduits, pole attachments, and any other  
8 pathways on terms and conditions equal to that provided by BellSouth to itself or any  
9 other party. Further, BellSouth should not preclude or delay allocation of these  
10 facilities to AT&T because of potential needs of itself or other parties. See  
11 Interconnection Agreement, § 32.4, and Attachment 3, § 3.

12 BellSouth's position is that it is entitled to reserve in advance five year's worth of  
13 capacity for itself. Rather, the Act requires, 47 U.S.C. § 251(b)(4), in order to foster  
14 competition quickly, that BellSouth be allowed to reserve in advance no more than  
15 one year's capacity, plus maintenance spares, on any given route consisting of outside  
16 plant facilities, and that BellSouth should accord AT&T this same right.  
17 Additionally, AT&T has requested copies of pole and conduit engineering records to  
18 facilitate planning the access to these facilities. BellSouth has refused to provide such  
19 copies. Together, these two areas of dispute significantly restrict and impede AT&T's  
20 access to these facilities and are inconsistent with the Act.

21 2. Local Number Portability: The Act requires BellSouth to provide  
22 Local Number Portability so that customers who wish to switch their local service to  
23 AT&T can retain their existing telephone numbers. See 47 U.S.C. § 251(b)(2).  
24 AT&T has requested that BellSouth coordinate number changes associated with  
25 interim Local Number Portability so that customers are not out of service more than

1 five minutes. See AT&T's Interconnection Agreement, Attachment 8, § 2. BellSouth  
2 has not agreed to provide coordination that would meet this performance level. The  
3 result is that customers changing to AT&T, while retaining their existing phone  
4 number, may be out of service for many hours, depending on when BellSouth  
5 executes its activities associated with this change request. In addition, AT&T has  
6 requested a wider range of options for implementing interim Local Number  
7 Portability than those to which BellSouth has agreed. These additional options will  
8 permit interim portability to be deployed more efficiently and enable AT&T to better  
9 meet its customers' requirements.

10 3. Two-Way Trunk Interconnection: AT&T has requested the ability to  
11 interconnect its local network with that of BellSouth using both one-way and two-way  
12 trunk groups. See AT&T's Interconnection Agreement, § 36.1.2. AT&T has  
13 requested that these trunks ultimately carry intraLATA, interLATA, and local traffic.  
14 These requests improve the efficiency of interconnection by commingling traffic  
15 terminating on either BellSouth's or AT&T's network on larger, more efficient trunk  
16 groups between the two networks. BellSouth has indicated it will accept intraLATA  
17 and local traffic from AT&T on one trunk group and interLATA traffic from AT&T  
18 on another trunk group. AT&T seeks an order that BellSouth work to fulfill AT&T's  
19 request to allow all AT&T traffic to be combined on one trunk group by a date  
20 certain.

21 4. Unused Transmission Media: AT&T has requested that BellSouth  
22 lease to AT&T BellSouth's unused transmission media. See AT&T's Interconnection  
23 Agreement, Attachment 3, § 4. BellSouth has refused. AT&T needs the ability to  
24 lease this media to facilitate its ability to efficiently build its own network  
25 transmission facilities. Without the ability to lease this media, AT&T faces yet

1 another capital investment barrier to developing its own network.

2 **VI. CONCLUSION**

3 **Q. PLEASE SUMMARIZE YOUR TESTIMONY.**

4 **A. AT&T is asking this Commission for a decision that will approve AT&T's requests**  
5 **for access to BellSouth's unbundled network elements and combinations of elements,**  
6 **including the additional requirements necessary for efficient use of these elements, as**  
7 **described in this testimony and enumerated in AT&T's proposed Interconnection**  
8 **Agreement with BellSouth. Access to the unbundled network elements and**  
9 **combinations of elements that AT&T has requested is technically feasible.**  
10 **BellSouth's refusal to provide AT&T access is based on an incorrect application of**  
11 **the concept of technical feasibility and on policy positions that conflict with the pro-**  
12 **consumer purposes of the Act. AT&T's Interconnection Agreement sets forth a**  
13 **business arrangement between AT&T and BellSouth, tailored to AT&T's individual**  
14 **needs, that will provide such access, and thereby make it possible for AT&T to**  
15 **diversify its presence in the local market and quickly bring the benefits of competition**  
16 **to consumers.**

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

18 **A. Yes.**