DIRECT TESTIMONY OF CHRISTOPHER RICE

Executive Vice President – Network Planning and Engineering AT&T Inc.

June 2, 2006

1 2 3		DIRECT TESTIMONY OF CHRISTOPHER RICE Executive Vice President – Network Planning and Engineering AT&T Inc.*
4	I.	INTRODUCTION
5	Q.	PLEASE STATE YOUR NAME AND TITLE.
6	A.	My name is Christopher Rice. I am Executive Vice President - Network Planning
7		and Engineering for AT&T Inc. ("AT&T").
8	Q.	PLEASE DESCRIBE YOUR JOB RESPONSIBILITIES.
9	A.	I am responsible for enterprise-wide development, engineering, planning and
10		procedures, deployment guidelines, advanced switching and routing, and other
11		aspects of the new AT&T network. As part of my responsibilities, I am
12		responsible for planning and implementing the integration of the legacy SBC
13		Communications Inc. ("SBC") network with the legacy AT&T Corp. network. I
14		also was involved in certain aspects of due diligence relating to the networks of
15		BellSouth Corporation ("BellSouth") and Cingular.
16	Q.	WHAT IS THE PURPOSE OF YOUR TESTIMONY?
17	A.	The purpose of my testimony is to explain from a network perspective the
18		benefits that customers in Tennessee can expect to receive as a result of AT&T's
19		merger with BellSouth. These benefits fall into three broad categories:
20		(a) benefits from network integration; (b) more innovation in networks and
21		services, and faster roll-out of new and existing services to our customers; and
22		(c) improved ability to respond to natural disasters.
	-	

^{*} Please see the Cautionary Language Regarding Forward-Looking Statements included as Attachment A to this testimony.

1 II. THE MERGER WILL ENHANCE NETWORK INTEGRATION AND THEREBY INCREASE SERVICE QUALITY

- 3 Q. DOES AT&T PLAN TO INTEGRATE THE BELLSOUTH AND AT&T IP 4 NETWORKS WITH CINGULAR'S IP NETWORK?
- Yes. A merged AT&T and BellSouth, with unified ownership of Cingular, will 5 A. be able to realize the advantages of combining the three companies' networks into 6 one, Internet Protocol ("IP") based network. This integration will yield 7 operational efficiencies, as the combined company will conduct network planning 8 and engineering across a single, integrated network and will realize more efficient 9 traffic management. In addition, AT&T is presently in the process of developing 10 an IP-based network architecture, known as "IP Multimedia Subsystem," or 11 12 "IMS," that will enable the delivery of combined voice, data, and video offerings across the company's wireline and wireless networks. With BellSouth, Cingular, 13 and AT&T each operating separate networks, it is not operationally feasible to 14 deploy a single IMS solution across the three companies' networks, which in turn 15 limits the ability of the companies to offer customers the full capabilities enabled 16 by this new technology. Following the merger, the combined company will be 17 able to deploy a single IMS solution across the entire, integrated network, which 18 in turn will permit the combined company to offer customers an array of 19 integrated voice, data, and video services. 20

21 Q. CAN YOU BE MORE SPECIFIC ABOUT HOW INTEGRATION WILL 22 BENEFIT CUSTOMERS IN TENNESSEE?

23 A. Yes. For one thing, the merged company will be better able to provide
24 innovative, efficient, high-quality service to the small- and medium-sized
25 businesses that BellSouth serves today in Tennessee. To take one of many

examples, prior to its merger with SBC, AT&T Corp. had developed an advanced "click-through" portal that allowed large enterprise customers to, in effect, provision and manage their telecommunications services in real time, simply by navigating a computer interface. A key benefit arising out of the SBC/AT&T merger is that the combined company now has the resources and customer base to enable it to make services such as this available to a broader segment of customers. Although the SBC/AT&T merger was consummated just last fall, we have already completed the systems work necessary to make the "click-through" portal available to a broader set of business customers than the legacy AT&T had, and we are funding additional work to expand the offering even further. Following the merger with BellSouth, that process will occur in Tennessee and other BellSouth states as well, thus ensuring that a broader set of customers in these states realize the benefits of innovations that previously had been limited to large enterprise customers. In addition, the merged company will be better positioned to serve the large enterprise customers that AT&T serves today in Tennessee. One of the primary objectives of the merger is to create a national and international end-to-end IP network that will allow for the more efficient transmission of the high volumes of traffic that enterprise customers generate, at the quality of service these customers increasingly demand. Finally, the integration of the BellSouth and AT&T IP networks with Cingular's IP network will permit the combined company to offer customers a range of next-

1

2

3

4

5

6

7

8

9

10

11

12

13

14

15

16

17

18

19

20

21

22

23

generation, IP-based services. With the deployment of IMS described above, the

merged company will be better able to offer a seamless suite of voice, data, and video services to the customer, regardless of where that customer is and what device (*e.g.*, wireline phone, wireless phone, or computer) he or she happens to be using.

Q. CAN YOU PROVIDE A CONCRETE EXAMPLE OF HOW NETWORK INTEGRATION CAN PROVIDE A BENEFIT TO CUSTOMERS, PARTICULARLY IN THE IP CONTEXT?

1

2

3

4

8

9

10

11

12

13

14

15

16

17

18

19

20

21

22

23

A.

Yes. Integrating BellSouth's and AT&T's complementary networks will allow us to move BellSouth's Internet-bound traffic (both domestic-bound and international-bound) onto AT&T's backbone network, achieving greater economies of scale. Specifically, this will allow Internet-bound traffic originated by BellSouth customers to be carried using AT&T's Tier 1 Internet backbone. Currently, despite the fact that BellSouth is a leading Internet service provider, it is not a Tier 1 backbone provider. Integrating the networks will allow BellSouthoriginated Internet traffic to be handed off on a direct peering basis. Such an arrangement is more efficient from an engineering viewpoint and reduces the cost of hand-offs of Internet traffic to other carriers. In addition, by carrying Internet traffic on our own network for a longer duration, the combined company will be better able to manage the quality of the traffic as it is delivered to other carrier(s) with which we will have a (Tier 1) direct peering relationship. By thus reducing the total number of hand-offs the traffic will experience as it travels among carriers, this integration will improve reliability, reduce latency (delay in signal flow), and allow us to provide a higher quality of service or "QoS." And these

benefits, in turn, will allow the merged company to provide more efficient, higher
 quality services to customers in Tennessee.

3 Q. HOW WILL THIS NETWORK INTEGRATION AFFECT QUALITY OF SERVICE FOR CUSTOMERS?

A.

As I explained immediately above, it will result in more traffic being carried entirely on a single, integrated IP network. Increasing the on-net traffic over a greater percentage of the distance between the origination and destination points allows us to better manage that traffic. Better management reduces latency, and therefore allows us to offer our customers better service. We will also be able to offer our customers improved reliability and security. And, again, this improved quality of service will benefit the customers that BellSouth and AT&T already serve in Tennessee, as well as the customers (both enterprise and mass market) that they hope to serve.

Q. HOW WILL THE NETWORK INTEGRATION DESCRIBED ABOVE AFFECT THE COMBINED COMPANY'S ABILITY TO ADDRESS NETWORK SECURITY ISSUES?

Integration of the BellSouth, AT&T, and Cingular IP networks will markedly enhance the company's ability to address security concerns. Simply put, security is far easier to manage on a single, IP-based network than it is on three distinct IP networks. Network integration results in fewer mission-critical facilities – i.e., core nodes and routers – that must be managed. In addition, with a single IP network, critical security solutions – such as firewalls and packet cleaning solutions – need only be installed and managed once, rather than repeatedly

across multiple networks. These efficiencies, in turn, permit the combined company to pursue security solutions on a cost-effective basis, leaving more resources to devote to the types of innovative solutions discussed above.

4 Q. HAS AT&T ACHIEVED ANY BENEFITS OF INTEGRATION FROM THE RECENT MERGER BETWEEN SBC AND AT&T CORP.?

A.

AT&T networks is just beginning, we already are realizing significant benefits.

After we closed the merger on November 18, 2005, we spent the next approximately six weeks completing the integration planning process. The actual implementation phase began in January. Even in the first several months of this process, we already are realizing significant benefits for customers from network integration. Indeed, we are ahead of schedule in many respects.

Absolutely. While the process of integrating the legacy SBC and the legacy

For instance, in addition to the "click through" example discussed above, as a result of that merger, we already are delivering enhanced Internet backbone reliability and reduced latency to our customers. Prior to the SBC/AT&T merger, AT&T Corp. had a national and international network, and was considered one of the "Tier 1" backbones. SBC, like BellSouth's subsidiaries, operated a dense inregion network with relatively few out-of-region points of presence. SBC was not considered a Tier 1 backbone, and therefore had to hand off significant amounts of traffic to a Tier 1 backbone and pay transit fees. Since closing the merger, we have begun the integration by directly connecting the legacy SBC backbone to the legacy AT&T backbones both inside and outside the U.S. so that they can operate effectively as one. As a result, traffic that previously was sent to/from legacy

SBC and AT&T customers is being exchanged directly and is therefore being handled with enhanced service quality.

Q: ARE THERE OTHER BENEFITS THAT ARE ALREADY MATERIALIZING AS A RESULT OF THE SBC/AT&T MERGER?

A.

Yes, there are. Another benefit of combining SBC and AT&T is that we have been able to commit the financial resources to accelerate expansion of network capacity in two respects. One expansion involves the legacy AT&T plan for an all-optical, ultra long-haul transport network. Because of budget constraints, the legacy AT&T had not planned to complete this network upgrade until at least 2007-2008. The new AT&T, with the financial resources of the combined companies, has accelerated that investment into the current year. When completed, this investment will greatly enhance the through-put (i.e., reduced latency and packet loss) and reliability of customer services. It will also lay the foundation for increasing the capacity of the AT&T IP backbone to meet customer growth for IP-based services such as virtual private networks, disaster recovery connections, and remote storage requirements. And it will also allow for shorter provisioning intervals and lower costs.

The second, broader expansion involves our core Internet backbone network. The legacy AT&T core was comprised of multiple OC192 circuits. The new AT&T has developed a plan to accelerate deployment of new OC768 circuits. That process will start later this year. In addition to increased capacity, the new network will benefit customers by enhancing traffic management efficiency, improving the reliability of the IP network, and providing increased disaster

recovery capabilities should a failure in any part of the IP network occur (i.e., transport facility, router, peer point, etc.). With the combination of SBC and AT&T, this enhancement of our Internet backbone will occur more quickly than either company alone would have been able to accomplish, to the benefit of our customers.

1

2

3

4

5

6

7

8

9

10

11

12

13

14

15

16

17

18

19

20

21

22

23

The combined company also is launching a project to reduce network congestion using an AT&T Labs-developed intelligent routing solution. Today, each router in a network operates off a list of routing tables that tell the router where to send the Internet traffic. These routing tables are used to re-route traffic when there is congestion in one part of the network (e.g., because a router goes down). Currently, when re-routing is necessary, routing tables are updated through a process of sending updated routing table information to every router in the system. That process takes time and causes additional congestion on the IP network, which delays traffic (i.e., increases latency and packet loss) as the IP routers update with the new routing tables. This process recurs when the failed router is restored, again causing all of the routing tables to update. The new AT&T has accelerated the implementation of a technology developed by AT&T Labs to connect these routing tables electronically to a single database, which will enable a router automatically to query the database and locate the best routing to avoid the point of congestion. Implementation of this new system will permit earlier identification of network congestion and quicker disbursement of re-routing information, resulting in a more stable network. This new intelligent routing capability will be able to mitigate Distributed Denial of Service

1		("DDOS") attacks by preventing congestion both on the IP network and on
2		customer connections. It also will enable the development/creation of new IP-
3		based services and applications much like the Advanced Intelligent Network
4		("AIN") technology did for the Public Switched Telephone Network ("PSTN").
5		These are just a few of the many examples of concrete benefits directly traceable to the integration accomplished as a result of the recent merger.
7 8	III.	THE MERGER WILL INCREASE THE PACE OF INNOVATION AND THE DEPLOYMENT OF NEXT GENERATION SERVICES
9 10	Q.	PLEASE DESCRIBE HOW THE MERGER WILL AFFECT INNOVATION AND THE INTRODUCTION OF NEW SERVICES.
11	A.	The wireline-wireless integration that I have discussed will permit us to introduce
12		new IP-based products and to be more responsive to consumer demands. Across
13		the spectrum of our customers, from the largest enterprise to a single household,
14		we continue to hear that consumers want to be able to access needed information
15		and applications from any connected device in an easy, intuitive, and reliable
16		manner. The integration of IP networks I've discussed above will position AT&T
17		to meet these demands.
18		The merger will allow the combined company to increase the pace of innovation,
19		roll-out new services more quickly, and offer those services to a broader range of
20		customers. Moreover, the combined company will have a greater incentive to
21		invest in new products and services than would either company alone. Because
22		technical innovations are generally applicable to a broad range of services, the
23		incentive to invest in such innovations is greatest when the resulting innovation

can be offered across multiple services and to the broadest range of customers,
allowing the innovator the maximum opportunity to earn the full benefits of the
innovation.

Q. CAN YOU PROVIDE AN EXAMPLE OF HOW AN INNOVATION CAN BE EXTENDED TO NEW CUSTOMER GROUPS?

Yes. In addition to the "click-through" portal I discussed earlier, another 6 A. innovation the new AT&T is pursuing involves a patented IP tool developed by 7 legacy AT&T Labs to detect network congestion in real time. This tool enables 8 the company to identify potential disruptions to VoIP or video services. Legacy 9 AT&T applied this tool only to large enterprise customers, but the SBC-AT&T 10 merger has allowed us to bring this development to business DSL customers as 11 well. By coupling the network congestion detection technology with AT&T's 12 expertise in managing networks through the use of automated troubleshooting and 13 isolation/localization of network faults, the new AT&T is able to offer more 14 reliable IP-based services to a broader range of customers. These same 15 technologies can be applied to BellSouth and Cingular, allowing AT&T to extend 16 the benefits of a more stable network to a broader customer base. 17

18 Q. ARE THERE PARTICULAR BENEFITS OF THE MERGER FOR RURAL CONSUMERS?

20

21

22

23

A.

Yes, there are. Access to a high-speed Internet connection can be particularly crucial for improving the quality of life for rural residents because the Internet can augment many basic services that are in short supply in rural America, such as state-of-the-art health care, extensive library resources, and educational

in some rural areas poses difficult challenges. 2 As a result of the merger, AT&T and BellSouth can consolidate their efforts to 3 explore ways to more efficiently deploy broadband services to rural and other 4 hard-to-reach areas. In particular, the pooling of AT&T and BellSouth resources, 5 combined with the technical expertise of Cingular, holds great promise for the

1

6

10

11

Texas this year.

opportunities. As the FCC has recognized, however, deployment of wireline DSL

development and deployment of broadband services using wireless technologies. 7

Indeed, AT&T is implementing pre-WiMax trials in rural areas of Nevada and 8 9

WILL ACCESS TO AT&T LABS PROVIDE ANY PARTICULAR Q. BENEFITS TO THE BELLSOUTH COMPANIES?

Yes. For instance, AT&T Labs has particular expertise in the development of IP-12 A. enabled voice and video techologies, including technologies relating to more cost 13 effective delivery of video over IP. AT&T Labs is working to develop enhanced 14 video compression technology so that video conferencing services can be offered 15 to enterprise customers with high quality of service commitments. The merger 16

Rural areas are typically characterized by sparse and dispersed populations, great distances between the customer and the service provider, and difficult terrain. These factors present a unique set of difficulties for providers attempting to deploy broadband services. Yet despite these obstacles, the data described in the preceding section demonstrate that significant progress is being made towards ubiquitous availability of advanced services in rural areas. This is a marked improvement since the Third Report.

Fourth Report to Congress, Availability of Advanced Telecommunications Capability in the Untied States, 19 FCC Rcd 20540, 20577 (2004).

¹ In its Fourth Report to Congress on the availability of advanced services, the FCC recognized that providing wired broadband service to certain rural areas poses some hurdles but noted that significant progress is being made:

with BellSouth will increase the attractiveness of investments in these developments by increasing the base of potential customers who would benefit from these developments. The increased customer base also will make the resulting higher quality video-conferencing services available more quickly and at more attractive prices to small- and medium-sized businesses.

A.

AT&T Labs also has been a leader in developing tools relating to speech and voice recognition, and in conversion of speech to text and vice versa. The ability to hear email over a cellphone, to read voicemail messages through a video display, or to text messages that can be heard by the receiving party offer tremendous advances in communication to consumers who are sight, hearing, or speech impaired. This transaction will position AT&T to offer such services to small businesses and consumers in BellSouth's region.

Q. ARE THE BENEFITS OF THE MERGER LIMITED TO RESIDENTIAL CUSTOMERS?

Not at all. The new products that will be made possible by the merger will benefit business customers as well. We will be able to more rapidly and effectively develop integrated business solutions that will bring the benefit of seamless mobility to the workplace by integrating wireless devices more fully with office applications. This will in turn enable businesses to be more productive and efficient as their workers will be able to perform a wider array of functions wherever they are located through mobile devices. The acquisition of BellSouth will enable us to meet business demands for integrated services, as well as to compete more effectively with a range of competitors — a number of which are

also working on integrated wireless-wireline devices for enterprises. Business customers will also benefit from our enhanced ability to offer network security services to protect their business networks from viruses, worms, spam, and denial-of-service attacks. And, as discussed above with regard to the merger of SBC and AT&T Corp., the merged company will be able to bring products and capabilities originally designed to serve the needs of AT&T's very large national and international customers to smaller businesses.

8 Q. WILL THE COMBINED COMPANY'S INCREASED INNOVATION BENEFIT TENNESSEE CUSTOMERS?

A. Absolutely. The innovation we expect from the merger will directly impact
customers in Tennessee. Many of these innovations will come in the area of
Internet and IP-enabled services, an area in which AT&T has been a long-time
industry leader. So, whether the customer is, on the one hand, a consumer that
subscribes to the merged company's broadband Internet access product, or, on the
other, an enterprise customer purchasing a suite of data services, the merger will
provide meaningful, direct benefits to customers in Tennessee.

17 IV. THE MERGER WILL FACILITATE DISASTER RESPONSE AND RECOVERY

19 Q. WILL THE MERGER AFFECT THE COMBINED COMPANY'S ABILITY TO RESPOND TO A NATURAL DISASTER?

A. Yes. Large-scale disasters such as ice storms, floods, tornadoes, hurricanes, and other natural phenomena burden the resources of companies even as large as AT&T and BellSouth. Historically, the Regional Bell Operating Companies ("RBOCs") supported one another through voluntary aid agreements, pursuant to

which they would make support personnel and equipment available to the affected RBOC. Such a voluntary system, however, cannot substitute for the efficiency that arises when there is one network throughout the affected region, with a common inventory of substitute equipment and personnel trained on that equipment.

In the case of Hurricane Katrina, for example, AT&T (that is, SBC before its November 2005 merger with AT&T Corp.) provided support personnel and equipment to support BellSouth's restoration effort. However, before we could deploy our personnel and equipment, the companies had to go through a formal process that involved a number of steps, each of which was necessary in the circumstances, but together delayed deployment. For example, after receiving BellSouth's formal request for assistance (which in turn could only be prepared after BellSouth understood the extent of the devastation it faced, what resources it had, and what it needed from others), SBC had to determine whether it had an inventory of compatible equipment and parts and, if so, how much could be spared without risking its own network. Similarly, SBC needed to determine how many personnel could be loaned to BellSouth consistent with SBC's own network support obligations, and then comply with various labor agreements before it could deploy personnel.

The merger will speed disaster response and recovery by enabling the combined company to share equipment and resources more efficiently. As a single company, AT&T and BellSouth will eliminate many of the processes that contributed to the delay of deployment. Moreover, with a single network, the

issue of equipment and electronics compatibility disappears, and the company could more efficiently plan for a disaster recovery effort in advance, thereby speeding up the eventual restoration of service considerably.

1

2

3

6

7

8

9

10

11

12

13

14

15

16

17

18

19

20

21

22

23

A.

4 Q. ARE THERE OTHER WAYS THAT THE MERGER WOULD IMPROVE DISASTER RECOVERY IN TENNESSEE?

Yes, AT&T has unique assets that can be deployed to improve disaster recovery. As an outgrowth of its long-standing role in national security communications, and to respond to demands of enterprise service customers that expect the highest level of network reliability, legacy AT&T invested hundreds of millions of dollars to develop truly unique disaster response capabilities. AT&T can deploy custombuilt emergency vehicles with satellite uplink facilities, providing a critical command center as a first response to a disaster. These command centers can be used by police, fire, and emergency personnel to support communications in the area, as occurred after the attacks on the World Trade Center in 2001. In addition, AT&T has the ability to deploy as many as 150 mobile central offices from its own fleet of trucks. Thus, if a central office is taken out by terrorist activity or other disaster, the mobile office can restore service very rapidly. Similarly, AT&T has some 350 trailers with generators, HVAC systems, and other resources needed to provide power and cooling to facilities that have lost power, enabling the facilities to be brought back on line quickly.

All of these AT&T recovery resources would be available to both BellSouth and Cingular following the merger. They would substantially enhance their abilities to respond to both natural and man-made disasters, to improve on-site

1		coordination of first responders and police, and to restore communications
2		services to private businesses and consumers in the affected areas.
3 4 5	Q.	WHAT CONCLUSIONS HAVE YOU REACHED CONCERNING BENEFITS TO TENNESSEE CUSTOMERS STEMMING FROM THE MERGER?
6	A.	The merger will result in significant benefits to customers in Tennessee. These
7		include increased efficiency and service quality from network integration,
8		increased innovation in network technology and services, availability of a broader
9		range of services to a broader range of customers, and more efficient disaster
10		response and recovery.
11	Q.	DOES THIS CONCLUDE YOUR TESTIMONY?
12	Α	Yes.

ATTACHMENT A

Cautionary Language Concerning Forward-Looking Statements

We have included or incorporated by reference in this document financial estimates and other forward-looking statements within the meaning of the Private Securities Litigation Reform Act of 1995. These estimates and statements are subject to risks and uncertainties, and actual results might differ materially from these estimates and statements. Such estimates and statements include, but are not limited to, statements about the benefits of the merger, including future financial and operating results, the combined company's plans, objectives, expectations and intentions, and other statements that are not historical facts. Such statements are based upon the current beliefs and expectations of the management of AT&T Inc. and BellSouth Corporation and are subject to significant risks and uncertainties and outside of our control.

Readers are cautioned that the following important factors, in addition to those discussed in this statement and elsewhere in the proxy statement/prospectus to be filed by AT&T with the SEC, and in the documents incorporated by reference in such proxy statement/prospectus, could affect the future results of AT&T and BellSouth or the prospects for the merger: (1) the ability to obtain governmental approvals of the merger on the proposed terms and schedule; (2) the failure of BellSouth shareholders to approve the merger; (3) the risks that the businesses of AT&T and BellSouth will not be integrated successfully; (4) the risks that the cost savings and any other synergies from the merger may not be fully realized or may take longer to realize than expected; (5) disruption from the merger making it more difficult to maintain relationships with customers, employees or suppliers; (6) competition and its effect on pricing, costs, spending, third-party relationships and revenues; (7) the risk that any savings and other synergies relating to the resulting sole ownership of Cingular Wireless LLC may not be fully realized or may take longer to realize than expected; (8) final outcomes of various state and federal regulatory proceedings and changes in existing state, federal or foreign laws and regulations and/or enactment of additional regulatory laws and regulations; (9) risks inherent in international operations, including exposure to fluctuations in foreign currency exchange rates and political risk; (10) the impact of new technologies; (11) changes in general economic and market conditions; and (12) changes in the regulatory environment in which AT&T and BellSouth operate. Additional factors that may affect future results are contained in AT&T's, BellSouth's, and Cingular Wireless LLC's filings with the Securities and Exchange Commission ("SEC"), which are available at the SEC's website (http://www.sec.gov). Neither AT&T nor BellSouth is under any obligation, and expressly disclaim any obligation, to update, alter or otherwise revise any forward-looking statement, whether written or oral, that may be made from time to time, whether as a result of new information, future events or otherwise.

This document may contain certain non-GAAP financial measures. Reconciliations between the non-GAAP financial measures and the GAAP financial measures are available on the company's website at www.sbc.com/investor_relations.