

**Before the  
FEDERAL COMMUNICATIONS COMMISSION  
Washington, D.C. 20554**

In the Matter of	)	
	)	
AT&T CORP.	)	WC Docket No. 05-65
	)	
and	)	
	)	
SBC COMMUNICATIONS INC.	)	
	)	
Application Pursuant to Section 214 of the	)	
Communications Act of 1934 and Section 63.04	)	
of the Commission's Rules for Consent to the	)	
Transfer of Control of AT&T Corp. to SBC	)	
Communications Inc.	)	
_____	)	

**DECLARATION OF MARK PIETRO**

1. My name is Mark Pietro. I am the President, Voice Services for Broadwing Communications LLC, a position I have held since 2004. I have over twenty years experience in telecommunications, having worked at New York Telephone, AT&T, and Fonorola, among others. I hold a B.S. in marketing from Mercy College.
2. The purpose of my declaration is to describe Broadwing's current use of special access circuits and the negative impact the SBC-AT&T merger, if consummated, would likely have on the market for special access and on Broadwing. In short, the special access market is highly concentrated, and a merger of SBC and AT&T would make the special access market even more concentrated by eliminating AT&T, which is currently the largest competitor to SBC in its territory for the supply of special access circuits. For the reasons set forth below, Broadwing and similarly situated companies, and their

customers in turn, will face higher special access rates and diminished quality of service if this merger is consummated without adequate competitive protections.

**I. BROADWING IS A FACILITIES-BASED PROVIDER OF VOICE AND DATA SERVICES.**

3. Broadwing is a communications services business that provides data and Internet services, broadband transport, and voice communications to large enterprises, mid-market businesses, and other communications service providers. Its revenue in the fourth quarter of 2004 annualized was \$872 million. Broadwing owns and operates a nationwide, all-optical, facilities-based network that connects 137 cities nationwide and is capable of transmitting up to 800 Gbps per fiber. Broadwing also acquired the assets of the former Focal Communications Corporation in 2004, which include a local fiber network in nine cities. In addition to the voice and data services described above, Broadwing also provides Internet backbone service both on an unbundled basis and in combination with Virtual Private Network (“VPN”) services.

**II. BROADWING RELIES ON SPECIAL ACCESS CIRCUITS PROVISIONED BY THIRD PARTIES, INCLUDING AT&T AND MCI.**

4. Broadwing does not self-provision its own loop and transport facilities because high fixed and sunk costs and economies of scale make self-provisioning uneconomic. Broadwing also faces other entry barriers, such as building access and access to rights of way, that make the deployment of loop facilities impossible in most circumstances.

5. Instead, Broadwing relies on special access circuits provided by third parties. To be more specific, Broadwing purchases transport links that connect Broadwing’s Points of Presence (“POPs”) to the in-region BOC’s serving wire center. Broadwing then

purchases “tails” (i.e., T-1 or T-3 loops) that connect the serving wire center to the customers’ premises.

6. Special access constitutes a significant cost to Broadwing. Of every \$1 of revenue that Broadwing earns, \$.50 to \$.60 is spent to procure special access circuits.

7. Today, 90 percent of the special access circuits that Broadwing purchases come from three carriers: AT&T, MCI, and the in-region BOC.

8. Broadwing generally purchases “Type I” circuits, which are circuits owned end-to-end by the provisioning carrier. Unlike many other carriers, Broadwing does not currently purchase many “Type II” circuits, which are BOC circuits that are resold by another carrier, such as AT&T and MCI. As a result, the vast majority of Broadwing’s special access circuits are currently provisioned by the BOC, because very few competitive carriers have deployed their own loop and transport facilities. Broadwing currently purchases 20,000 special access circuits from SBC in its territory.

9. Broadwing purchases special access circuits from SBC pursuant to a long-term contract that provides Broadwing with a sizable discount off the tariffed rate for special access circuits if Broadwing makes a substantial volume commitment, both for Broadwing’s existing and future demand. The agreement is a “take or pay” contract, so if Broadwing does not meet its volume commitment to SBC, it is forced to pay the difference between its actual spend and the annual commitment. Thus, if Broadwing does not meet its commitment, the take or pay nature of the agreement effectively reduces the discount off the tariffed rate. Broadwing’s prior agreement with SBC made it even more difficult to obtain special access circuits from competitive providers by requiring Broadwing to transition 4 percent of its existing special access circuits from

competitors to SBC. As a result of these and other terms and conditions, it is often difficult, if not impossible, for Broadwing to use special access circuits from competitive carriers even when such facilities are available.

10. In my experience, AT&T and MCI are the largest competitors to the BOCs in the market for special access circuits. As shown by the data below, there are approximately 429 connections to enterprise buildings by providers other than SBC within the Chicago MSA. (Of course, this number is dwarfed by the number of enterprise buildings lit by SBC.) But of the total number of buildings where competitors have extended their own facilities, AT&T and MCI serve more than one-half. By contrast, the next largest provider – XO – only serves 17 percent. The same trend is evident with regard to “lit” LEC serving wire centers. Of the 53 LEC wire centers that are served by competitive carriers, AT&T serves an astounding 92 percent, and MCI serves more than one half. These figures overshadow XO, the next largest provider at 26 percent.

Company	Lit Buildings	Lit LEC SWCs
MCI	253	29
AT&T	239	49
XO	72	14
LGN	24	6
On-Fiber	16	
FiberNet	8	
Time Warner	4	2
ICG	1	
Total:	429	53

**III. RESPONSES TO BROADWING’S SPECIAL ACCESS RFP FURTHER CONFIRM THAT THE MARKET FOR SPECIAL ACCESS SERVICES IS HIGHLY CONCENTRATED.**

11. Of the 10,500 special access circuits that Broadwing purchases in the Verizon region, approximately 10,000 are provisioned by Verizon.

12. In December 2004, Broadwing issued an RFP seeking to move some of the 10,000 special access circuits currently provided by Verizon to a competitive carrier. In particular, Broadwing sought to reduce the mileage charges that it currently pays to Verizon for the transport links between Broadwing's POPs and Verizon's serving wire centers. As such, the RFP asked competitive providers if they could offer transport links at a lower rate than Verizon, using either Type I or Type II facilities.

13. Broadwing sent the RFP to the following vendors: AT&T, MCI, Sprint, Qwest, XO, Cavalier, Covad, Fibernet, MCI, PPL, Time Warner, and Neon. Broadwing received a response from only seven of those carriers, and none of them could supply more than 10 percent of the special access circuits that Broadwing currently purchases from Verizon.

14. MCI offered the most comprehensive response to Broadwing's RFP. MCI made two proposals. Pursuant to the first proposal, MCI could offer Type I transport links to approximately 20 percent of the wire centers that Broadwing needs to reach. Under the second proposal, MCI could connect some of Broadwing's POPs to MCI's POPs and then use Type II facilities to connect Broadwing to its customers' premises.

15. After MCI, AT&T submitted a list of all the buildings that AT&T had wired nationwide, and proposed that Broadwing cross-reference its current list of special access circuits with AT&T's list of on-net buildings.

16. The only other carrier that provided a meaningful proposal was XO. However, given that XO has a much smaller network than MCI and AT&T, its proposal was geographically limited. It is Broadwing's experience that most competitive carriers have

“lit” only 50 to 200 buildings, which requires Broadwing to acquire last-mile transmission facilities from the BOC in almost all circumstances.

#### **IV. THE MERGER WOULD REDUCE COMPETITION IN THE SPECIAL ACCESS MARKET.**

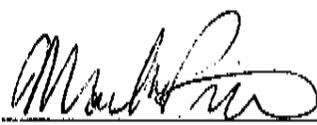
17. The merger between SBC and AT&T is a matter of significant concern to Broadwing. As a result of the merger, Broadwing would lose one of its few competitive suppliers of special access circuits. As demonstrated above, there are only two primary competitors to the BOC in the special access market – AT&T and MCI. The merger of SBC and AT&T will therefore reduce the number of potential competitors in SBC’s 13-state region from three potential suppliers to two. It would effectively reduce it to one if SBC and Verizon fail to compete with each other out of region after being permitted to merge with AT&T and MCI.

18. The merger between SBC and AT&T will lead to two negative outcomes. First, greater concentration in the special access market is likely to result in increased rates. Today, Broadwing purchases thousands of special access circuits from SBC at a specified discount off the tariffed rate. Broadwing’s current agreement with SBC does not guarantee any specific dollar price for circuits but only specifies a discount off tariffed rates. The only thing that keeps the underlying tariffed rates in check is what competition there is from competitive carriers, mainly AT&T and MCI. Thus, to the extent that the SBC-AT&T merger removes one of the two main competitors from the special access market, Broadwing is likely to see its rates for special access circuits increase within SBC’s 13-state footprint. Second, the acquisition of AT&T by SBC raises the concern that the SBC will degrade special access service quality for non-affiliated carriers. SBC

has every incentive to discriminate in favor of its new long distance affiliate, AT&T. This will harm non-affiliated carriers such as Broadwing and their customers because those carriers will not be able to deliver circuits to end users within the same timeframe, and at the same level of service quality, as SBC.

**VERIFICATION**

I declare that the foregoing is true and correct.

Signature:   
Mark Pietro  
President – Voice Services  
Broadwing Communications LLC

Dated: April 25, 2005

**Before the  
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Communications Inc.	)	
_____	)	

**DECLARATION OF GARY ZIMMERMAN**

1. My name is Gary Zimmerman. My business address is 1 Savvis Parkway, Town & Country, Missouri, 63017. I am Vice President of Global Client Service – Carrier Management for SAVVIS. I have worked for SAVVIS since 1995. My current responsibilities include negotiating contracts for special access circuits with other telecommunications carriers worldwide. I am also responsible for preparing performance “report cards” on all the carriers from whom SAVVIS purchases special access circuits on a quarterly basis. My organization is the focal point within SAVVIS for managing all issues and problems related to special access services.

2. The purpose of my declaration is to describe SAVVIS’ current use of special access circuits and the negative impact that the SBC-AT&T merger would, if consummated as proposed, have on the market for special access and on SAVVIS. As further described herein, the special access market is already highly concentrated, and it

will become still more concentrated if this transaction is allowed to proceed. Indeed, the transaction could eliminate AT&T as one of SAVVIS' largest suppliers of special access circuits. In short, for the reasons set forth below, SAVVIS and similarly situated companies likely will face higher special access rates and diminished quality of service if this merger is concluded as proposed.

**I. SAVVIS IS A GLOBAL INFORMATION TECHNOLOGY SERVICE PROVIDER.**

3. SAVVIS is a global information technology services company with over 5,000 customer endpoints in the financial services, media, retail, professional services, healthcare, manufacturing, government (including the U.S. federal government) and other sectors. The company's revenues in 2004 exceeded \$600 million.

4. SAVVIS provides its customers with a full range of information technology services that allows them to establish large-scale managed internal networks, including (1) end-to-end large-scale managed Internet Protocol virtual private networks (known as IP VPNs); (2) hosting facilities, networks, servers, and storage offered through 24 data centers located in the United States, Europe, and Asia; (3) infrastructure tied to workflow applications that enhance the creation, production and distribution of digital content and streaming media; and (4) a broad range of network services to support voice, video, data, and web applications. These network services include providing businesses with public Internet access in the United States, Europe, and Asia at speeds from fractional T-1 to full OC192. Unlike Internet Service Providers ("ISPs") that provide only the "last mile" physical connection between end-users and the nearest network node connected to the public Internet, SAVVIS is a true Internet Backbone Provider ("IBP"), owning and operating the high-volume fiber "pipes" and associated transmission equipment that

physically connect Internet nodes around the country and even the world. SAVVIS' network, however, reaches only its own customers – without peering between IBPs, the network would be an island of SAVVIS customers only. In other words, without peering interconnections between IBPs such as SAVVIS and competitors such as SBC, Qwest, AT&T, MCI, Level 3, Sprint, and Broadwing, the Internet literally would not work and data packets could not traverse the globe with the high-speed and low-cost universal connectivity that end-users have grown to expect.

5. Customers (including ISPs) can purchase SAVVIS' Internet backbone service either individually or in combination with the other services described above. For example, a business could use a SAVVIS private network to connect its offices and SAVVIS Internet backbone services to reach its customers or partners. For large enterprise or carrier customers, SAVVIS also offers High Speed Dedicated Internet Access (HS-DIA), which is unmanaged and delivered at speeds ranging from OC3 to OC192. SAVVIS offers its customers contracts that are typically one to three years in length. All of the SAVVIS Managed Service contracts contain Service Level Agreements (SLAs) with guarantees for network availability, throughput, latency, packet loss and jitter, and service credits for failure to meet them.

6. In order to provide its private networking and Internet backbone services, SAVVIS owns and operates an extensive infrastructure that includes approximately 50 MPLS switches, 200 backbone routers, 17,000 access devices at customer locations, and hundreds of Points of Presence, or PoPs, in 47 countries. This network is designed with highly redundant backbone infrastructure including diversely-routed long haul and local access connections from multiple carriers, and employs a ring architecture so that at least

two different paths exist between switching facilities resulting in a self-healing, fault-tolerant network.

**II. THE MARKET FOR SPECIAL ACCESS SERVICES IS HIGHLY CONCENTRATED.**

7. SAVVIS uses special access circuits to provide tails (*i.e.*, loops) that connect end-user customers to SAVVIS' Internet backbone via points of presence ("PoPs"). As a practical matter, SAVVIS always purchases "tails" from a third-party provider. SAVVIS does not self-provision its own loop facilities for three fundamental reasons. First, economies of scale make self-provisioning uneconomic. Most of the cost of deploying transmission facilities is in the supporting structures, placement, rights of way, and access to buildings, and not in the conductors (fiber strand or copper wires) themselves.

Because the cost of the supporting structures is relatively insensitive to the number of lines deployed, the BOCs enjoy substantial economies of scale that competitors like SAVVIS simply cannot match. Second, transmission facilities are characterized by substantial sunk costs. An investment is sunk if, once made, it cannot be redeployed for some other use. Investments spent on trenching, structure, and rights of way for a loop clearly fall into this category. Indeed, it is basic economics that the need to incur significant sunk costs to deploy facilities that have substantial economies of scale establishes a significant barrier to entry. Finally, SAVVIS also faces other entry barriers, such the limited building access and access to rights of way that combine to make the deployment of loop facilities a practical impossibility in many circumstances.

8. In my experience, because competitive providers have not been able to replicate the incumbent LECs' transmission facilities, the market for special access services is highly concentrated. In the vast majority of cases, there are no practical alternatives to

the BOCs' special access services. To date, CLECs have only established alternative facilities to a small fraction of buildings. Moreover, most of the major CLECs that provided alternative access have gone bankrupt.

9. Significantly, even in situations where CLECs do offer special access facilities, those companies most often merely resell special access provided by the BOC. This is because, as a practical matter, would-be competitors to the BOCs face most of the same barriers to the deployment of special access facilities that – as described above – SAVVIS faces in self-provisioning its own loop facilities. The market for special access services thus remains dominated by the BOCs, with the limited degree of competition that does exist depending substantially on the resale of BOC special access services by large IXC (such as AT&T, MCI, and Sprint) and CLECs.

10. Despite the scarcity of alternatives to the BOCs, SAVVIS uses competitive providers of special access circuits whenever possible. Today, [REDACTED] of SAVVIS' special access circuits are provisioned by AT&T and MCI. Of those circuits, *approximately* [REDACTED] *are BOC circuits resold by AT&T and MCI.* Such circuits are generally referred to as "Type 2 circuits." A much smaller amount of the special access circuits purchased by SAVVIS are provisioned directly by the ILEC. These circuits are referred to as "Type 1 circuits." Though SAVVIS prefers to purchase Type 1 service, in reality, very few of the circuits purchased by SAVVIS are Type 1 circuits offered by competitors.

11. SAVVIS purchases the vast majority of its special access circuits from the large interexchange carriers primarily because it obtains better special access rates from the IXCs than it could from the BOCs. BOCs set rates for special access based on a carrier's

“buy” or “commit to buy” rate. In other words, the BOC provides a discount to the carrier off the normal tariffed rate if that carrier commits to purchasing a set monetary amount of special access services each month, usually for a term of one, three, or five years. BOCs also typically sell special access circuits through a single contract that covers their entire region, and not on an MSA or route-specific basis.

In my estimation, SAVVIS typically buys fewer special access circuits per month nationwide than the large IXC such as AT&T buy per month from *each* BOC. AT&T thus gets a larger discount on special access than every other carrier, including SAVVIS, because it has a higher buy rate. AT&T passes on this discount when it resells Type 2 special access circuits to SAVVIS. Hence, SAVVIS is able to leverage the IXC’s buy rate to get a lower price (and better service) for special access than if SAVVIS bought directly from the BOC.

12. SAVVIS also purchases the majority of its special access circuits from IXCs, and not CLECs, because the IXCs have much larger networks. For example, I estimate that AT&T, MCI, and Sprint can resell special access services in every LATA nationwide. By contrast, XO – the CLEC with the largest national network – only serves approximately 10 percent to 15 percent of all LATAs. Although other CLECs have built networks in certain niche markets, no CLEC can rival the scope of the large IXCs. Thus, because the market for special access is defined by BOC region, SAVVIS primarily purchases special access circuits from the large IXCs. This is because purchasing from the IXCs allows SAVVIS to purchase circuits throughout a BOC region, or even throughout the nation, using a single contract. Indeed, in many markets, the large IXCs are the only alternative to the BOC. Thus, eliminating AT&T and MCI as competitive

providers of special access circuits could leave only one competitive provider with a national footprint – Sprint.

13. Finally, it is SAVVIS' policy to buy from the IXC's whenever possible because managing relationships with the BOC's requires greater resources. Currently, SAVVIS employs five people to manage relationships with 20 carriers nationwide. However, if SAVVIS were to enter into an agreement with a BOC, it would have to double the size of its carrier management staff, because the BOC's are tougher to manage. Indeed, SAVVIS buys the majority of its special access circuits from AT&T and MCI because these large IXC's view SAVVIS as a significant and valued customer. The BOC's, by contrast, view SAVVIS as a "niche" carrier – and thus a less valued customer – based on our monthly recurring revenue, which falls far short of the large IXC's.

## **II. SAVVIS' CONCERNS ABOUT THE MERGER**

14. The merger between SBC and AT&T raises three primary concerns for SAVVIS' business. First, SAVVIS likely will lose one of its largest suppliers of special access circuits. Today, there are only three primary competitors in the special access market nationwide: AT&T, MCI, and Sprint. The merger of SBC and AT&T will therefore reduce the number of potential competitors in SBC's 13-state region from three potential suppliers to two. Indeed, if AT&T merges with SBC, AT&T likely will cease to provide Type 2 special access circuits to SAVVIS in SBC's 13-state region. As a result, pricing could increase where AT&T is no longer a competitive alternative to the BOC. And, other than possibly Sprint, no other carrier purchases the same volume of special access circuits as AT&T and MCI. This likely will leave SAVVIS with a single alternative with a national footprint for Type 2 special access circuits. Of course, Sprint may not have the

buying power to be eligible for discounts that are comparable to those received by AT&T and MCI today. Thus, even if SAVVIS buys Type 2 circuits from Sprint, SAVVIS is likely to see a price increase.

15. Further, in today's market, AT&T – by virtue of both its demand and its unused fiber capacity – exerts some disciplining effect on SBC's special access pricing. AT&T receives the most favorable special access rates and terms based on the fact that it is one of SBC's largest special access customers, with a large amount of internal capacity. As a result of AT&T's volume of demand, and the implicit threat that AT&T could more aggressively groom circuits off SBC's network onto its own or others, AT&T is more able to secure the most favorable special access rates and terms. This exerts some discipline on special access rates in general. But if the merger is consummated, this discipline will no longer constrain SBC. In short, AT&T is one of SBC's largest competitors and customers in the special access market. The loss of AT&T is therefore likely to result in an increase in the rates paid by all special access customers within SBC's 13-state region.

16. Moreover, it will be difficult for SAVVIS to move its special access circuits from AT&T to another competitive carrier, such as Sprint. Moving an end user customer from one carrier to another takes a great deal of resources and may result in a service disruption. This jeopardizes SAVVIS' relationship with the customer. Further, SAVVIS might not be able to find another competitive carrier with a national footprint to replace AT&T. As discussed above, very few providers can duplicate the ILEC's network – which currently provides distribution plant to every customer premises within its service area – because of the high fixed and sunk costs, economies of scale, and first mover

advantages associated with deploying loops and transport. Thus, as a result of the merger, SAVVIS will have little choice but to purchase special access service ultimately from SBC within its 13-state region.

17. Second, the acquisition of AT&T by SBC could degrade special access service quality for non-affiliated carriers. It is likely that as a result of the merger, SBC will move all of AT&T's special access circuits from third-party providers onto SBC's own network to avoid losing customers through possible divestiture of these facilities as a condition of the merger. For instance, after AT&T acquired TCG, it flooded TCG with orders for special access circuits as AT&T tried to move customers on-net. As a result, circuit delivery intervals increased dramatically. If SBC uses the same strategy, the net result will be that service to non-affiliated carriers will decline as SBC tries to process all of its orders from AT&T. Indeed, SBC has every incentive to discriminate in favor of its new long distance affiliate, AT&T. Likewise, the provision of special access circuits to non-affiliated carriers will also decline as AT&T concentrates on moving its special access circuits onto SBC's network, not the needs of its wholesale customers, including SAVVIS. This will render non-affiliated carriers such as SAVVIS non-competitive, because SAVVIS will not be able to deliver circuits to its end user customers within the same timeframe, and at the same level of service quality, as SBC.

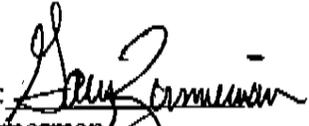
18. Third, the SBC-AT&T and Verizon-MCI mergers could reach anti-competitive agreements for special access pricing. The mergers, if consummated as proposed, would create two players with huge volumes of special access circuits. Based on their enormous buy rates, each BOC could offer the other deeply discounted special access services out-of-region. But no other carrier would be able to qualify for these sweetheart deals

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because they will never have the same volume of traffic as the BOCs. As a result, SAVVIS and other non-affiliated carriers will not be able to compete on price, because SBC-AT&T and Verizon-MCI will have lower input costs.

**VERIFICATION**

I declare that the foregoing is true and correct.

Signature:   
Gary Zimmerman  
Vice President of Global  
Client Service - Carrier  
Management  
SAVVIS Communications,  
Inc.

Dated: April 25, 2005

**Before the  
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Transfer of Control of AT&T Corp. to SBC	)	
Communications Inc.	)	

**DECLARATION OF DR. MATHEW P. DOVENS**

I, Mathew P. Dovens, do hereby declare:

1. I am employed by SAVVIS as Senior Director, Network Products. My responsibilities include leading SAVVIS' network relationship activities and directing strategy in negotiating peering agreements with similarly-sized Internet backbone networks, as well as network cost management and regulatory support. My business address is 12851 Worldgate Drive, Herndon, VA 20170.

2. I have 24 years experience in the telecommunications industry, including 10 years managing and operating the network assets that SAVVIS now owns. Before SAVVIS acquired Cable & Wireless America's network assets in March 2004, I was responsible for Cable & Wireless's global IP planning and implementation. Before Cable and Wireless acquired MCI's network assets (in a divestiture arising out of the 1998 MCI-WorldCom merger, motivated by antitrust concerns in the Internet backbone market), I

managed MCI's international marketing department at internetMCI. From 1994 to 1996, I managed the creation and expansion of the MCI vBNS program, the U.S. research network sponsored by the National Science Foundation that evolved into the Internet II backbone. From 1991 to 1994, I was MCI's Ambassador at Advanced Network and Services (ANS) Inc. I joined MCI in 1985 to manage the design, development, and engineering of the MCI Digital Data Network and in 1987 headed the MCI team that won the National Science Foundation Network (NSFNET) cooperative agreement. This network served as the backbone of the global Internet from 1987 until 1995. I received a doctoral diploma from the University of Technology in Eindhoven, The Netherlands, in Electrical Engineering with a specialization in Data Communications.

3. This declaration describes the significant threat to the market for Internet backbone services posed by SBC's proposed acquisition of AT&T's Internet backbone network (especially in light of Verizon's proposed acquisition of MCI's Internet backbone network). I begin by describing SAVVIS' existing Internet backbone business and its position within the market for Internet backbone services. In particular, I describe the "peering" arrangements among existing Tier-1 Internet networks that, without any need for regulatory oversight, provide customers with low-cost access to the entire Internet. Next, I discuss why a combined SBC-AT&T (and Verizon-MCI) network would harm consumers by fundamentally changing the competitive dynamics of the Internet backbone services marketplace. As I explain in greater detail below, the net result of these mergers would be to give the combined entities the ability to drive other players (including many existing Tier-1 providers) out of the marketplace. The net losers of this development will be consumers. Finally, I explain why the outdated and

incomplete data that SBC and AT&T provide are inadequate to answer the significant public interest concerns raised by their proposed merger.

**I. SAVVIS' EXISTING INTERNET BACKBONE NETWORK**

4. SAVVIS is a global information technology services company with over 5,000 customer endpoints in the financial services, media, retail, professional services, healthcare, manufacturing, government (including the U.S. federal government) and other sectors. The company's revenues in 2004 exceeded \$600 million.

5. SAVVIS provides its customers with a full range of information technology and communications services, including: (1) end-to-end large-scale managed IP virtual private networks (known as IP VPNs); (2) hosting facilities, networks, servers, storage, and operations offered through 24 data centers located in the United States, Asia, and Europe; (3) infrastructure tied to workflow applications that enhance the creation, production and efficient distribution of digital content and streaming media; and (4) a broad range of network services to support voice, video, data, and web applications. These network services include providing businesses with public Internet access in the United States, Europe, and Asia at speeds from fractional T-1 to full OC192. Unlike Internet Service Providers (ISPs) that provide only the "last mile" physical connection between end-users and the nearest network node connected to the public Internet, SAVVIS is a true Internet Backbone Provider (IBP), owning and operating the high-volume fiber "pipes" and associated transmission equipment that physically connect Internet nodes around the country and even the world. SAVVIS's network, however, reaches only its own customers – without peering between IBPs, the network would be an

island of SAVVIS customers only. In other words, without peering interconnections between IBPs such as SAVVIS and competitors such as SBC, Qwest, AT&T, MCI, Level 3, Sprint, and Broadwing, the Internet literally would not work and data packets could not traverse the globe with the high-speed and low-cost universal connectivity that end-users have grown to expect.

6. Customers (including ISPs) can purchase SAVVIS' Internet backbone service either individually or in combination with the other services described above. For example, a business could use a SAVVIS private network to connect its offices and SAVVIS Internet backbone services to reach its customers or partners. For large enterprise or carrier customers, SAVVIS also offers High Speed Dedicated Internet Access (HS-DIA), which is delivered at speeds ranging from OC3 to OC192. SAVVIS offers its customers contracts that are typically one to three years in length. Most contain Service Level Agreements (SLAs) that offer guarantees for network availability, throughput, latency, packet loss and jitter, and service credits for failure to meet them.

7. In order to provide its private networking and Internet backbone services, SAVVIS owns and operates an extensive global infrastructure that includes approximately 50 MPLS switches, 200 backbone routers, 17,000 access devices at customer locations, and hundreds of Points of Presence (POPs) in 47 countries. This network is designed with highly redundant backbone infrastructure including diversely-routed long haul and local access connections on fibers from multiple sources, and employs a meshed architecture so that at least two different paths exist between switching/routing facilities – resulting in a self-healing, fault-tolerant network.

**II. A MARKET COMPOSED OF SIMILARLY-SIZED “PEER” NETWORKS PROVIDES CONSUMERS WITH ACCESS TO THE ENTIRE INTERNET AT AN ECONOMICALLY-EFFICIENT PRICE.**

8. In order to meet the expectations of its Internet backbone customers, SAVVIS must provide them with the ability to communicate with any end-user connected to any part of the public Internet. All customers expect to be provided universal Internet connectivity, meaning that all locations on the Internet can be reached through the connection provided by the IBP. The Internet exhibits what economists refer to as “direct network effects,” meaning that the value of each end-user’s connection to the Internet increases with the number of other end-users also connected to the Internet. For example, a business like Amazon.com maximizes its profits only if its IBP allows any end-user with an Internet connection to reach Amazon.com’s Web page.<sup>1</sup> And, similarly, the end-user maximizes value (or the ISP that serves the end-user maximizes profit) only if an IBP allows him or her to reach any Web page connected to the Internet.

9. In order to provide universal connectivity to its customers, SAVVIS (like other comparably sized IBPs) has formed “peering” agreements with other IBPs that have national and international geographic footprints and high data throughput. These agreements contain two basic provisions. *First*, they authorize SAVVIS to transfer, at specified handoff points, IP data packets originating on its network and addressed to a customer of the other network, and vice versa. Crucially, this agreement does *not* give SAVVIS the right to transfer IP packets to a peer network if the ultimate end-user recipient is not the peer’s customer. *Second*, the peering agreements specify that the

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<sup>1</sup> The example is simplified. Generally a large content provider such as Amazon.com or a large ISP will simultaneously employ more than one IBP, for redundancy purposes as well as to create a bargaining position with leverage.

transfer is to be “settlement-free,” meaning that neither network will charge the other so long as each terminates the other’s traffic as per the agreement.

10. In order to maximize its customers’ ability to reach any end-user connected to the Internet, SAVVIS will peer with any IBP that meets certain criteria. This set of criteria is called a peering policy. SAVVIS, like several other leading IBPs, publishes its peering policy on its external Web site.<sup>2</sup> The key requirements for U.S. connectivity – similar to most other comparably-sized IPBs’ published peering criteria -- are (1) a redundant United States network of at least OC192 (9.6 GBps) capacity; (2) with backbone hubs in at least 9 specified geographic regions in the United States; (3) a 90 percentile traffic volume at all peering connections of at least 1000 Mbps; and (4) a weekly aggregated 90 percentile ratio of outgoing to incoming traffic of no more than 2:1.

11. IBPs that terminate traffic solely through settlement-free peering agreements are commonly known as Tier-1 IBPs. SAVVIS is a Tier-1 IBP. SBC, AT&T, and MCI all have networks that meet SAVVIS’ peering criteria. All are also generally regarded as Tier-1 peers by knowledgeable observers.

12. Networks that do not qualify for settlement-free peering with the Tier-1 IBPs have two options. Some may negotiate “paid-peering” arrangements, which give them the right to terminate traffic like a settlement-free peer, but for a volume-based fee. For obvious reasons, this arrangement puts the paying network at a competitive cost disadvantage compared to the true Tier-1 networks.

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<sup>2</sup> See [http://www.savvis.net/peering/peering\\_usa.doc](http://www.savvis.net/peering/peering_usa.doc).

13. The more common arrangement is for a smaller network to reach a “transit” arrangement with a Tier-1 IBP. Transit arrangements in essence treat the smaller network as a customer of the Tier-1 IBP. The transit network pays a volume-based fee for traffic it transfers to the Tier-1 IBP, or for traffic transferred by the Tier-1 IBP to the transit network. In return, the Tier-1 IBP treats the transit network’s traffic as its own – terminating originating traffic on its own backbone or transferring it to the Tier-1 network’s peers as needed, and terminating incoming traffic headed to the transit network. So long as the Tier-1 peer has the ability to terminate to any Internet end-user through peering arrangements with all the other Tier-1 peers, the transit network customers can piggyback off these arrangements and be assured of universal termination capability. In this way, a single transit contract with a Tier-1 peer is sufficient to ensure connectivity with any Internet user.

14. Because the transit network must pay for each data packet it transfers, however, it is at a significant cost disadvantage relative to a Tier-1 peer. This competitive disadvantage persists even after accounting for the transit network’s cost savings in not establishing a full Internet backbone network.<sup>3</sup> That is why large networks (such as SBC) generally opt to become peers rather than transit networks, even if that requires geographic expansion outside of an existing business footprint.

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<sup>3</sup> Transit networks sometimes also form settlement-free peering agreements with each other in order to reduce the amount of traffic that they must pay to transfer to their Tier-1 providers. These agreements are typically reached by two regional networks and specify that if traffic originates on one regional network and is destined for the other regional network, or vice versa, then the two networks will transfer and terminate the traffic without charge. This practice is known as “Tier-2 peering.” Of course, transit to the Tier-1 network is still necessary for traffic originating or terminating in other regions.

15. The past nine years of commercial Internet history have demonstrated that a market with a significant number of Tier 1 IBPs of a sufficiently similar size (so that all will peer with each other) ensures an economically efficient level of traffic exchange without any direct government regulation. The driving force is the universal connectivity mentioned above – each Tier-1 IBP maximizes the value of its service only by offering customers the ability to reach the customers of *every* other Tier-1 IBP. Any IBP that failed to reach settlement-free peering agreements would quickly lose all its customers to a competitor that could provide universal connectivity. However, as explained in detail below, this equilibrium is not likely to persist if the proposed AT&T-SBC merger occurs (and especially if the MCI-Verizon merger occurs as well).

### **III. THE PROPOSED MERGERS WOULD CREATE “MEGA-PEERS” ABLE TO TAKE ADVANTAGE OF “NETWORK EFFECTS” TO COLLECT MONOPOLY RENTS.**

16. As the FCC and DOJ have realized,<sup>4</sup> the economically efficient equilibrium of widespread peering among Tier-1 IBPs is unlikely to remain viable if a single IBP becomes sufficiently large relative to the others – a so-called mega-peer. The danger is that the market would “tip” towards a monopoly or quasi-monopoly. The

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<sup>4</sup> See *In re Application of WorldCom, Inc. and MCI Communications Corp. for Transfer of Control of MCI Communications Corp. to WorldCom, Inc.*, Memorandum Opinion and Order, 13 FCC Rcd 18025 (1998) (“*MCI/Worldcom Order*”); *In re Intermedia Communications, Inc., Transferor, and WorldCom, Inc., Transferee, for Consent to Transfer Control of Corporations Holding Commission Licenses*, Memorandum Opinion and Order, 16 FCC Rcd 1017 (2001) (“*Intermedia Order*”); *United States v. WorldCom Inc. and Intermedia Communications, Inc.*, Compl. (filed D.D.C., Nov. 17, 2000) (“*Intermedia Complaint*”), available at [www.usdoj.gov/atr/cases/f7000/7043.htm](http://www.usdoj.gov/atr/cases/f7000/7043.htm); *United States v. WorldCom, Inc. and Sprint Corporation*, Compl. (filed D.D.C., June 26, 2000) (“*Sprint Complaint*”), available at [www.usdoj.gov/atr/cases/f5000/5051.pdf](http://www.usdoj.gov/atr/cases/f5000/5051.pdf).

reason is that the new mega-peer has far less to lose than a smaller IBP if the two networks were to end peering or, more likely, if the quality of their peering were to suffer due to degradation. This gives the mega-peer a sizeable strategic advantage that it could exploit in at least two ways.

17. In one scenario, a mega-IBP could decline to upgrade the speed of its peering connection with smaller Tier-1 IBPs, even as customers come to expect the upgraded connection speed. Most likely, the mega-peer would use this technique to pick off rivals sequentially – declining to upgrade the speed or number of peering connections of a single IBP at time. The effect on the mega-peer’s customers would be relatively small, since its customers will still be able to reach most websites at the prevailing connection speed and will experience the relatively slow speed only when attempting to connect to customers of the IBP being victimized. Meanwhile, *all* the customers of the victimized IBP will experience slow speeds when they attempt to connect to any of the many end-users of the now-dominant IBP. The victimized IBP would lose customers in droves. The dominant IBP could then turn to the next IBP and apply the same process, until eventually it drives most or all of its rivals out of the market.

18. Alternatively, the same “tipping” would result if the dominant IBP were to decline to renew a peering agreement with a smaller IBP and ask instead for transit payments or paid-peering. Because the threat of doing so would be credible in light of the mega-peer’s position of negotiating strength, the smaller IBP might see no other option than to give in. This possibility exists whenever one network would be hurt far more than the other by the refusal to continue terminating each other’s inter-network traffic. If the smaller IPB were unwilling or unable to pay the dominant IBP for peering

or for transit, universal connectivity would be broken, and the smaller IBP would become isolated. A single instance of this lack of connectivity is called a “black hole.” The customers of the victimized IBP would be unable to reach any destination on the dominant IBP’s network. This would be an unacceptable state of affairs for the smaller IBP’s customers. Multiple instances of this lack of connectivity would *balkanize* the Internet into isolated islands that are unable to communicate with one another. In that environment, customers would be compelled to purchase service from the mega-peers, who continue to exchange traffic with one another. Thus the customers are compelled to contribute to the formation of the oligopoly of mega-peers. It is hardly in the public interest to surrender the public Internet to two mega-networks that have a history of anti-competitive dominant behavior.

19. While the present IBP market does not have a single player with the market share that WorldCom had when it was prevented three times during 1998-2001 from acquiring Internet backbone assets via merger, the market has changed in significant ways that make market share alone an inappropriate and misleading measure of whether tipping is a real possibility.

20. In particular, one peering condition that a mega-peer might employ if it decided to de-peer existing Tier 1 IBPs is the requirement relating to a network’s ratio of outgoing to incoming traffic. In addition to the many peering policy requirements relating to potential throughput, geographic scope, and traffic that are described above, many Tier-1 IBPs<sup>5</sup> will exchange traffic on a settlement-free basis only with a network

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<sup>5</sup> See [global.mci.com/uunet/peering/](http://global.mci.com/uunet/peering/); [www.qwest.com/legal/peering\\_int.html](http://www.qwest.com/legal/peering_int.html); [www.teleglobe.ca/fr/our\\_network/peering\\_policy\\_for\\_as6453.pdf](http://www.teleglobe.ca/fr/our_network/peering_policy_for_as6453.pdf);

that originates less than twice as much traffic as it terminates (*i.e.*, less than a 2:1 ratio). SBC's published peering policy explicitly does not contain any ratio requirements (though of course SBC might add one to its policy if it merges with AT&T).<sup>6</sup> The possibility of the formation of mega-peers may prompt a reexamination of this clause in the policies of many Tier 1 IBPs, including SAVVIS.

21. The proportion of a network's end-users that are (1) content providing businesses (like Amazon.com or CNN.com) compared to the proportion that are (2) consumers and/or businesses that do not provide content (colloquially known as "eyeballs"), has an enormous effect on its traffic ratio in a peering agreement with a differently-proportioned network. The reason is that "eyeballs" typically use their Internet connections to, among other things, transmit small amounts of data (*e.g.*, a query for a Web page) to content providers, which prompts the content providers to send a large amount of data in response (*e.g.*, the Web page itself). Accordingly, if an eyeball-heavy network were to exchange traffic with a content-heavy network, the eyeball-heavy network would have a low outgoing to incoming traffic ratio (meaning that it would qualify as a peer) and the content-heavy network would have a high ratio (meaning that it would not).

22. The eyeball/content distinction is relevant in the present context because AT&T and SBC (as well as MCI and Verizon) appear to have disproportionately strong positions in the market for eyeballs. Because of their last-mile dominance in providing telecommunications services, BOCs have significant advantages (resulting from their

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[www.level3.com/press/1890.html](http://www.level3.com/press/1890.html); [www.atdn.net/settlement\\_free\\_int.shtml](http://www.atdn.net/settlement_free_int.shtml);  
[www.sbcbackbone.net/peering/#public](http://www.sbcbackbone.net/peering/#public).

<sup>6</sup> See [www.sbcbackbone.net/peering/#public](http://www.sbcbackbone.net/peering/#public).

prior status as franchised monopolists) in attracting eyeballs. SBC and Verizon, for example, serve a huge number of DSL customers (consumers and small businesses) as well as special access customers (generally non-content providing businesses). MCI and AT&T also have a strong position in the market for traditional business customers, few of whom are content providers.

23. SAVVIS in contrast has a more typical balance of customers: some eyeball customers (ISPs that serve cable modem and dial-up customers, as well as traditional businesses) and some content-provider customers. Based on peering statistics from the SAVVIS network, a significant peering imbalance exists with only very few of the Tier 1 peers, indicating a wealth of eyeballs. More typically, the ratios are well within the 2:1 ratio prescribed by most peering policies.

24. Thus, absent any specific data to the contrary – and SBC and AT&T have provided none – there is a very real possibility that a merged SBC and AT&T entity (like a merged Verizon and MCI entity) could use the ratio requirement as a pretext for declining to peer with existing Tier-1 IBPs. Market share is thus the incorrect and incomplete measure of whether a particular IBP has the potential to act like a “mega-peer” by de-peering existing Tier-1 IBPs. Equally if not more important is whether certain networks have a dominant position in the market for “eyeballs,” since in today’s operating environment they can leverage that position into a monopoly or quasi-monopoly position in the peering environment. This is an important consumer welfare and public interest issue because, as explained above, the existing efficient pricing depends upon having multiple competitive IBPs of at least roughly equal size and negotiating position with respect to peering. As demonstrated above, disturbing this

balance may well result in the breakup of the Internet as it exists today and the re-composition of the Internet as an oligopoly of mega-peers.

#### **IV. THE OUTDATED, STATIC, AND INCOMPLETE DATA PROVIDED BY SBC AND AT&T ARE INADEQUATE TO SUPPORT THEIR CONCLUSIONS**

25. SBC and AT&T's public interest statement (like MCI and Verizon's) asserts that 2003 data on market share (as measured by revenue, traffic estimates, and AS connections) do not show that any of the merged entities would be as large as the WorldCom market share that provoked the FCC's and DOJ's concern about a mega-peer. But that data is inappropriate for at least three reasons.

26. *First*, the data is completely outdated. As the erosion of MCI's market share from 2000 shows, the IBP market can change quite quickly. It is my experience and understanding, and it is generally accepted by Tier 1 peers, that AT&T is, by far, the largest IBP in the market today, based on volume of traffic.

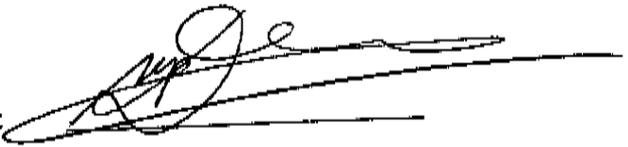
27. *Second*, the AT&T and SBC data only shows the picture at a single point in time, and do not provide any information about dynamic trends. In fact, SBC (and Verizon) only recently received Section 271 approval to offer long distance service, which in turn led them to build the types of national networks that Tier-1 IBPs require. The development of SBC into a Tier-1 peer in that short period of time suggests the power of its position as a DSL and special access provider in negotiating peering agreements with existing IBPs, as well as strong future growth.

28. *Third*, the SBC and AT&T data fail to capture the distinction between eyeball-heavy and content-heavy networks. The reliance on pure market share data is

thus deeply misleading. Absent additional data showing the composition of the SBC and AT&T networks' consumers' composition, the most reasonable conclusion is that the combined entity will assume a dominant position in the interconnection negotiations because it combines a leading business and special access provider (AT&T) with a leading broadband last mile provider (SBC). The same logic also applies to MCI (business and special access provider) and Verizon (DSL provider). At a minimum, SBC and AT&T should be required to provide data that address this important issue. Ultimately, a set of remedies to prevent the issues outlined above, in particular the ones that prevent universal connectivity and reachability, may be appropriate.

**VERIFICATION**

I declare that the foregoing is true and correct.

Signature: 

Dr. Mathew P. Dovens  
Senior Director, Network Products  
SAVVIS Communications, Inc.

Dated: April 25, 2005

**Before the  
FEDERAL COMMUNICATIONS COMMISSION  
Washington, D.C. 20554**

In the Matter of	)	
	)	
AT&T CORP.	)	WC Docket No. 05-65
	)	
and	)	
	)	
SBC COMMUNICATIONS INC.	)	
	)	
Application Pursuant to Section 214 of the	)	
Communications Act of 1934 and Section 63.04	)	
of the Commission's Rules for Consent to the	)	
Transfer of Control of AT&T Corp. to SBC	)	
Communications Inc.	)	

**DECLARATION OF DR. MICHAEL BORTZ**

I, Michael Bortz , do hereby declare:

1. I am employed by Broadwing Communications, LLC as Vice President, Planning and Engineering. My responsibilities include overseeing the negotiation and management of Broadwing's interconnection agreements with other Internet Backbone Providers (IBPs). My business address is 1122 Capital of Texas Highway South, Austin, Texas.

2. As Vice President, Planning and Engineering, I am responsible for Broadwing's network platform engineering, including core network, access network and service network engineering. Prior to joining Broadwing, I was executive engineer at Corvis Corporation. I am a graduate of Cornell University and received a Ph.D. in applied physics from Stanford University.

3. The purpose of my declaration is to explain why the proposed merger of SBC and AT&T would seriously harm competition in the market for Internet backbone

services. Currently, the market is populated by between five to ten similarly-sized companies that interconnect with each other, without any government regulation, through a bill-and-keep system known as “peering.” However – as the Commission, the United States Department of Justice, and the European Commission have all acknowledged – this economically-efficient equilibrium is likely to break down if one “peer” were to become significantly larger than the others. Such an entity – a “mega-peer” – would have the ability to “tip” the market – charging customers supra-competitive prices and squeezing rivals out of the market by raising their costs for obtaining interconnection. As I explain below, a combined SBC-AT&T entity would be just such a “mega-peer,” with grave consequences for the efficiency of the Internet backbone market. In addition, if MCI and Verizon were to merge, the resulting entity would also qualify as a “mega-peer.” These two mega-entities could divide the market between them, charging socially-harmful duopolistic prices and driving out rivals by raising their costs to an uncompetitive level.

4. My declaration consists of two sections. First, I describe Broadwing’s existing Internet backbone business and the structure of the existing IBP market. Second, I explain why the proposed SBC-AT&T merger would fundamentally undermine the efficiency of the existing market and why SBC and AT&T have not met their burden to justify the merger.

**I. BROADWING’S EXISTING INTERNET BACKBONE BUSINESS**

5. Broadwing is a communications services business that provides data and Internet, broadband transport, and voice communications services to large enterprises,

mid-market businesses, and other communications service providers. Broadwing owns and operates a nationwide, all-optical, and facilities-based network that connects 137 cities nationwide and is capable of transmitting up to 800 Gbs per fiber (OC 48). Broadwing also acquired the assets of the former Focal Communications Corporation in 2004. These assets include a local fiber network in nine cities and a 4,000 enterprise and wholesale/carrier customer base.

6. Broadwing's total revenue from communications services in 2004 was \$658 million, of which roughly \$80 million was earned by providing Internet backbone services. Broadwing provides its Internet backbone service both on an unbundled basis and in combination with Virtual Private Network (VPN) services, and can provide customers Internet access at speeds ranging from 56kps to OCx and gigE. Roughly 60% of Broadwing's Internet backbone customers are wholesale customers (such as ISPs that handle cable modem traffic), while roughly 40% are end-users (such as Fortune 500 companies and enterprise customers that provide content).

7. Broadwing's Internet backbone customers naturally expect that Broadwing will deliver their traffic to, and terminate traffic from, any end-user connected to the Internet. In addition, through individual Service Level Agreements (SLAs), Broadwing guarantees its customers that it will meet specified measures of latency, availability, and packet loss.

8. In order to provide its customers with high-quality service and universal connectivity, Broadwing has formed "peering arrangements" with approximately fifty other IBPs. A peering agreement provides that Broadwing will accept and terminate any traffic from a particular IBP if the traffic is addressed to one of Broadwing's customers.

In return, the IBP agrees to accept and terminate any traffic that originates from a Broadwing customer and is addressed to any of that IBP's customers. These agreements generally provide for "settlement-free" interconnection, meaning that Broadwing and the peer IBP collect fees only from their own customers and charge nothing for termination to the other and the other's customers.

9. Broadwing's peering agreements, like virtually all such agreements in the industry, also specify "hot potato routing," which means that the originating network will transfer the traffic to the peer network at the nearest point of interconnection between the two networks. Broadwing maintains multiple points of interconnection between its network and its peer's networks, including both the several public Metropolitan Area Ethernet (MAE) connections as well as the more numerous private Equinix collocation points, at which all major IBPs maintain a presence. Accordingly, there is generally a point of interconnection near a packet's point of origination, and most packets exchanged between two peer networks travel the majority of the distance of their trip on the terminating network.

10. Broadwing has published on its website the criteria it uses to decide whether to peer with another IBP.<sup>1</sup> In order to peer with Broadwing, an IBP must maintain: (1) a nationally-deployed, redundant network operating on dedicated circuits of at least OC-12 with backbone nodes in eight specified geographic locations; (2) two or more geographically dispersed interconnection facilities, operating at 155 Mbps or higher, in at least two different areas of Broadwing's network; (3) a fully staffed 24x7 Network Operations Center (NOC); (4) a ratio of incoming to outgoing traffic of no more

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<sup>1</sup> See [http://www.broadwing.com/peering/InterconnectPolicy\\_2004\\_.doc](http://www.broadwing.com/peering/InterconnectPolicy_2004_.doc).

than 2.5 to 1 in either direction; (5) a guarantee of 99.99% availability, less than 1% packet loss, and less than 100 ms delay; and (6) a minimum traffic level on all links of 20 mbs. In addition, IBPs with a minimum of 75 mbs are eligible to establish direct interconnections between its network and Broadwing's, thus eliminating the need for using the MAEs or Equinix collocation facilities.

11. In addition to its peering agreements, Broadwing has also entered into "transit" arrangements with so-called Tier-1 IBPs – networks that have peering arrangements that allow settlement-free termination to the full universe of Internet end-users. A transit agreement allows the buyer of transit to transmit traffic addressed to any Internet user, for a volume-based fee, to the Tier-1 IBP. The Tier-1 IBP, in turn, agrees to treat the traffic as originating from a customer and terminate it via its peering arrangements. A transit agreement also provides that the transit buyer will pay a volume-based fee for the Tier-1 IBP to receive traffic bound for the buyer or the buyer's customers, and transfer it to the buyer's network. Because Broadwing is a customer of the Tier-1 IBP, the Tier-1 IBP's peering arrangements will allow for receipt of traffic from any Internet end-user.

12. In theory, Broadwing could meet all its interconnection needs with a single transit arrangement with a Tier-1 IBP. However, a company that exchanges a sizeable percentage of its traffic via transit will always be at a significant cost disadvantage relative to a Tier-1 peer or a company that exchanges the great majority of its traffic via peering. Moreover, a transit customer is at a cost disadvantage that goes beyond the requirement of paying high per-volume fees. This is because of the prevalence of so-called Border Gateway Protocol (BGP) routing, which chooses paths

primarily based on the number of networks traversed, rather than cost or performance measurements. Carriers who interconnect with the largest networks therefore stand to send and receive the largest volume of traffic from their customers. Since most IP transit service is billed according to usage, the best-interconnected networks receive the most revenue from large customers (who are often large enterprises or other carriers who purchase service from multiple IBPs). Thus, to minimize costs and maximize revenue, efficient IBPs form peering arrangements with as many IBPs as possible and route traffic through these arrangements rather than via transit whenever possible.

## **II. THE PROPOSED MERGERS WOULD CONVERT A WELL-FUNCTIONING MARKET INTO AN INEFFICIENT DUOPOLY DOMINATED BY TWO “MEGA-PEERS”**

13. As the Commission, the United States Department of Justice, and the European Commission have recognized, a market with numerous IBPs that interconnect via settlement-free peering will provide customers with high-quality, low-cost Internet backbone services.<sup>2</sup> It is common-ground among IBPs and academic commentators that there is no need for government regulation of such a market.

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<sup>2</sup> See *In re Application of WorldCom, Inc. and MCI Communications Corp. for Transfer of Control of MCI Communications Corp. to WorldCom, Inc.*, Memorandum Opinion and Order, 13 FCC Rcd 18025 (1998) (“MCI/Worldcom Order”); *In re Intermedia Communications, Inc., Transferor, and WorldCom, Inc., Transferee, for Consent to Transfer Control of Corporations Holding Commission Licenses*, Memorandum Opinion and Order, 16 FCC Rcd 1017 (2001) (“Intermedia Order”); *United States v. WorldCom Inc. and Intermedia Communications, Inc.*, Compl. (filed D.D.C., Nov. 17, 2000) (“Intermedia Complaint”), available at [www.usdoj.gov/atr/cases/f7000/7043.htm](http://www.usdoj.gov/atr/cases/f7000/7043.htm); *United States v. WorldCom, Inc. and Sprint Corporation*, Compl. (filed D.D.C., June 26, 2000) (“Sprint Complaint”), available at [www.usdoj.gov/atr/cases/f5000/5051.pdf](http://www.usdoj.gov/atr/cases/f5000/5051.pdf).

14. Allowing SBC and AT&T to merge (as well as Verizon and MCI) would, in contrast, “tip” the IBP market from one that operates through settlement-free free peering arrangements to one in which most IBPs pay transit fees to one or two “mega-peers.” The ultimate losers would of course be customers, since it is well-recognized that a duopolistic market inevitably translates into higher product prices.

15. The reason the market likely would tip if SBC and AT&T were to merge arises from the widespread requirement that an IBP maintain a specified outgoing/incoming traffic ratio relative to a peer IBP in order to qualify for settlement-free peering. The industry standard is a maximum ratio of approximately 2 to 1, though individual policies vary slightly. As noted above, Broadwing permits a maximum of 2.5 to 1. MCI permits only 1.8 to 1.<sup>3</sup>

16. The most common reason that one network would exhibit a greater than 2 to 1 outgoing to incoming traffic ratio in its interconnection with another network is if the first network has a relatively greater proportion of content providers (businesses that use their Internet connections in large part to provide Web pages to users who request them) than eyeball users (consumers or businesses who use their Internet connections in large part to view Web pages). The content-heavy network will have large outgoing data flows because the Web pages it sends to eyeball users are composed of data-heavy graphics and video. The content-heavy network will have small incoming data flows because the queries for Web pages from eyeball users are composed only of a few bytes. The greater the difference between the proportions of content and eyeballs between two networks, the greater the traffic ratio.

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<sup>3</sup> See [global.mci.com/uunet/peering/](http://global.mci.com/uunet/peering/).

17. A combined AT&T and SBC entity would easily be one of the most eyeball-heavy networks in the IBP business. AT&T is well-known throughout the industry for providing IBP service to leading cable modem ISPs. SBC also is by far the dominant provider of DSL service to consumers and small businesses within its geographic footprint. Also, the combined SBC-AT&T entity would have a near stranglehold on the special access market within the geographic areas served by the incumbent telephone operations of SBC. This stranglehold will further cement the individual entities' already strong positions in providing telecommunications services to large enterprise customers. These businesses represent millions of workers who use the Web during business hours.

18. A combined MCI and Verizon entity would also have a similarly eyeball-heavy network. For instance, Verizon has an overwhelmingly dominant position in the DSL market within its geographic footprint, and MCI also has a leading position in the large enterprise customer market.

19. The net result of allowing the SBC-AT&T and Verizon-MCI mergers would be to create two entities with guaranteed, vertically-integrated access to an overwhelming percentage of the eyeballs in the country. Though none of these companies have provided the necessary data to do a precise calculation, my professional judgment is that it is unlikely that any content-heavy or balanced network could meet the criteria for peering with either of the merged entities. In addition, there is nothing to prevent the merged entities to change their peering criteria to eliminate all IBPs except the two of them from qualifying for settlement-free peering.

20. Thus, allowing the two proposed mergers means that most or all existing IBPs (including Broadwing) would be forced to become paying transit customers of the two “mega-peers.” These IBPs would find themselves at a significant cost disadvantage relative to SBC-AT&T and Verizon-MCI. As economists have explained, this “raising rivals’ costs” strategy would ultimately hurt consumers.<sup>4</sup>

21. Finally, the data that SBC and AT&T (and Verizon and MCI) have provided in their public interest statement do not meet their burden to justify the merger because the data do not capture the content/eyeball distinction. The merging entities simply discuss market share as measured by revenue, traffic, and AS connections. Those metrics were sufficient to *prevent* three proposed Worldcom IBP asset acquisitions from 1998-2001 that would have harmed competition. But they certainly are not sufficient to *justify* these mergers, since they avoid the pressing issue of the harms that would arise in creating two eyeball network behemoths.

22. The SBC/AT&T data are also inadequate because they do not account for market trends over time. For instance, SBC and Verizon were not even in the IBP market until they received Section 271 approval, but are already two of the six industry leaders in revenue according to their own provided data.<sup>5</sup>

23. The SBC/AT&T data, which are from 2003, are also too old to provide a justification for a merger in 2005. To take one example, in the period from 2001 to 2003, MCI’s market share fell from 37% to less than 12%. Though, as noted above, market

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<sup>4</sup> G. Krattenmaker & Steven C. Salop, "Anticompetitive Exclusion: Raising Rivals' Costs to Achieve Power Over Price," 96 Yale L.J. 209 (1986).

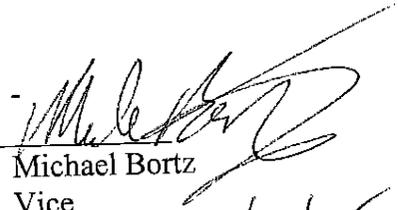
<sup>5</sup> See *Merger of SBC Communications Inc. and AT&T Corp., Description of the Transaction, Public Interest Showing and Related Demonstrations*, WC Docket No. 05-65, Schwartz Declaration, Table 3.

share is not the appropriate measure here, the rapid changes in market share show how quickly the IBP market can change and why two-year-old data is unreliable.

**VERIFICATION**

I declare that the foregoing is true and correct.

Signature: \_\_\_\_\_



Michael Bortz  
Vice

President, Planning and  
Engineering

Broadwing  
Communications, LLC

4/25/05

Dated: April 25, 2005