



1200 EIGHTEENTH STREET, NW
WASHINGTON, DC 20036
TEL 202.730.1300 FAX 202.730.1301
WWW.HARRISWILTSHIRE.COM
ATTORNEYS AT LAW

August 12, 2005

EX PARTE – Via Hand Delivery and ECFS

Marlene H. Dortch
Secretary
Federal Communications Commission
445 12th Street, SW
Washington, DC 20554

Re: WC Docket No. 05-65 (SBC-AT&T merger application)
WC Docket No. 05-75 (Verizon-MCI merger application)

Dear Ms. Dortch:

Broadwing Communications, LLC (“Broadwing”) and SAVVIS, Inc. (f/k/a “SAVVIS Communications Corp.”) (“SAVVIS”) file this *ex parte* letter to address the Applicants’ recent filings concerning the market for Internet backbone services.¹ In particular, Broadwing and SAVVIS set forth the several reasons why the Applicants have failed to carry their burden to show that consolidation and vertical integration in the Internet backbone market is in the public interest.

The Applicants are ducking the real issues here. They proceed as if the volume of traffic carried right now by the Applicants’ backbones is the only factor that matters. To be sure, current traffic volume is relevant here² and, indeed, proved decisive in the Commission’s review during 1998-2000 of three proposed horizontal mergers between large, mature IXC backbones.³

¹ See Joint Opposition of SBC Communications Inc. and AT&T Corp. to Petitions to Deny and Reply to Comments, WC Docket No. 05-65 (May 10, 2005), at 53-65 (“SBC-AT&T Reply”); Joint Opposition of Verizon Communications Inc. and MCI, Inc. to Petitions to deny and Reply to Comments, WC Docket No. 05-75 (May 24, 2005), at 69-86 (“Verizon-MCI Reply”); Letter from Dee May and Curtis Groves to Marlene Dortch, WC Docket No. 05-75 (August 8, 2005) (“Verizon-MCI Letter”).

² Indeed, as explained below at 3-7, the Applicants should be more forthcoming in providing traffic and revenue share information in this proceeding.

³ See generally Opposition of Broadwing Communications, LLC, and SAVVIS Communications Corporation to the Merger Application Filed by SBC Communications, Inc., and AT&T Corp., WC Docket 05-65 (April 25, 2005), at 42-47 (“Broadwing-SAVVIS SBC-AT&T Comments”); Opposition of Broadwing Communications, LLC, and SAVVIS Communications Corporation to the Merger Application Filed by Verizon Communications, Inc. and MCI,

But – contrary to what the Applicants seem to believe – the horizontal combination of two large, mature IXC backbones is not the *only* way that a merger (or mergers) might harm the Internet backbone market.

As Broadwing, SAVVIS, and other parties have explained,⁴ the two largest existing IXCs (with mature backbone businesses) merging with the two largest existing BOCs (with rapidly growing high-speed Internet access businesses) present equal – if not greater – cause for concern in today’s marketplace. Acquiring millions of BOC residential broadband, voice, and wireless customers will give the newly-created “mega peer” Internet backbone providers significant negotiating leverage over their non-vertically-integrated competitors. And it is *this* concern that the Applicants have yet to address, let alone dispel.

The Applicants concede – as they must – that the fundamental issue here is whether the newly created BOC-IXC mega peers will be able to hold over existing Tier 1 providers the threat that disruption or degradation of traffic exchange between them will harm the existing providers more than the new mega peers.⁵ For two reasons, AT&T’s and MCI’s acquisition of enormous and growing numbers of BOC customers will allow them to make this threat credible:

First, as ordinary voice communications become increasingly IP-based, and as wireless and residential broadband services become ever more popular, the IXC-BOC mega peers will come to carry proportionately more and more IP traffic relative to their non-vertically-integrated rivals. The Applicants’ substantial one-time jump in size from the mergers will thus continue to grow over time, perhaps explosively. And the Applicants’ increased traffic share will insulate

Inc., WC Docket 05-75 (May 9, 2005), at 44-50 (“Broadwing/SAVVIS Verizon-MCI Comments”); *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”); *Intermedia Communications, Inc., Transferor, and WorldCom, Inc., Transferee, for Consent to Transfer Control of Corporations Holding Commission Licenses and Authorizations Pursuant to Sections 214 and 310(d) of the Communications Act and Parts 21, 63, 90, and 101*, Memorandum Opinion and Order, 16 FCC Rcd 1017 (2001) (“Intermedia Order”); *United States v. WorldCom Inc. and Intermedia Communications, Inc.*, Complaint (filed D.D.C., Nov. 17, 2000) (“Intermedia Complaint”), available at www.usdoj.gov/atr/cases/f7000/7043.htm; *United States v. WorldCom, Inc. and Sprint Corporation*, Complaint (filed D.D.C., June 26, 2000) (“Sprint Complaint”), available at www.usdoj.gov/atr/cases/f5000/5051.htm; Address by Constance K. Robinson, Director of Operations and Merger Enforcement, Antitrust Division: U.S. Dep’t of Justice, *Network Effects in Telecommunications Mergers: MCI WorldCom Merger: Protecting the Future of the Internet*, at 12 (Aug. 23, 1999) (“Robinson Speech”), available at www.usdoj.gov/atr/public/speeches/3889.pdf.

⁴ See Reply Comments of BT Americas Inc. and BT Infonet USA, WC Docket No. 05-65 (May 10, 2005), at 22-29 (“BT Comments”); Petition to Deny of EarthLink Inc. and Request for Adjustment of Schedule, WC Docket Nos. 05-65 & 05-75 (May 9, 2005) (“Earthlink Comments”); Comptel/ALTS Petition to Deny, WC Docket No. 05-65 (April 25, 2005), at 30-40 (“Comptel/ALTS Comments”); Comments of the Rural Alliance, *Developing a Unified Intercarrier Compensation Regime*, CC Docket 01-92, at 167-171 (filed May 23, 2005) (“Consolidation of telecommunications companies will lead to greater market power for the leading firms, which will cause renewed concern regarding concentration in the Internet backbone.”).

⁵ See SBC-AT&T Reply, Declaration of Marius Schwartz at ¶ 3 & n.4 (“Schwartz Reply Decl.”); Verizon-MCI Reply at 75.

their Internet backbone customers from the effect of disrupted or degraded traffic exchange because a larger percentage of their customers' IP traffic will remain "on net."⁶

Second, the newly created IXC-BOC mega peers will serve a disproportionate share of "sticky" residential voice, wireless, DSL, and (in some cases) cable modem end users, as compared to their non-vertically-integrated rivals.⁷ These "eyeball" consumers are generally tied to their present backbone service providers by long-term retail or wholesale service commitments, are less sensitive to service quality issues, and do not own their email addresses and domain names.

In contrast to the mega peers, competing backbone providers disproportionately serve "content provider" customers. These large enterprise customers generally sign at-will service commitments, may be served simultaneously by more than one backbone provider, monitor service quality closely, and own their domain names. Such content provider customers are thus far more mobile than eyeball customers, who are understandably reluctant to switch providers. This important difference in customer type provides a second and independent reason why acquiring the BOCs' millions of customers will embolden the mega peers to de-peer their rivals.

Despite the obvious importance of IP-based communications growth and the stickiness of the BOCs' customers, the Applicants' comments and reply comments conspicuously avoid discussing these issues in connection with the Internet backbone market. Indeed, the Applicants continue to insist that the BOC-IXCs' ability to de-peer their rivals "hinges on whether the [merged network] commands a sufficiently large share of the overall Internet customer base" – presumably at the time of the merger – and the Applicants continue to measure these shares using outdated data from 2003.⁸

The Commission must require the Applicants to deal with the criticisms of this merger head on. The first two sections of this letter describe the gaps in the Applicants' submitted materials, as well as the additional data and analyses that the Applicants must provide to permit a meaningful understanding of the effects of this merger on the market for Internet backbone services. The final three sections address the Applicants' misleading assertions about the economics of the Internet backbone market and the Commission's legal duty in reviewing two simultaneously proposed mergers. Attached as Appendix A is a sample information and

⁶ "On net" in this context means IP traffic that originates and terminates with (different) customers of a single backbone network. *See generally* Broadwing-SAVVIS SBC-AT&T Comments at 42-47; Letter from John Butler to Marlene Dortch, WC Docket 05-75 (July 15, 2005), at 10-11 ("EarthLink Letter").

⁷ As noted below at 7-8, an undisclosed number of cable modem service providers are customers of the Applicants and the Applicants have not, to date, disclosed the terms of these contracts. If these are long-term contracts then these cable modem end users – even though not retail customers of the Applicants – are "stuck" with the Applicants for backbone services and cannot leave in response to temporary service disruptions as the market "tips." And if the tipping occurs quickly enough, then there will be few, if any, service providers other than the mega peers remaining when it is time for the cable modem ISPs to re-negotiate their purchase of backbone services.

⁸ Schwartz Reply Decl. at ¶ 3 & n.4; *see also* Verizon-MCI Letter at 14 ("[G]iven that the best current estimate is that the combined [Verizon-MCI backbones] would carry only about 10% of all North American Internet traffic, its share would have to grow tremendously before the possibility of competitive harm would even arise.")

document request that addresses the existing gaps in the Applicants' submitted materials; attached as Appendix B is a declaration by Simon Wilkie.

I. The Applicants Must Provide Up-To-Date Information on the Current – and Future – Size of Their Internet Backbones.

As noted above, the (1) current size and (2) expected future growth of the Applicants' backbones are both critical to assessing whether these mergers will give them the means and motive to de-peer or degrade the quality of traffic exchange with their competitors. To date, the Applicants have not been forthcoming on either score. The Commission must require them to provide the necessary data and analysis.

Current Size. In its initial data request, the Commission ordered the Applicants to provide up-to-date information on current traffic shares.⁹ Despite the Commission's clear command, SBC and AT&T have refused to provide this information. Instead, they assert that the combined size of the SBC-AT&T network raises no public interest concerns, based on an unrealistic extrapolation from the very same 2003 traffic share data that the Applicants used in their February 21, 2005 initial public interest statement (and that the Commission plainly deemed inadequate when it asked on April 18, 2005 for more recent data).¹⁰

The claim that the Applicants cannot provide up-to-date traffic share information is demonstrably false. Indeed, MCI's and Verizon's reply comments – based on data gathered by RHK, Inc – demonstrate that traffic share information as of the end of 2004 *is* in fact available.¹¹ The Commission should require SBC and AT&T to provide that information. The Applicants' foot-dragging on this issue strongly suggests that the SBC and AT&T networks may be considerably larger today than the Applicants care to admit.

In any event, even the currently incomplete record rules out the Applicants' claim that the horizontal combination of their existing backbones will not meaningfully increase the combined networks' bargaining position *vis a vis* their competitors.¹² For example, SBC reveals that its

⁹ See Letter from Michelle Carey, Deputy Chief, Wireline Competition Bureau, transmitting Initial Information and Document Request, WC Docket No. 05-65 (April 18, 2005), at 6; Letter from Thomas Navin, Acting Chief of the Wireline Competition Bureau, transmitting Initial Information and Document Request, WC Docket No. 05-75 (May 9, 2005), at 7.

¹⁰ See Response of SBC Communications Inc. to Information and Document Request Dated April 18, 2005, WC Docket No. 05-65 (May 9, 2005), at 63 (“SBC Data Response”); Schwartz Reply Decl. at ¶ 12. This extrapolation is unrealistic because it assumes that AT&T's traffic share has remained constant between 2003 and the present. But the record demonstrates that traffic shares in this rapidly changing market have been far from static. If anything, the default assumption should be that over any two year period traffic shares are likely to have changed dramatically – certainly SBC's traffic share in that period has increased from almost zero to a significant size. In any event, because that the relevant data plainly exist, there is no need to rely here on highly questionable and speculative extrapolations – SBC and AT&T can simply provide the necessary information, just as MCI and Verizon have done.

¹¹ See Verizon-MCI Reply, Reply Declaration of Michael Kende at ¶¶ 6-9 & Annex A (“Kende Reply Decl.”).

¹² See Schwartz Reply Decl. at ¶ 12.

traffic volume was roughly half of AT&T's at the end of 2004.¹³ Clearly, a backbone provider that instantaneously expands by 50 percent will have gained a negotiating advantage over its rivals. Similarly, MCI and Verizon reveal that they were two of the four leading backbone providers in terms of revenue in 2003 (the last year for which the Applicants provide revenue data).¹⁴ Again, the merger of these two backbones will clearly enhance the combined network's negotiating position.

Future Size. Traditionally, backbone providers have been companies (or descendants of companies) whose primary business was or is long-haul transport (*e.g.*, AT&T, MCI, Level 3, and Sprint). In fact, of the various companies mentioned in this proceeding as Tier 1 backbone providers, only Sprint has a significant presence in the wireless market, only Qwest has a significant presence in the local telephone services market, and none has a significant presence in the critically important residential broadband facilities market.¹⁵

The Applicants' proposal to create two vertically-integrated backbone providers with leading positions in the markets for traditional residential voice, wireless, and broadband services would thus fundamentally reshape the Internet backbone market. Indeed, it would be a development without precedent in the history of the Internet. And most importantly, it would provide the new mega peers with guaranteed access to rapidly-growing sources of IP traffic as traditional communications products become increasingly IP-based.

The Applicants do not dispute that their Internet backbone businesses will be thoroughly reshaped by the shift to IP-based telecommunications. In extolling the virtues of this merger, for instance, SBC and AT&T's initial public interest statement disclosed that "both networks will be transformed over periods of years into unified IP-based networks" and that doing so "requires not only the transformation of the backbone network, but also a comparable transformation of the local network and related systems to a unified, IP-based capability."¹⁶ Indeed, SBC and AT&T went even further – explaining that the merger will "result in more traffic being carried entirely on the combined company's network, thus avoiding the latency and reliability issues associated with traversing multiple networks."¹⁷

But when it comes to addressing competition in the Internet backbone market, the Applicants are conspicuously silent about the shift to IP-based communications and its impact on the Internet backbone market. Their comments and reply comments on Internet backbone competition, for instance, do not contain a *single word* discussing the emergence of IP-based

¹³ See SBC Data Response at 63; Schwartz Reply Decl. at ¶ 12. As noted above, this information is insufficient to calculate traffic share *circa* 2004 because the record does not disclose AT&T's traffic share for that period.

¹⁴ See Kende Reply Decl. at ¶ 17 & Exhibit 3.

¹⁵ Though Qwest does provide DSL services to customers within its geographic footprint, it has a relatively minor presence in the residential broadband services market – its market share is roughly half of BellSouth's, Charter's, and Cox's; a quarter of Verizon's and Time Warner's; a sixth of SBC's; and a seventh of Comcast's. See SBC-AT&T Reply at 58-59.

¹⁶ Description of the Transaction, Public Interest Showing, and Related Demonstrations, WC Docket No. 05-65 (Feb. 21, 2005), at 33-34 ("SBC-AT&T Public Interest Showing").

¹⁷ *Id.* at 41.

voice services, future growth in residential broadband technologies such as DSL and fiber-to-the-home, or future growth in wireless broadband services such as 3G.¹⁸ Indeed, the only evidence that the Applicants recognize the importance of this issue is that SBC's and AT&T's reply comments (unlike their opening statement) *studiously avoid mention* of their plan to seamlessly merge their existing IP backbone and circuit-switched LEC networks.¹⁹

The Applicants' failure to address this issue is especially striking because the shift to IP-based communications is *the* strategic challenge facing telecommunications companies today. For this reason, the Applicants have very likely prepared or commissioned studies on expected traffic and revenue growth in the DSL, fiber-to-the-home, wireless 3G, and VoIP sectors. Such studies would be uniquely valuable to the Commission here because they would reflect the Applicants' honest views about future growth, rather than having been designed to justify the mergers. The Commission should therefore require the Applicants to use these existing analyses and projections to provide specific, numerical estimates of expected future IP traffic. In order to satisfy their burden to justify this merger, the Applicants' analyses of future IP growth must observe two principles.

First, the Applicants' projection must address *all* the potential sources of IP traffic growth that will flow from the acquisition of the BOCs' customer bases. This list should, of course, begin with existing residential broadband services such as DSL and second-generation replacements such as fiber-to-the-home. As SBC explains in its public interest statement, its history of "multi-billion dollar [investment] initiatives" has made it a leading residential broadband provider today and it pledges to "increase capital spending on advanced network capabilities by approximately \$2 billion in the first few years following the completion of the transaction beyond what would have occurred without the merger."²⁰ Given that its past investment in residential broadband transformed SBC from a non-entity in the Internet backbone market four years ago into a nearly-Tier 1 provider today, the burden is plainly on the Applicants to address how an *increased* level of investment going forward will affect the amount of IP traffic generated by its residential broadband customers. The overwhelming likelihood, of course, is that it will cause already feverish growth rates to accelerate.

The list of relevant IP-traffic-generating services, moreover, must not end with residential broadband. SBC and Verizon control the two largest wireless companies in the nation, which have recently spent billions of dollars creating 3G networks capable of providing broadband services. Presumably, the Applicants did not invest billions of dollars without first attempting to

¹⁸ Several months after filing their reply comments, which do not mention the shift to IP-enabled services at all, Verizon and MCI filed a 16-page ex parte letter which devotes exactly two sentences to the topic. Verizon-MCI Letter at 15. They assert that "there is no reason to believe" that the shift to IP services "will result in any significant increase in Verizon/MCI's proportional *share* of Internet traffic." *Id.* (emphasis in original). This conclusory assertion is no substitute for detailed, numerical analysis along the lines discussed below. At any rate, the unsupported and qualitative conclusion is deeply counterintuitive – the BOCs' leading position (and customer name recognition) in the circuit-switched voice market is in fact an enormous strategic asset in marketing unfamiliar VoIP and other IP-based products to consumers. If the Commission is to make a predictive judgment here, the most reasonable view is that the BOCs are likely to have substantial advantages in the market for IP-enabled services.

¹⁹ See Broadwing-SAVVIS SBC-AT&T Comments at 53-55; SBC-AT&T Reply at 17-18.

²⁰ SBC-AT&T Public Interest Showing at 34.

estimate consumer demand for wireless broadband services. And the Applicants (or their consultants) presumably continue to update these studies today. The Applicants can therefore easily provide the requisite estimates of traffic growth from this source.

Similarly, it is widely expected (including by the Applicants),²¹ that VoIP will soon become a mass market substitute for traditional circuit-switched local service. As VoIP customers begin to call other VoIP customers, an increasing portion of voice traffic will consist of IP traffic that originates on one backbone and terminates on another. The Applicants, who have already begun to market residential and business VoIP products, enjoy significant advantages in this marketplace (*e.g.*, first mover and name recognition) over competing entrants. It therefore seems likely that much of the future IP-IP voice traffic will end up originating or terminating on the Applicants' backbones, just as most circuit-switched traffic originates and terminates on their PSTN networks today. In any event, as with the other IP-based technologies described above, the burden is plainly on the Applicants to provide a numerical analysis that attempts to rebut the commonsense presumption that VoIP will greatly boost their backbone traffic shares in the near future.

Second, the Applicants' projections must clearly and completely identify all of the economic and engineering assumptions on which their calculations depend. In particular, the Applicants must specifically identify any assumptions they make about how their products will fare in relation to their intra-modal competitors (*e.g.*, DSL versus cable modems, or VoIP products offered by facilities versus non-facilities-based providers). It is simply not enough to say that competitors in particular markets, even successful ones, will exist. The existence of genuine competition may demonstrate that the price in a particular market will be efficient or nearly efficient, but the question here is whether the BOCs will achieve enough volume in certain markets to increase the size of their backbone network. The Applicants must therefore provide specific estimates about how much market share they and their various competitors are expected to acquire. Serving even a portion of the aforementioned markets will generate significant amounts of IP traffic.

As noted above, the use of internal projections prepared for legitimate, pre-existing business reasons (rather than to justify these mergers) should ensure that the figures reflect the Applicants' good faith estimates about the future. But a complicated forward-looking calculation of this sort will inevitably require the use of simplifying and controversial assumptions. The Applicants must create these estimates in the first instance because only they have the resources and information necessary to produce them. But they must also provide them in a sufficiently transparent format so that Broadwing, SAVVIS, and other parties can analyze their figures independently and verify their plausibility.

²¹ See Response of Verizon to the Commission's May 5, 2005 Initial Information and Document Request, WC Docket 05-75 (May 26, 2005), at 111 (describing "the rapid rate at which VoIP services are expected to grow").

II. The Applicants Must Disclose the Terms of their “Sticky” Contracts with Wholesale and Retail Backbone Customers.

As noted above, another critical factor (besides sheer size) in determining whether one backbone provider can credibly threaten to de-peer or degrade the quality of traffic exchange with its competitors is “stickiness,” meaning the rate at which existing customers will leave an Internet backbone provider in response to lack of service or degraded quality of service. Broadwing, SAVVIS, and other parties have pointed out that the mega peers’ customers are likely to be far stickier on the whole than the customers served by other backbone providers.²² But despite the obvious relevance of this distinction, the Applicants have paid scant attention to it. Indeed, the Applicants have not even mentioned in their comments that they provide transit services to certain cable ISPs,²³ nor have they disclosed the terms of these contracts. Instead, they fall back on the misleading assertion that cable ISPs serve more “eyeball” customers than DSL providers. Of course, that hardly matters if the Applicants are providing backbone services indirectly to the cable modem users as well as directly to the DSL end users.

In order to carry their burden of justifying these mergers, the Applicants cannot continue to ignore this pressing issue. At a minimum, the Commission should request the necessary data from the Applicants so that other parties to this proceeding can attempt to estimate the Applicants’ customers’ sensitivity (or, more likely, insensitivity) to service disruptions and degradation of quality. At the Commission staff’s suggestion, Broadwing and SAVVIS have drafted sample information and document requests (attached as Appendix A) that will elicit information responsive to these concerns.

Until the Applicants provide information to the contrary, the Commission should proceed under the reasonable assumption that the Applicants’ typical “eyeball” customer is a DSL or 3G wireless customer that faces a significant early termination fee for switching providers. In addition, because the Applicants’ have not disclosed the terms of their contracts with cable modem ISPs, it is also possible that these agreements contain liquidated damages provisions that would prevent these ISPs from switching Internet backbone providers in the event of service disruptions. Finally, residential “eyeball” customers often do not own their own email addresses or domain names (e.g., john@sbcglobal.net or john@verizon.net) and will lose these valuable items if they seek Internet service elsewhere.

By way of comparison, Broadwing, SAVVIS, and other Internet backbone providers serve proportionally more “content provider” customers. These companies are sophisticated businesses that generally sign at-will contracts with stringent service-level guarantees.²⁴ Their

²² See CompTel/ALTS Comments at 37-38.

²³ See e.g., Comments of Cox Communications, WC Docket 05-65 (April 25, 2005), at 14 (“Cox and other customers of AT&T’s transit services could not readily respond to by switching to another Tier 1 Internet backbone provider and certainly could not switch without suffering a loss, given that they have already spent substantial time, money, and resources to install connections to AT&T’s backbone facilities.”)

²⁴ See Broadwing-SAVVIS SBC-AT&T Comments, Declaration of Dr. Mathew P. Dovens at ¶ 6 & Declaration of Michael Bortz at ¶ 7. Larger network customers (generally OC3 and above) generally are multi-homed, whereas smaller customers (DS3 and below) generally are not.

customers may be “multihomed,” meaning that they connect to two or more Internet backbone networks, and thus can switch providers without incurring fixed costs.²⁵

In short, the Applicants’ customers are far less likely, compared to their rivals’ customers, to switch providers based on a temporary interruption in service or degradation in service quality. This confers an enormous advantage on the Applicants when it comes to negotiating the terms of traffic exchange: the Applicants’ can leave the table and still stay solvent, while their competitors know their businesses could literally dissolve in a few months time. As with labor-management negotiations, the threat of a strike rarely needs to be carried out – the critical question is whether the threat is credible.

III. The Applicants Will Be Able To Engage in Targeted De-Peering.

The Applicants’ reply comments purport to demonstrate they would not be able to engage in targeted de-peering – meaning the attempt to de-peer a single competing backbone provider – after these mergers.²⁶ This rests on two demonstrably false claims.

The first claim is that if a mega peer were to target a smaller network, the smaller network could buy transit to counter the attempt at raising its costs.²⁷ But, as the attached declaration explains, purchasing transit would be economically ruinous for a current Tier 1 provider.²⁸ To begin with, even if transit prices are efficient, it is far more costly to pay them than to engage in settlement-free peering (even after accounting for the cost of building a national network).²⁹ That is why virtually all of the largest backbone providers (in terms of revenue) have chosen to become Tier 1 providers and do not purchase transit.

Even more important, large wholesale customers for the most part do not purchase backbone services from non-Tier 1 providers – and some companies on the cusp of Tier 1 status even purchase “paid-for peering” to *appear* to be Tier 1 peers.³⁰ Indeed, only vertically-integrated providers such as SBC and Verizon – that have guaranteed business from their “eyeball” retail customers – are able to rank among the leading backbones in terms of revenue without achieving Tier 1 status. Moreover, the Border Gateway Protocol (BGP) routing scheme

²⁵ See Declaration of Simon Wilkie, attached as Appendix A, at ¶¶ 14-15 (“Wilkie Decl.”); Verizon-MCI Reply at 75, 80-81.

²⁶ See SBC-AT&T Reply at 60-65; Schwartz Reply Decl. at ¶¶ 15-34; Verizon-MCI Reply at 75-77, 80-81.

²⁷ See Schwartz Reply Decl. at ¶¶ 15, 30.

²⁸ See Wilkie Decl. at ¶¶ 11-12, 14.

²⁹ See Broadwing-SAVVIS SBC-AT&T Comments at 42.

³⁰ See Wilkie Decl. at ¶¶ 14. A company that purchases paid-for peering from Network X will appear, to other networks, identical to a company that has qualified for settlement-free peering with Network X. In this way, a company that qualifies for settlement-free peering with most but not all Tier 1 networks can successfully pass itself off as a true Tier 1 network by purchasing paid-for peering from the few networks that will not grant it settlement free-peering. This strategy is worthwhile in part because of the serious economic consequences – for most networks – of slipping from the ranks of perceived Tier 1 networks.

used by the public Internet directs traffic based on the number of networks through which a message must travel to reach its destination.³¹ A Tier 1 provider would thus see its multi-homed customers' traffic – that is, most of the largest customers' traffic – disappear automatically as soon as it is forced to purchase transit.³²

The Applicants' second – and equally inaccurate – claim is that a mega peer would lose its customers to third parties if it engaged in targeted de-peering against an existing Tier 1 network.³³ This claim ignores the fact, discussed above, that the Applicants' eyeball customers are “sticky” – they don't own their email addresses or domain names, are often subject to one- or multi-year commitments, and are not as sensitive to performance. [REDACTED]³⁴ The Applicants' observation that they currently maintain peering relationships with several smaller networks thus rings hollow.³⁵ There are many reasons why a large network might peer with a few select small networks. But outlier examples do not rebut the commonsense conclusion that a mega peer wishing to maximize profits will, in general, exploit its negotiating power.

IV. The Applicants Have Shown No Cost Basis For the Ratio Requirement

The applicants also assert that there are cost-based reasons for applying the settlement free-peering requirement that outgoing/incoming traffic ratios be less than 2 to 1.³⁶ As the attached declaration notes, however, this view specifically contradicts the position of SBC's publicly available peering policy, which expressly disclaims such ratio requirements.³⁷ The Applicants' combined networks should be required to adopt SBC's reasonable view because, for the reasons given below, in today's marketplace the ratio requirement has no basis in economic costs and benefits. Instead, as Broadwing and SAVVIS have explained, the ratio requirement is likely to be used simply *as a pretext* for targeted de-peering based on the mega-peers' market power and desire to charge supra-competitive prices.³⁸ [REDACTED] The Commission should accordingly require, at a minimum, that the Applicants *disclaim use of the ratio* as a condition of approving these mergers.

³¹ See generally Border Gateway Protocol, Cisco Systems, Inc., available at http://www.cisco.com/univercd/cc/td/doc/cisintwk/ito_doc/bgp.htm.

³² See Wilkie Decl. at ¶¶ 11-12. Note that a paid-for peer would benefit from BGP routing in the same way as a settlement-free peer. In other words, if backbones A and B peer, then regardless of the financial arrangement between them, a packet originating on one network and destined for the other will have to traverse only the two networks. In contrast, if network A buys transit from network C (which peers with Network B) then a packet between a customer of A and of B will have to traverse three networks. Generally under BGP routing, if there is an alternate route that would traverse only two networks (*e.g.*, if the customer was multi-homed with A and C) then the packet will be sent on that path.

³³ See Schwartz Reply Decl. at ¶¶ 15, 31-32; Verizon-MCI Reply at 81.

³⁴ [REDACTED]

³⁵ See Schwartz Reply Decl. at ¶ 32.

³⁶ See *id.* at ¶¶ 33-34; Verizon-MCI Reply at 79-80.

³⁷ Wilkie Decl. at ¶ 4.

³⁸ See Broadwing-SAVVIS SBC-AT&T Comments at 48-51.

The conceptual foundation of the ratio requirement is the assumption that the originating party receives the higher (and typically the only) value from the IP packet transfer. But that view is not applicable to the Internet, where the end user who sends a small Web query to download a large application likely derives as much or more utility than the Web site from the transaction, despite the asymmetry in data flows.³⁹ Indeed, even the economic literature describing communications networks more broadly has evolved away from the “calling party pays” assumption.⁴⁰ Moreover, the ratio requirement has no basis in actual economic cost because recent developments in the supply of Internet backbone networks have reduced the marginal cost of transporting IP packets to nearly zero.⁴¹ And this is unlikely to change in the foreseeable future because of the well-recognized fiber glut.⁴²

V. The Commission Cannot Accept the Applicants’ Suggestion To View Either of the Two Proposed Mergers In Isolation

Finally, the Applicants resort to asserting that the Commission should not consider the proposed Verizon-MCI merger when considering the proposed SBC-AT&T merger.⁴³ Not only does this bizarre suggestion have no justification in terms of policy, it would also be plainly unlawful. As the Supreme Court has explained, an administrative agency must consider the “whole record” before it when reaching a decision.⁴⁴ Here, the “whole record” clearly reflects the fact that two simultaneous (and strikingly similar) mergers are proposed. In deciding whether allowing one is in the public interest, the Commission plainly must consider *all* relevant factors. The fact that the market for Internet backbone services might change radically due to another merger is obviously highly relevant.

³⁹ See *id.* at ¶¶ 8-9; Broadwing-SAVVIS Verizon-MCI Comments at 53.

⁴⁰ See Wilkie Decl. at ¶ 9.

⁴¹ See Wilkie Decl. at ¶ 6.

⁴² *Id.*

⁴³ See SBC-AT&T Reply at 54.

⁴⁴ *Universal Camera Corp. v. NLRB*, 340 U.S. 474, 488 (1951) (“The substantiality of evidence must take into account whatever in the record fairly detracts from its weight.”)

VI. Conclusion

For the foregoing reasons, the Commission cannot approve the proposed mergers on the present record.

Respectfully submitted,

By: _____/s/_____

Kim D. Larsen
Lawrence E. Strickling
BROADWING COMMUNICATIONS, LLC
1122 Capital of Texas Highway South
Austin, TX 78746
512-742-4141

Christopher J. Wright
Timothy J. Simeone
Bruce L. Gottlieb
HARRIS, WILTSHIRE & GRANNIS, LLP
1200 18th Street, N.W.
Washington, DC 20036
202-730-1300
202-730-1301 (FAX)

Grier C. Raclin
Joanna S. Lowry
Cathleen K. Wasilewski
SAVVIS COMMUNICATIONS CORPORATION
12851 Worldgate Drive
Herndon, VA 20170
703-667-6757

APPENDIX A

Sample Information and Document Request

1. Provide the share of overall domestic Internet traffic carried by the SBC and AT&T backbones as of the end of the second quarter of 2005 (or as of the end of 2004 if more recent data – *including from third party data gathering services* – is not available). If such 2005 data is not available, please provide documentation demonstrating reasonable efforts to obtain such information from third party data gathering services, as well as affidavits from company officers explaining in detail why such information is not available.
2. Provide the share of overall domestic traffic carried by the Verizon and MCI backbone networks as of the end of the second quarter of 2005.
3. For the SBC, AT&T, MCI, and Verizon networks, provide data on IP backbone-based revenue through 2004. If such data is not available, please provide documentation demonstrating reasonable efforts to obtain such information from third party data gathering services, as well as affidavits from company officers explaining in detail why such information is not available.
4. For SBC-AT&T and Verizon-MCI, provide a numerical estimate of future expected growth in IP traffic volume (measured in Megabits per second based on 95th percentile daily traffic statistics) from all sources, including but not limited to (A) future and current DSL customers, (B) future and current fiber-to-the-home and other residential broadband customers, (C) future and current Voice over IP residential and business customers, and (D) future and current broadband wireless customers of Cingular and Verizon Wireless (respectively). These numerical estimates should include two, three, and five year projections and should be based on *existing* competitive and marketing analyses prepared by company employees or outside consultants. Include documentation that clearly and completely explains the estimates on which the ultimate numerical answer is based, including all economic and engineering assumptions. This supporting documentation should include explanations of acronyms as well as how, when, and by whom the analyses were prepared. If the companies have more than one study that answers a single question, they should provide both documents and note the discrepancy in the final numerical estimate.
5. Provide information on any and all contracts that SBC, AT&T, MCI, or Verizon have (or had at any point in the last two years) with consumer ISPs (including the nation's 20 leading cable modem providers) that require the ISPs to purchase a fixed amount of bandwidth, fixed percentage of their bandwidth requirements, or other form of fixed "spend" commitment, from the Applicants. This disclosure must include the length of any such contracts, key terms and prices, and accounts of any recent or current negotiations to create or renew such contracts. The companies must also provide information on any wholesale contract terms (including early termination fees or other forms of liquidated damages) intended to discourage, or that have the effect of materially discouraging, current ISP customers from switching backbone service providers.

6. Provide information on the degree of “churn” among ISP wholesale customers of SBC, AT&T, MCI, and Verizon, as well as any studies produced internally or commissioned from outside consultants to measure the reaction of current customers to service interruptions or their price elasticity of demand.
7. Provide information on any early termination or liquidated damages fees to which SBC, AT&T, MCI, and Verizon customers of DSL, fiber-to-the-home, 3G wireless, and VoIP services are subject, as well as any other fees or incentive programs intended to discourage, or that have the effect of materially discouraging, current end user customers from switching retail service providers. This must include an estimate of the average cost faced by existing DSL, fiber-to-the-home, 3G wireless, and VoIP customers to terminate their service contracts, as well as the average number of months before the customer can terminate the service without any penalty. Include any documents that explain the companies future plans regarding early termination fees and or similar liquidated damages for the aforementioned services.
8. Provide information on the degree of “churn” among the DSL, fiber-to-the-home, 3G wireless, and VoIP customers of Verizon, MCI, AT&T, and SBC, as well as any studies produced internally or commissioned from outside consultants to measure the reaction of current customers to service interruptions or their price elasticity of demand. The companies must also provide any studies produced internally or commissioned from outside consultants that measure whether such customers notice different levels of service quality, including but not limited to service interruptions with other backbone providers.

APPENDIX B

**Before the
FEDERAL COMMUNICATIONS COMMISSION
Washington, DC 20554**

In the Matter of)	
)	
SBC Communications Inc. and)	
AT&T Corp. Applications for)	WC Docket No. 05-65
Approval of Transfer Of Control)	
)	
Verizon Communications Inc. and)	WC Docket No. 05-75
MCI Inc. Applications for Approval)	
of Transfer of Control)	
)	

DECLARATION OF SIMON WILKIE

1. My name is Simon J. Wilkie. I am a Senior Research Associate in Economics at the California Institute of Technology. Prior to joining the faculty at the California Institute of Technology, I was a Member of Technical Staff at Bell Communications Research. I have also held the positions of Affiliated Scholar of the Milken Institute, and Visiting Assistant Professor at Columbia University. Over the past fifteen years, my academic research has focused on the areas of mechanism design, regulation, and game theory, with a particular emphasis on the telecommunications industry. I received a Bachelor of Commerce degree in Economics from the University of South Wales, and an M.A. and Ph.D. in Economics from the University of Rochester.

2. From 2002 to 2003, I served as Chief Economist at the Federal Communications Commission (“FCC” or “Commission”). In that capacity, I oversaw the economic analysis performed by the Commission staff, and advised the Chairman and Commissioners on issues involving economic analysis. Major items before the Commission during my tenure included the EchoStar/DirecTV transaction, the Comcast/AT&T Broadband transaction, the Triennial Review of Unbundling Obligations, and the Biennial Review of Media Ownership rules.

3. I have been asked by Broadwing Communications LLP (“Broadwing”) and SAVVIS, Inc. (“SAVVIS”) to review the pending Applications for Approval of the Transfer of Control (“Application”) of AT&T Corporation and its subsidiaries (“AT&T”) to SBC Communications Inc. (“SBC”) (AT&T and SBC together, the “Applicants”) and provide an analysis of the public interest issues raised by the proposed transaction. In particular, this Declaration provides an economic analysis of how the proposed merger

likely would affect competition in the market for Internet Backbone (“IB”) services. I also comment on the economic analysis of these issues as presented in the Declaration of Professor Marius Schwartz.¹

4. The proposed merger, in connection with the projected combination of MCI, Inc. (“MCI”) and Verizon Communications Inc. (“Verizon”), will create two very large Internet Backbone Providers (“IBPs”) that have relatively many end users and relatively little content. For such networks, the ratio of inbound to outbound traffic likely will be relatively large. Some IBPs have peering policies that require the ratio of inbound to outbound traffic be no more than two to one in order to maintain settlement-free peering. Other IBPs, *e.g.*, SBC² and SAVVIS, do not maintain such traffic ratio criteria in their peering policies. Indeed, SBC’s guidelines for establishing public peering state: “No requirement for a balanced traffic exchange ratio due primarily to the asymmetric nature of current broadband metallic transmission systems such as ADSL and cable modems.”

5. If the merged SBC/AT&T firm were to use an inbound/outbound traffic criterion in its peering policy, it likely would end settlement-free peering with some current Tier 1 IBPs,³ especially those that have relatively more content providers than end users. IBPs that lack settlement-free peering are at a competitive disadvantage compared to Tier 1 IBPs. In the absence of settlement-free peering, an IBP lacks the highest-level

¹ Declaration of Marius Schwartz on behalf of SBC and AT&T, May 7, 2005.

² <http://www.sbcbackbone.net/peering>.

³ A Tier 1 ISP is generally defined as a network that has obtained a full set of Internet routes through settlement-free peering agreements.

access to the entire Internet and generally offers their customers relatively lower quality service in terms of response times, connectivity, capacity, and control and flow of data.⁴

For these reasons, Internet Service Providers (“ISPs”) prefer Tier 1 IBPs.

6. Professor Schwartz considers the situation in which SBC/AT&T might choose to end settlement-free peering with Broadwing or SAVVIS because of inbound/outbound traffic imbalances. He concludes that such an outcome would be economically appropriate since it would be based on SBC/AT&T’s costs of serving those IBPs.⁵ As he notes, this conclusion rests on the assumption that the sending network uses “Hot Potato Routing,” i.e., transferring the data at the peering point closest to the location of the customer on the sending network. This argument may have had some validity several years ago, but more recent developments in the supply of IB networks have made this argument untenable. The costs of providing transmission capacity on IB networks have fallen so much that an IBP’s incremental cost of delivering more data than it sends has become miniscule. In particular, in part due to the increases in the capacity of existing fiber due to advances in Dense Wave Division Multiplexing, the marginal cost of moving such traffic equals approximately zero until demand increases sufficiently to require an increase in fiber capacity. Given the large amount of excess capacity held by IBPs,⁶ such capital expenditures are unlikely in the near term.

⁴ Though paid-for peering gives IPBs the same connection quality as settlement-free peering, such arrangements generally are not an economically-viable long-term option because they are significantly more expensive on a per volume basis than settlement-free peering arrangements.

⁵ Declaration of Marius Schwartz on behalf of SBC and AT&T, pp. 18-19, May 7, 2005.

⁶ Andrew Odlyzko, *Data Networks are Lightly Utilized, and Will Stay That Way*, Review of Network Economics, vol. 2, 2003, pp. 210-237. Professor Odlyzko concludes that “well engineered backbones of the large [Internet] carriers with high traffic volumes appear to be running at average utilizations of around 15%.” *Id.*, p. 222.

7. Moreover, a network that has relatively many end users, as opposed to content suppliers, will have many customers who download large files from content suppliers. For example, an end user may download an update of Microsoft Windows XP. Such downloads often originate on the networks of IBPs such as Broadwing and SAVVIS, which have relatively more content providers than end users. In other words, in many cases the cause of inbound/outbound traffic imbalances is the demand by end users connected to an IBP such as AT&T or MCI for content provided over an IBP such as Broadwing or SAVVIS. In such cases, Broadwing and SAVVIS not only are not the cost causers, they cannot even control demand by end users connected to IBPs such as AT&T or MCI. These considerations also raise the fundamental issue of whether an IBP such as Broadwing and SAVVIS imposes costs on a Tier 1 network such as AT&T or instead actually provide a benefit in terms of being the supplier of content that enables AT&T to attract end users in the first place.

8. The foundation of Professor Schwartz's argument is based on older models of telephony that lead to the "caller pays principle." Those models assume that the calling party has a higher (typically the only) value from the call. As a result, the caller imposes a negative externality on the network by increasing congestion or creating the need for more capacity; thus, efficiency requires that the caller pays the cost of transport.⁷ But in the case of IB services, these two assumptions are invalid because (1) there exists chronic excess capacity and (2) the receiving party typically values the information more than the sending party. For example, consumers purchase a Microsoft

product because their value of the product exceeds the price. Similarly, when they download an application, although the number of packets used to request the product is small, the consumers' value of the application exceeds that of the seller, even though the seller or content provider sends much more data than the buyer.

9. There have been dramatic developments in the theory of efficient interconnection and pricing in the last few years. In particular, we now have economic models appropriate to the case at hand. In particular, Atkinson and Barnekov (2000) and DeGraba (2000) analyze the case of communication networks where both sides value the communication.⁸ Both papers conclude that a version of "Bill and Keep" is the efficient policy, which is the equivalent of peering. In a more complete model, Katz and Hermalin (2001) allow for differing values and incorporate the effect of transit prices on the ultimate end user prices. They find that, in contrast to the naïve model used by Professor Schwartz, the optimal transit pricing rule is not marginal cost pricing. While the cost recovery perspective suggests that the transit price " t " equal to marginal cost is optimal, the authors argue that "in the presence of positive receiver benefits, t would have this value only by coincidence. We also found that $t = 0$ could be efficient."⁹ Thus, the peering relationship is likely to be the efficient one.

⁷ Stephen J. Brown and David S. Sibley, *The Theory of Public Utility Pricing*, New York: Cambridge University Press, 1986.

⁸ Jay M. Atkinson and Christopher C. Barnekov, *A Competitively Neutral Approach to Network Interconnection*, FCC-Office of Strategic Planning & Policy Analysis Working Paper, December 2000; Patrick DeGraba, *Bill and Keep at the Central Office as the Efficient Interconnection Regime*, FCC-Office of Strategic Planning & Policy Analysis Working Paper, December 2000.

⁹ Benjamin E. Hermalin & Michael L. Katz, *Network Interconnection with Two-Sided User Benefits*, Walter A. Haas School of Business, University of California, Berkeley, July 2001.

10. Moreover, a simple remedy to the cost imbalance issue exists, i.e., “Cold Potato Routing.” In this case, the receiving party takes traffic from the sending party at the point of interconnection closest to the receiver. Transit costs would be borne by the IBP with the content provider as customer, thus no transit cost externality exists. However, Hot Potato Routing provides a value to the receiving network: since the traffic travels farther on its network, it can better enforce any quality or service restrictions or commitments it has provided to its customers. If this benefit is greater than the (small) marginal cost, then the efficient outcome is that traffic should be exchanged at the first point of interconnection, at zero price. On the other hand, if the benefit from monitoring and enforcing quality of service plans is less than this cost, then economic efficiency dictates that the hand off should occur at the point of interconnection closest to the end user. Therefore, the correct solution to imbalances in net traffic flows is simply the option of parties choosing the correct transfer protocol based on their costs and benefits. Such a mechanism is efficient and “incentive compatible,” that is the recipient of the traffic will have the incentive to choose the efficient routing option.¹⁰ The alternative of de-peering poses several anti-competitive concerns that I will address.

11. Internet traffic is generally routed according to the border gateway protocol (“BGP”). One of the most important criteria in BGP is the number of networks a message must travel through to reach its destination. From the perspective of an ISP,

¹⁰ See Drew Fudenberg and Jean Tirole (1991) “*Game Theory*” MIT Press Chapter 7.

the use of BGP provides an incentive for contracting with a Tier 1 IBP,¹¹ since this tends to reduce the number of networks required to reach a given destination. ISPs generally use more than one IBP in order to reduce the likelihood of service interruptions. Consider the case in which an ISP has contracts with two IBPs, one a Tier 1 network and the other not. In this case, the BGP will automatically route the ISP's traffic through the Tier 1 provider. Thus, if an IBP were to lose its status as a Tier 1 provider, the effect of the BGP would be to cause a substantial reduction in its traffic.

12. The antitrust implications of these Internet routing considerations are significant. If terminating settlement-free peering were to cause an IBP to lose its Tier 1 status, the use of BGP would cause a significant reduction in the demand for that IBP's network. The IBP could attempt to repair the damage by contracting for "paid for" peering, but the costs of this strategy would be prohibitive. Indeed, the IPB would be forced to negotiate the cost of paid for peering with the very entity that was trying to put it out of business by ending settlement-free peering. In this case, stopping settlement-free peering would provide SBT/AT&T with a simple and direct method to impair the quality of rival IBPs.

13. Professor Schwartz analyzes whether SBC/AT&T would engage in targeted de-peering in such a manner as to cause an increase in IB prices. He notes: "a striking feature is that AT&T accepts settlement-free peering not only with Level 3, that is comparable in total Internet traffic to AT&T, but also with companies such as

¹¹ In this paragraph, my reference to Tier 1 networks refers to any network that engages in settlement-free peering or appears to be a peer because it purchases paid for peering. As noted above, paid-for peering is not a long term economically viable strategy because it is too expensive relative to settlement-free peering.

[REDACTED]¹² which have less Internet traffic. Based on this empirical finding, Professor Schwartz concludes: “Since even large size disparity is not enough to prevent de-peering today, the case has not been made that the postulated mergers, alone or in combination, will engage in targeted de-peering to an extent sufficient to have a significant impact on Internet backbone pricing.”¹³ However, Professor Schwartz’s premise that “even large size disparity is not enough to prevent de-peering today” is incorrect. [REDACTED]

14. Professor Schwartz argues that two conditions are necessary for targeted de-peering of rival IBPs. First, the targeted IBP must be prevented from exchanging traffic with customers of the IBP that seeks to degrade the targeted IBP’s network. Professor Schwartz asserts that the targeted IBP could exchange such traffic “by purchasing high-quality and competitively priced transit from another IBP that is peered with [the IBP seeking to degrade the targeted IBP’s network].”¹⁴ Second, the IBP seeking to degrade the targeted IBP’s network must find it profitable to degrade that network through targeted de-peering. With respect to the first point, the ability to purchase transit from another IBP offers cold comfort to the de-peered IBP, since doing so clearly raises its costs and weakens it as a competitor. Furthermore, the de-peered IBP would be at a competitive disadvantage for two reasons. First, for multihomed customers (i.e., those connected to two or more IBP networks), if one of the networks does not have to purchase transit, the end user (or her ISP) will choose that IBP over one that must pay

¹² Declaration of Marius Schwartz on behalf of SBC and AT&T, p. 17, May 7, 2005.

¹³ Declaration of Marius Schwartz on behalf of SBC and AT&T, pp. 17-18, May 7, 2005.

¹⁴ Declaration of Marius Schwartz on behalf of SBC and AT&T, p. 16, May 7, 2005.

transit charges. Second, for non-multihomed customers, such customers do not generally purchase large wholesale Internet services from non-Tier 1 providers.

15. [REDACTED] The profitability of targeted de-peering is not surprising given the relative ability of customers to substitute away from AT&T or MCI versus SAVVIS in response to a decline in service quality. As discussed above, AT&T's and MCIs' IBs serve relatively more end users than content providers, with the reverse holding for SAVVIS. End users tend to have higher switching costs than content providers. End users (*e.g.*, retail consumers of DSL service) most often have contracts with a single supplier, generally for a year or more in duration, and they tend to be less sensitive to changes in traffic speeds than commercial content providers. Conversely, large content providers (*e.g.*, web hosting or wholesale customers) are highly sensitive to changes in traffic speeds and generally are multihomed. Thus, although target de-peering adversely affects the service quality of both firms, the effects are substantially stronger in the case of an IBP with relative less "sticky" customers.

16. The possibility of a policy of selective de-peering based on traffic flows is especially troublesome given the putative benefits of these mergers claimed by the applicants. In particular, Verizon has started to implement its fiber rich FIOS household strategy. This platform offers consumers asymmetric service with download speeds of up to 30 Mbps. Similarly, SBC has announced its Lightspeed Project to increase speed to residences. These projects will dramatically increase the demand for bandwidth-hungry content and applications. Of course, post merger SBC will be vertically integrated with AT&T and Verizon will be vertically integrated with MCI. Thus, in stark contrast to the

current situation, rival IBPs will not be able to compete for the business of the two largest aggregators of bandwidth-hungry demand. As a result, there will be, by definition, an inbuilt traffic imbalance in the net traffic flows that is directly attributable to the merger.

17. Because of the vertical integration of the BOC ISPs and the AT&T and MCI IBPs such traffic imbalances cannot be eliminated as Professor Schwartz suggests, by competition for the contract with the ISP. Suppose now that, because of this inbuilt imbalance post merger, SBC/AT&T de-peers an IBP with many content rich providers as customers. This will raise the competing IBP's costs and degrade its quality of service if it ceases to be a Tier 1 Peer. Customers of the de-peered firm will look for alternative providers, but IBPs other than SBC/AT&T and Verizon/MCI would face the real threat that if they accept the content rich customer, they will be selectively de-peered next. Therefore, they will factor this cost into their bidding for the customer and, as a result, competition for these customers will be diminished, increasing the market power of the two vertically integrated Peers. In the limit, of course, this would generate a new bottleneck for content rich providers, and additionally they would face the possibility of a "hold-up problem."¹⁵ The hold-up problem arises because if there is a paucity of Tier 1 providers competing for a content provider's business, then the content provider knows that the bottleneck owner, through higher prices, will attempt to appropriate the rent from the development of any new "high bandwidth" content. This in turn will have a negative effect on the incentive to generate new high bandwidth content and applications, and so, in turn will have a negative effect on the development and adoption of broadband. In

different contexts both Congress and the FCC have recognized the importance of the hold up problem for content providers. Thus Section 612(h) of the Communications Act explicitly instructs the FCC to develop rules that limit the horizontal reach and vertical integration of cable companies in order to protect the incentive of programmers to develop quality programming. The FCC had set that cap at 30% of the national market. Similarly, the FCC developed the national ownership cap for ownership of TV broadcast license, based on the share of households that the owner of broadcast licenses can reach. When the FCC relaxed this cap from 30% to 45% of households in the 2002 Biennial Review of Media Ownership rules, Congress overruled the FCC and reinstated national cap at a lower level of 39%.¹⁶

18. I conclude from this analysis that targeted de-peering is a profitable strategy and likely to become even more profitable post merger. A merged SBC/AT&T will likely have the ability and incentive to exercise substantial market power in the supply of IB services through the use of targeted de-peering. Moreover, this exercise of market power will be exacerbated by the proposed merger of Verizon and MCI, further reducing competition in the market for IB services.

19. These competitive problems, however, have a simple remedy. SBC and other firms do not impose such qualitative requirements on peering, and SBC publicly posts its peering policies. To avoid any such competitive harms, the applicants should

¹⁵ Jean Tirole, *Procurement and Renegotiation*, Journal of Political Economy, Vol. 94, No. 2, 1986; Oliver Williamson, *Markets and Hierarchies: Analysis and Antitrust Implications*, New York, Free Press, 1975.

¹⁶ See 2002 Biennial Regulatory Review - Review of the Commission's Broadcast Ownership Rules and Other Rules Adopted Pursuant to Section 202 of the Telecommunications Act of 1996, Report and Order and Notice of Proposed Rulemaking, MB Docket 02-277 (rel. July 2, 2003), at ¶¶ 499- 584.

commit to maintaining SBC's and other firms' current policies of settlement-free peering with firms having sufficient backbone capacity and points of presence in a sufficiently large number of geographic markets.

VERIFICATION

I declare that the foregoing is true and correct.

A handwritten signature in black ink, appearing to read "Simon Wilkie", is written over a horizontal line. A vertical line is positioned to the right of the signature.

Signature:_____

Dr. Simon Wilkie

Dated: August 12, 2005