

**Section IV: RESPONDENTS' SBC/AMERITECH CLAIMS**

*Access Point*<sup>28</sup>

- Access Point claims that the “Commission correctly recognized in the *SBC-Ameritech Order* that the larger the combined entity, the more incentive it would have to discriminate because of gains from external effects.”<sup>29</sup>
- Access Point claims that “the proposed AT&T-BellSouth merger would patently erode still further – and probably wash away altogether – the ability of regulators to monitor the practices of the incumbents for purposes of adopting pro-competitive approaches to regulation.”<sup>30</sup>
- Access Point claims that the merger would result in the “fundamental loss of one of three significant potential competitors in both the AT&T and BellSouth territories.”<sup>31</sup>

*Cbeyond*

- Cbeyond claims that if “AT&T and BellSouth are permitted to merge they will have a greater incentive to discriminate because the effects of any such discrimination will be felt throughout the combined entity's 22 state incumbent operating territory.”<sup>32</sup>

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27. Center for Digital Democracy Comments, p. 1.

28. Petition to Deny of Access Point, Inc. CAN Communications Services, Inc., DeltaCom, Inc., Florida Digital Network, Inc. D/B/A FDN Communications, Globalcom Communications, Inc., Lightyear Network Solutions, Inc., McLeodUSA Telecommunications Services, Inc., Pac-West Telecomm, Inc., Smart City Networks, Inc., and US LEC Corp., June 5, 2006 (hereafter Access Point Comments.).

29. Access Point Comments, p. 21.

30. Access Point Comments, p. 15.

31. Access Point Comments, p. 8.

32. Cbeyond Comments, pp. 89-90.

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- Cbeyond claims that the “benchmark analysis tool is dependent on the existence of similarly-situated firms to which an incumbent LEC's practices can be compared and as the number of firms decrease, so too does the effectiveness of benchmarking analysis.”<sup>33</sup>
- Cbeyond claims that the merger would “eliminate existing and/or potential competition throughout the BellSouth incumbent local operating territory by one of the very few remaining and most significant market participants in the highly-concentrated mass market for local voice services.”<sup>34</sup>

*Time Warner Telecom*

- Time Warner Telecom claims that the “larger is an ILEC’s footprint, the more fully it is able to appropriate the gains from discrimination and the greater, therefore, its incentive to discriminate. A merger that results in an ILEC with a large footprint increases the rewards from discrimination and thus makes such discrimination more likely.”<sup>35</sup>
- Time Warner Telecom claims that “the proposed merger will diminish or eliminate entirely regulators’ ability to rely on benchmarking to regulate RBOCs’ conduct.”<sup>36</sup>
- Time Warner Telecom argues that the merger would harm competition for special access services by eliminating “AT&T as a significant actual and potential competitor in the BellSouth region, and it would eliminate BellSouth as a potential competitor in the AT&T ILEC region. As ILECs

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33. Cbeyond Comments, p. 82.

34. Cbeyond Comments, p. 35.

35. TWTC Comments, p. 44.

36. TWTC Comments, p. 50.

with adjacent territories, these companies have special advantages over other types of competitors . . .”<sup>37</sup>

**Section V: RESPONDENTS’ RETAIL MASS MARKET AND BUSINESS SERVICES CLAIMS**

*Cbeyond*

- Cbeyond claims that by assuming “complete control over Cingular in a single organization for the first time,” AT&T “would eliminate the wireless leader, undercutting to a significant extent the claim that wireless services, as a whole, provide effective competition” with wireline services.<sup>38</sup>
- Cbeyond claims that “intermodal competitors do not qualify as significant participants in business markets,” and, more specifically, that “most VoIP services . . . ride incumbent LEC facilities and do not qualify as an independent source of competition.”<sup>39</sup>

*Access Point*

- Access Point claims that “if wireless could provide an alternative to Applicants’ services, it could not be counted as a competitor to them since a significant portion of that competition would come from Cingular, the country’s largest wireless company, which they own.”<sup>40</sup>
- Access Point also claims “[n]or is VoIP a significant competitor to the traditional wireline residential or business market . . . Thus, VoIP does not

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37. TWTC Comments, p. 16.

38. Cbeyond Comments, p. 76.

39. Cbeyond Comments, pp. 57-58.

40. Access Point Comments, p. 45.

eliminate the dependence of competitors on ILEC or cable last mile facilities.”<sup>41</sup>

## **Section VI: RESPONDENTS’ EFFICIENCIES CLAIMS**

### *Access Point*

Access Point claims that “the proposed merger would not produce significant public interest benefits.”<sup>42</sup> More specifically, it argues that:

- “the benefits of video competition are not merger-specific;”<sup>43</sup>
- the “claimed benefits concerning unified ownership of Cingular are unconvincing and not, in any event, merger specific;”<sup>44</sup>
- the claimed efficiencies reflect “benefits merely to the merger partners not to the public interest;”<sup>45</sup> and
- the benefits of integration of Cingular can be achieved by “intercarrier agreements between Cingular and AT&T and between Cingular and BellSouth.”<sup>46</sup>

### *Earthlink*<sup>47</sup>

11. Earthlink argues that the claimed synergies are not credible because “real-world mergers have demonstrated that such claims are often little more than self-serving and hypothetical.” Earthlink further suggests that “the FCC should reject [efficiency] claims as speculative.”<sup>48</sup>

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41. Access Point Comments, p. 45.

42. Access Point Comments, p. 48.

43. Access Point Comments, p. 48.

44. Access Point Comments, p. 51.

45. Access Point Comments, p. i.

46. Access Point Comments, p. 53.

47. Petition to Deny of Earthlink, June 5, 2006 (hereafter Earthlink Comments).

48. Earthlink Comments, pp. 31 – 32.

**Appendix 2**

**CALCULATION OF APPROXIMATE SPECTRUM SHARES**

12. This appendix summarizes our methodology for calculating AT&T's post-transaction share of spectrum identified as suitable for mobile and/or fixed broadband services. The estimates in Table 3.2 of our declaration summarize our calculation for the areas in which AT&T or BellSouth hold WCS or BRS/EBS spectrum.

13. The FCC's Universal Licensing System (ULS) databases are a principal source of information for this calculation.<sup>1</sup> Lexecon obtained from the FCC the ULS databases for "Market Based Services"<sup>2</sup> and "Cellular - 47 CFR Part 22." These databases contain information on for each spectrum band used in the analysis with the exception of BRS-EBS spectrum. We have used the ULS data to identify for each spectrum and band geographic area (i) the identity of licensees and (ii) bandwidth per licensee. We use this information for the following currently-licensed spectrum bands:

700 MHz Lower Band (radio service code ("WZ"))  
700 MHz Upper (or Guard) Band ("WX")  
2.3 WCS Band ("WS")  
1.6 WCS Band ("BC")  
1.9 GHz Broadband PCS Band ("CW")  
850 MHz Cellular ("CL")

14. For BRS-EBS spectrum, we rely on the coverage of BellSouth's BRS-EBS holdings prepared by Wiley, Rein and Fielding (WRF). BRS-EBS spectrum is licensed primarily on the basis of Protected Service Areas (PSAs), which grants the

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1. The FCC's ULS database is available at <http://wireless.fcc.gov/cgi-bin/wtb-datadump.pl>.
  2. The Market Based Services data includes information for the 700 MHz Lower Band (radio service code "WZ"), the 700 MHz Upper (or Guard) Band ("WX"), the 2.3 WCS Band ("WS"), the 1.6 WCS Band ("BC") and the 1.9 GHz Broadband PCS Band ("CW").

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licensee the protected use of spectrum within a 35 mile radius of the licensee's transmitter.<sup>3</sup> WRF identified BellSouth's BRS-EBS licensed holdings and estimated the population each area in which BellSouth holds spectrum.<sup>4</sup> WRF then calculated on a BTA basis the total number of "MHz pops" covered by the licensed. This figure reflects the product of (i) the population in the license area; and (ii) the bandwidth (in MHz) licensed by BellSouth.

15. As shown in Table 1, different spectrum bands (and sometimes different spectrum blocks within a band) are licensed on different geographic bases.

**Appendix Table 2.1**

Spectrum Band	Block	License Area	Number of Areas
Cellular	A/B	CMA	722
PCS	A/B	MTA	48
	C/D/E/F	BTA	487
1.6 GHz – WCS		NWA	1
2.3 GHz – WCS	A/B	MEA	48
	C/D	REA	8
2.5 GHz - BRS/EBS <sup>5</sup>		PSA	3,921
		BTA	487
700 MHz / Lower	C	CMA	722
	D	EAG	6
700 MHz / Upper	A/B	MEA	48

Source: FCC ULS database.  
 Definitions: NWA Nationwide Area  
 EAG Economic Area Group  
 REA Regional Area Group  
 MEA Major Economic Area  
 MTA Major Trading Area  
 BTA Basic Trading Area  
 CMA Cellular Market Area

3. Certain portions of the BRS/EBS spectrum are also licensed on a BTA basis but exclude PSAs held by other firms in that BTA. See Maravedis, "BRS, EBS and WCS Regulatory and Licensing Analysis," December 2005, p. 27.
4. We understand that portions of the EBS spectrum held by educational institutions are often leased to commercial providers. WRF's analysis attempts to account for EBS spectrum held by BellSouth by means of such leases.
5. Reflects the count of unique PSAs in the ULS database.

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16. We have attempted to identify spectrum shares at the BTA level. BTAs are the standard geographic license area for market based BRS/EBS licenses and the predominant geographic area for PCS licenses. We have utilized a “cross-walk” maintained by the FCC to attempt to map different geographic areas to BTAs.<sup>6</sup> In some cases the geographic units do not map cleanly to a BTA. In such cases we have attempted to assign the geographic area to the predominant BTA.

- For geographic areas that encompass multiple BTAs, such as MTAs, we recognize that spectrum holdings are identical in each BTA.
- For areas, such as CMAs that are smaller than a BTA, we assign each to the appropriate BTA. In these cases, we calculate a BTA average bandwidth based on population weighted average of the spectrum holdings for a firm within the BTA.
- We identify spectrum held by AT&T, BellSouth and Cingular based in part on information from MapInfo identifies corporate parents for various license holders.
- In some instances, the ULS data reports that multiple firms hold identical spectrum blocks (or channels) in the same geographic areas. In many instances, the FCC data indicate that spectrum holders have “partitioned” the spectrum, in which case their holdings may be smaller than the geographic areas covered by the license.

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6. These data are available at  
[http://wireless.fcc.gov/auctions/data/maps/cntysv2000\\_census.xls](http://wireless.fcc.gov/auctions/data/maps/cntysv2000_census.xls).

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- In some cases, the ULS data report separate information for the partitioned areas. An example includes WCS spectrum licenses at the REA level but partitioned to (smaller) MEA areas.
- In other circumstances, the FCC data report multiple holders for a particular license. In such cases, we assigned each licensee a pro-rata share of overall bandwidth.
- As noted above, WRF has identified the “MHz pops” covered by BellSouth BRS-EBS licenses in a BTA. We use this information along with estimates of population by BTA to calculate BellSouth’s average bandwidth in the BTA. AT&T does not hold any BRS-EBS spectrum.
- For certain of our calculations we also included 198 MHz of unauctioned spectrum in each BTA, which includes 130 MHz of AWS spectrum, 30 MHz of Lower 700 MHz spectrum, 30 MHz of Upper 700 MHz spectrum and 8 MHz of 1.4 GHz WCS spectrum.
- In other calculations we include 638.5 MHz of unlicensed spectrum, which included 83.5 MHz of 2.4 IMS spectrum and 555 MHz of 5 GHz U-NII spectrum.
- BellSouth’s share of bandwidth is calculated based on BTA-specific measures of (i) aggregate bandwidth in the spectrum bands included in the calculation and (ii) estimates of bandwidth of the combined spectrum holdings of BellSouth, AT&T and Cingular. National calculations reflect population weighted averages of the BTA-specific measures.

### **Appendix 3**

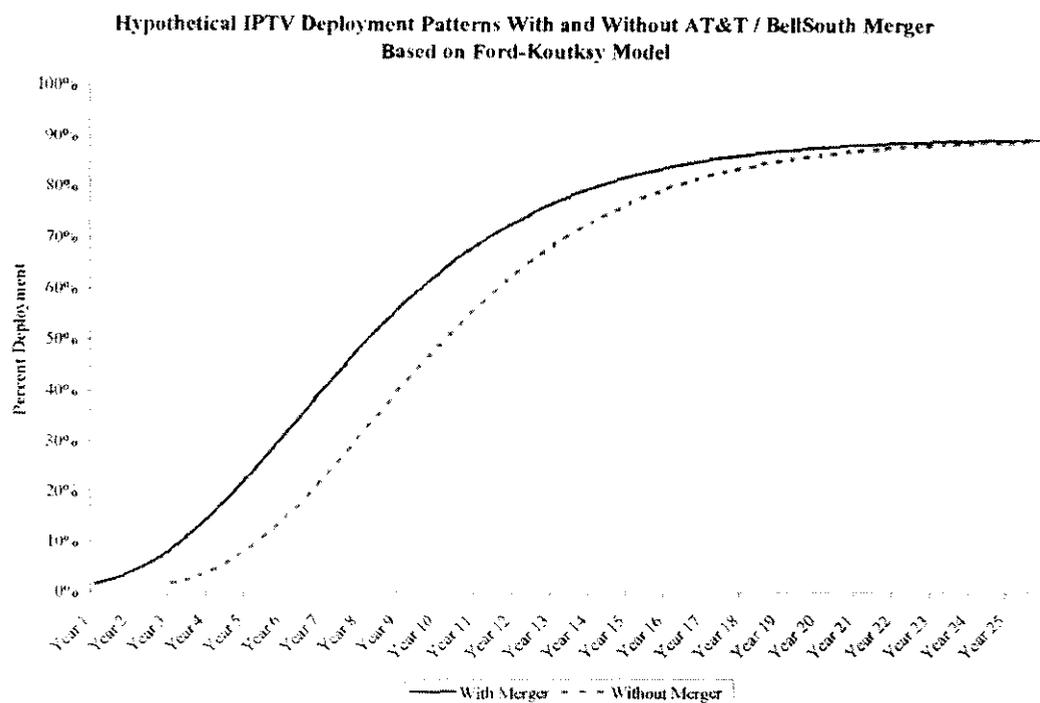
#### **CALCULATIONS ON CONSUMER WELFARE GAINS FROM ACCELERATION OF IPTV DEPLOYMENT BASED ON FORD / KOUTSKY MODEL**

1. In a recent paper, George Ford & Thomas Koutsky estimate the consumer welfare loss from the delay in IPTV deployment due to local franchising regulations.<sup>7</sup> They develop a model to estimate the resulting loss in consumer welfare due to delay in the realization of lower prices for video programming services. Ford and Koutsky also account for the expected increase in the number of MVPD subscribers from the price reduction expected due to competition.
2. Our model is similar to theirs but uses alternative assumptions regarding expected deployment patterns and pricing. More specifically, Ford and Koutsky assume:
  - The introduction of a competitive service will reduce prices faced by consumers (including those that remain cable consumers) by 15 percent. Ford and Koutsky assume average cable expenditures of \$50 per month.
  - They assume that 90 percent of cable customers will eventually have access to IPTV services and that this deployment will be achieved after 25 years. They assume that deployment follows an “S-curve” pattern and calculate loss under alternative assumptions about the average delay.

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7. George S. Ford and Thomas M. Koutsky, “In Delay There Is No Plenty: The Consumer Welfare Cost of Franchise Reform Delay,” Phoenix Center Policy Bulletin No. 13, January 2006, p. 13.

Appendix Figure 1



- They assume that the price elasticity of demand for MVPD services is -1.5 and discount losses from deployment delays to present value terms based on an annual rate of 5.25 percent.
  - 5 and discount losses from deployment delays to present value terms based on an annual rate of 5.25 percent.
3. Assuming that the proposed transaction accelerates the deployment of IPTV in the BellSouth region by services by 12 months, the Ford and Koutsky model implies that consumers in BellSouth's region would realize a benefit with a present value of \$900 million. The corresponding figure assuming a 24-month acceleration is \$1.8 billion.



**DECLARATION OF MARIUS SCHWARTZ**

**Professor of Economics  
Georgetown University**

I, Marius Schwartz, hereby declare the following:

**Biographical Information and Qualifications as an Expert**

1. I am a Professor of Economics at Georgetown University. I earned my B.Sc. degree from the London School of Economics with 1<sup>st</sup> class honors, and Ph.D. from UCLA. My teaching and research specialties are in industrial organization, competition, and regulation. From September 1998 to April 2000, I served at the Antitrust Division of the U.S. Department of Justice (DOJ) as the Economics Director of Enforcement, and for six months also as the Acting Deputy Assistant Attorney General for Economics (chief economist).

2. I have been actively involved in the telecommunications area both as an academic, government official, and private consultant. From April 1995 to June 1996, I served at the President's Council of Economic Advisers as the Senior Economist for industrial organization, working extensively on telecom issues including the 1996 Act. From 1996 to 1997, I was the DOJ's main economic outside expert on Bell entry into long-distance services. In 2000, I prepared to serve as the DOJ's testifying economic expert on Internet backbone issues in the proposed merger between WorldCom and Sprint. I have also consulted for the private sector on significant telecom matters, including international satellite services, international settlement rates, and the FCC's spectrum cap. I acted as expert consultant on Internet Backbone issues to SBC Communications, Inc. in connection with its 2005 acquisition of AT&T Corporation, submitting two declarations to the FCC in connection with that acquisition. My curriculum vitae is attached as Appendix 1.

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3. I am submitting this declaration to respond to comments submitted in opposition to the proposed merger of AT&T, Inc. and BellSouth Corp. raising competitive concerns in two areas: (a) the Internet Backbone market, and (b) “net neutrality.” Part I of this Declaration will address Internet Backbone issues.<sup>1</sup> Part II will address net neutrality.<sup>2</sup>

**I. The Merger Will Not Adversely Affect Competition in the Tier 1 Internet Backbone Market**

4. In its recently-completed review of the SBC/AT&T merger, the FCC conducted an extensive analysis of the Internet Backbone sector and concluded that: (1) SBC was not a Tier 1 competitor – defined as one that does not pay any other Internet backbone for connectivity<sup>3</sup> – so that transaction did “not remove an existing Tier 1 provider”, and (2) “several Tier 1 competitors with significant market shares would remain in the market post-merger.”<sup>4</sup>

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<sup>1</sup> Petition to Deny of Time Warner Telecom at 25-32 and Appendix A (Declaration of Graham Taylor ¶¶ 19-47 (hereinafter “Taylor Decl.”)); Comments of Consumer Federation of America, *et al.*, at 5-8 and Declaration of Mark Cooper and Trevor Roycroft at 57-62 (hereinafter “Cooper/Roycroft Decl.”); Comments of Access Point, Inc., *et al.* at 29-34.

<sup>2</sup> Declaration of Susan Baldwin and Sarah Bosley on behalf of New Jersey Division of the Ratepayer Advocate (“Baldwin/Bosley Decl.”) ¶¶ 214-234; Center for Digital Democracy at 2-4; Cooper/Roycroft Decl. at 4-10, 40-57 (hereinafter “merger critics” or “critics”).

<sup>3</sup> *See In re Applications of SBC Communications Inc. & AT&T Corp.*, Memorandum Opinion & Order, 20 FCC Rcd. 18290, 18352 ¶ 111 (2005) (hereinafter “SBC/AT&T Merger Order”) (stating “Tier 1 IBPs peer with all other Tier 1 IBPs on a settlement-free basis”).

<sup>4</sup> *SBC/AT&T Merger Order* ¶ 124. The FCC based its conclusions on a Tier 1 market comprised of eight firms – AT&T, MCI (now Verizon), Qwest, Global Crossing, Sprint, (now Sprint-Nextel), Level 3 (which has since acquired WilTel), Cogent and SAVVIS. This list, in turn, was taken from my declaration. *See id.* ¶ 115, n. 344 (citing Schwartz Decl. ¶ 20). A number of large backbones not identified by the FCC sell DIA and transit services to US customers, and thus there may well be competitively significant, nearly fully peered Internet Backbones beyond these eight.

5. The FCC's recent conclusions apply with equal force to the current proposed merger of AT&T and BellSouth. Regarding conclusion (1), the proposed merger likewise will not alter the number of Tier 1 competitors. BellSouth has only a modest regional backbone network for the transmission of Internet traffic and is further than SBC was from meeting the FCC's definition of a Tier 1 Internet Backbone provider. Whereas AT&T does not pay any other backbone for the handling of its traffic, BellSouth is peered only with Cogent, and pays two other Tier 1 Internet Backbone providers for transit services to obtain global connectivity. Thus, the FCC's first conclusion – that the transaction will “not remove an existing Tier 1 provider” – applies equally here.<sup>5</sup> Moreover, as I will show below, the FCC's second conclusion – that “several Tier 1 competitors with significant market shares would remain in the market post-merger” – also applies to this merger. There is no evidence that the merged firm will be in a position to profit from degrading connectivity with competitors, or to de-peer them.

**A. Global De-Peering Requires An Installed Base Share Far Larger Than Would Be Possessed By the Merged Firm**

6. The established economic theory addressing whether a “larger” backbone has an economic incentive to deny or degrade interconnection with a “smaller” backbone — or to use a credible threat of degradation to impose de-peering — is built on the concept of an “installed base” of unique customers. A backbone's installed base are those end users that (1) are uniquely reachable only through that backbone (or could be reached via other backbones only at significantly

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<sup>5</sup> Further, as the FCC found in *SBC/AT&T*, (a) the Internet Backbone market is not concentrated, and (b) SBC was not a uniquely situated potential competitor. *SBC/AT&T Merger Order* ¶ 139 (listing criteria that must be met for the acquisition of a potential competitor to raise antitrust concerns, and confirming that the criteria I identify in the text were not satisfied in that

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higher cost or lower quality), and (2) who cannot easily switch to another backbone.<sup>6</sup> The economic analysis addresses conditions under which the network with the largest share of installed-base connectivity<sup>7</sup> might gain by degrading interconnection so as to impede rivals when competing to win new customers.

7. Global degradation — degradation of interconnection with *all* rivals — poses the following profitability tradeoff for the largest backbone: (a) All backbones, including the largest, suffer a loss of “quality” (none can offer universal connectivity), leading to a harmful decrease in the total number of new customers in the market; but (b) the largest backbone *might* win a larger *share* of new customers. Effect (b) hinges on whether degradation yields the largest backbone a relative quality advantage over rivals. If there is only one rival, i.e., duopoly, then (barring rather implausible consumer expectations) a backbone will obtain a quality advantage if (and only if) its share of the installed base is more than 50%. However, if there are two or more rivals, themselves interconnected (as is true of Internet backbones today), then degradation can cause the largest backbone to suffer a quality *disadvantage* and a reduced share of new subscribers no matter how large its installed-base share.<sup>8</sup>

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transaction). Given these conclusions, even if BellSouth is considered to be a potential Tier 1 competitor, this acquisition of a potential competitor cannot cause substantial competitive harm. *Id.*

<sup>6</sup> See, e.g., Jacques Cremer, Patrick Rey and Jean Tirole, “Connectivity in the Commercial Internet,” *Journal of Industrial Economics*, vol. 48 (Dec. 2000) at 433-472 (hereinafter “CRT”).

<sup>7</sup> If all connections are equally important, then the connectivity share equals the share of existing installed-base customers.

<sup>8</sup> The reason is that intra-network competition among the smaller but interconnected rivals causes them to price more aggressively to attract new customers, potentially giving their network a greater total connectivity universe (of installed-base *plus* new customers) than that of the backbone with the largest installed base. See David Malueg and Marius Schwartz, “Compatibility Incentives of a Large Network Facing Multiple Rivals,” *Journal of Industrial Economics* (forthcoming), available at: <http://ssrn.com/abstract=876084>.

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8. The standard analysis, therefore, establishes that a share above 50% of the relevant installed-base connectivity universe is *necessary* to make global de-peering profitable, but generally is not sufficient. It is necessary, because a share of 50% or less will fail to yield a relative advantage over the other, interconnected backbones, but will reduce overall market demand.<sup>9</sup> It is not sufficient, because, with two or more rivals, the largest backbone may not even gain a relative advantage and, even if it does, this effect can be outweighed by the demand reduction effect.

9. Applying this analysis to the current facts, it is evident that this merger poses no risk to the Tier 1 Internet Backbone market from global de-peering by a post-merger AT&T. This conclusion is supported by all available metrics of “market share”, but I turn first to the metric that most closely approximates the concept of an installed base, namely broadband residential and small business “eyeballs.”

#### 1. “Eyeballs”

10. For an Internet backbone, its *candidate* installed base consists of its immediate customers – the ISPs to whom it provides global connectivity in exchange for a transit fee, and the dedicated Internet access (DIA) customers (typically, larger business customers) who purchase such connectivity directly. Clearly, however, not all such customers qualify as an “installed base”: many DIA and ISP customers appear to face low switching costs, and can, and do, change providers

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<sup>9</sup> CRT, for example, conclude that in a model with four equally sized backbones, the merger of two of them to create a 50% share would not be sufficient to support a global degradation strategy: “[a] global degradation strategy is not profitable: it reduces again the demand and does not yield any competitive advantage to the new entity.” CRT at 458. *See also* Reply Declaration of Dr. Marius Schwartz, *In re Applications of SBC Communications Inc. & AT&T Corp.*, WC Docket 05-65 (2005) fn. 14 (if the customer base of the degrading network is no larger than that of the rivals collectively, then refusing interconnection will not yield a relative advantage but will harm the absolute quality).

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with some frequency, and many, especially the larger ones, are multi-homed (for the security of a redundant Internet connection and to preserve competitive options).<sup>10</sup>

11. To the extent that any end-user customers can be viewed as both unique and quite sticky to an Internet backbone, the closest proxy would be the retail broadband customers who are served by the backbone's affiliated ISP — in the case of AT&T, the DSL subscribers of its affiliated broadband ISP. The extent of “stickiness” is questionable even then.<sup>11</sup> Nonetheless, such residential customers are likely at any point in time to be single-homed, and thus reachable only via the AT&T backbone network. As such, they are the closest proxy in today's world to an installed base, and therefore form the basis of my analysis below.

12. According to the broadband data provided in the Table at page 103 of the Public Interest Statement, a merged AT&T/BellSouth would account for 23% of the residential and small business broadband connections. This would still leave over three-fourths of the eyeballs in the hands of other large ISPs. Two of those (Verizon and Qwest) are themselves integrated with Tier 1 backbones. The great majority of remaining end users subscribe to a handful of large cable company ISPs (Comcast, TimeWarner Cable, Cox, Charter, Cablevision). As the FCC found, these large ISPs have the ability, and incentive, to switch backbone providers in the face of attempted strategic behavior by a backbone affiliated with their telephone company retail competitors.<sup>12</sup>

<sup>10</sup> Legacy AT&T data on DIA customers from the end of 2004, for example shows a “churn” of approximately [begin confidential] [end confidential] per month, meaning that [begin confidential] [end confidential] of the customers turn over every year.

<sup>11</sup> See *SBC/Merger Order* ¶ 128 (eyeballs are not “sticky” because of the “widespread availability of competing broadband” alternatives).

<sup>12</sup> See *id.* ¶ 129. Contrast this with the European Commission's decision in *WorldCom/Sprint* that ISPs would be too fragmented to be able individually to affect backbone shares. See Commission Decision No. 4064/89/EEC (2000) (*WorldCom/Sprint*) ¶ 170 (hereinafter “*EC WorldCom/Sprint Decision*”).

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Under such circumstances, any attempt by a post-merger AT&T, with 23% of all eyeballs, to engage in global de-peering would not be profitable – AT&T would suffer not only an absolute loss in quality, but also *relative* to the other backbones and hence a competitive disadvantage.

13. Other metrics to measure a backbone's share of the relevant connectivity universe are consistent with, and support, this conclusion. Although such metrics are less direct proxies for an installed base of customers, and therefore less reliable measures of the relevant "market share," within the limits noted below, they offer a cross-check on the conclusions reached based on eyeballs.

## 2. Traffic

14. After eyeballs, traffic is likely to be the closest proxy for an installed base of customers. Traffic is a less satisfactory proxy, however, for a number of reasons. First, traffic does not convey whether the customer is unique to that IBP – in the case of traffic on a backbone coming from both DIA and ISP customers, for example, the customer often can be reached via one or more other backbones. Second, traffic on a backbone originating with a large ISP, such as Cox or Comcast, for example, represents eyeballs or customers "controlled" by that ISP, not by the IBP. The shifting by even one large ISP of its traffic from one Tier 1 IBP to another would greatly alter the relative shares of traffic carried by individual backbones.<sup>13</sup> With these caveats, it is noteworthy that current traffic data paints a similar picture as eyeball shares.

15. In my previous declaration, I used traffic data compiled by RIIK, as augmented by actual traffic data of the merging parties, and I follow the same methodology here. In Table 1, I

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<sup>13</sup> The Commission has already found that there are no significant barriers to these large ISPs shifting traffic from one IBP to another. *SBC/AT&T Merger Order* ¶ 129, n.381.

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have calculated the shares of North American Internet traffic, utilizing RHK data.<sup>14</sup> Using BellSouth's traffic data for March, 2006, BellSouth carried approximately [begin confidential] [end confidential] of the traffic carried by AT&T for the same period, which would put BellSouth's share of North American Internet traffic at less than 2%. AT&T's post-merger traffic share of about 20% is thus relatively consistent with its post-merger eyeball share of 23% noted in Paragraph 12, above.

16. Even if the traffic universe is limited just to the 8 Tier 1 IBPs identified by the FCC in *SBC/AT&T*, the results do not fundamentally change. As shown in Table 1, within the more limited Tier 1 universe, AT&T's premerger share is [begin confidential] [end confidential] and the addition of BellSouth's traffic would take it to [begin confidential] [end confidential]. This still is well below the 50% threshold that needs to be exceeded for global degradation to be plausible in the Internet backbone market.<sup>15</sup>

### 3. Revenue

17. Finally, market shares may also be measured based on revenue. Stressing revenue, TWTC and Cooper/Roycroft argue that the merger will lead to high market share. There are,

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<sup>14</sup> I have utilized RHK data for the 4th quarter of 2004, as reflected in Annex A to the Reply Declaration of Dr. Michael Kende in the Verizon/MCI merger, as this is the most current data from RHK available to the parties.

<sup>15</sup> TWTC, relying on the DOJ's *Intermedia Competitive Impact Statement*, asserts that a company with 37% traffic share "would possess enough power to tip the Internet backbone market." TWTC Pet. at 28. In fact, however, DOJ was considerably more guarded, stating only that a "significant increase" above 37% would increase "the likelihood of tipping" the Internet backbone market. *United States v. WorldCom, Inc. and Intermedia Communications, Inc.*, Case No. 1:00CV02789, Competitive Impact Statement at 9-10 (D.D.C. filed December 21, 2000). Whatever the merits of 37% as a threshold of concern, the current *post-merger* shares are significantly below that. See also *SBC/AT&T Merger Order* ¶ 119 (finding that "the Tier 1 market has . . . become less concentrated [since *MCI/WorldCom/Sprint*] such that the proposed merger will not create a dominant backbone provider").

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however, at least two problems with utilizing revenue data: (a) revenue is a weak proxy for the size of the end user customer base because of the manner in which Internet services are priced, and (b) companies often categorize revenues from the same functionality differently, leading to potentially large discrepancies in reported revenue information.

18. Regarding point (a), large IBP customers receive significant discounts when purchasing Internet connectivity from backbones relative to prices paid by smaller IBP customers. As a result, an Internet backbone that does business mostly with very large ISPs – those with the greatest number of end-users – will show relatively low revenues, as compared to an Internet backbone that focuses more on smaller ISPs and retail business customers. Consequently, there can be a large divergence between IBPs' market shares based on revenues on the one hand, and traffic or eyeballs on the other.

19. As an example of this phenomenon, the 2003 IDC revenue data cited by the FCC in *SBC/AT&T* lists Level 3 (which targets primarily larger customers)<sup>16</sup> with only \$283 million in “backbone revenues,” i.e., upstream transit and DIA revenues.<sup>17</sup> This is a mere one-fourth of the same categories of revenue that IDC reported for legacy AT&T for 2003, while the RHK traffic data at that time showed that Level 3 and AT&T had approximately equal shares of Internet traffic.

20. Turning to the second point, I note that the FCC cited 2003 IDC revenues for upstream transit and DIA in its analysis of the SBC/AT&T merger, which were submitted by SBC

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<sup>16</sup> See <http://www.level3.com/580.html#business> (visited on June 16, 2006).

<sup>17</sup> IDC tracked revenues as follows: In the Wholesale category, sub-categories for (i) Dial Up/Managed Modem, (ii) Upstream Transit, and (iii) Other; in the Business IP category, sub-categories for (iv) DIA and (v) Remote Access. In *SBC/AT&T*, I identified categories (ii) and (iv) as most-closely capturing backbone functionality. (A second reason for selecting these sub-categories is that the elimination of Dial-Up revenues resulted in much higher shares for AT&T and SBC, because of the large revenues that MCI earned in that category, and thus my choice was in

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in an ex parte dated July 22, 2005.<sup>18</sup> In connection with this transaction, I requested that BellSouth provide its upstream transit and DIA revenues for 2003. According to BellSouth, it in fact had no upstream transit revenue at all in 2003, and DIA revenues of only approximately [begin confidential] [end confidential] in that year. IDC, however, reported that BellSouth had \$103 million in upstream transit and \$297 million in DIA revenues. Thus, BellSouth's actual combined revenues from upstream transit and DIA — the rough proxies for Internet backbone services — were about [begin confidential] [end confidential] of the \$400 million reported by IDC.

21. Alerted by this large discrepancy, I then asked AT&T to provide data for legacy AT&T and legacy SBC, so that I could assess whether the IDC revenues for these companies were likewise in error. AT&T data indicate that it had [begin confidential] [end confidential] in "Managed Internet Services" revenue for 2003, a category which includes both upstream transit and DIA revenues as classified by IDC. This is not far off the \$1,134 million reported by IDC for legacy AT&T. AT&T has advised me, however, that the [begin confidential] [end confidential] includes more than [begin confidential] [end confidential] in dial up access revenues (which properly belonged in one of the other IDC revenue categories), and another [begin confidential] [end confidential] in DSL retail services. Moreover, AT&T estimates that of the approximately [begin confidential] [end confidential] of revenue for DIA and transit, approximately 22% would represent access line

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part intentionally conservative.) As is evident from the analysis in the Paragraphs 19-24, however, even these remain, at best, crude approximations.

<sup>18</sup> *SBC/AT&T Merger Order* ¶ 123. Even in doing so, however, the Commission acknowledged that it was not endorsing revenue as the best, or even an appropriate, measure of market share, but simply the one dataset that it had on the record. *Id.* n.343.

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charges, so that AT&T's "true" DIA and transit revenues for 2003 are more in the range of **[begin confidential]** **[end confidential]**, or about 60% of the revenues as reported by IDC.

22. For legacy SBC, IDC reported total Internet backbone revenue of \$396 million, including upstream transit revenues of approximately \$111 million and DIA revenues of approximately \$286 million. SBC's actual transit revenues were **[begin confidential]** **[end confidential]**, but its DIA revenues were only **[begin confidential]** **[end confidential]**.

23. As shown in Table 2, simply adjusting the IDC 2003 revenue data to reflect actual legacy AT&T and legacy SBC, and using actual BellSouth revenues, would produce a post-merger revenue share within a "Tier 1 Internet Backbone Market" of a little over 29%. It is thus evident that the IDC revenue data has the potential to greatly overstate the parties' true revenue shares.

24. Besides the inaccuracies for the parties, the IDC data has additional anomalies as a measure of backbone services. Some Tier 1 backbones rank far lower on the IDC revenue list than do ISPs that are not Tier 1 backbones. For example, IDC's revenue data places Global Crossing, a Tier 1 backbone, at 16<sup>th</sup> based on combined revenues for upstream transit and DIA (after adjusting for the SBC/AT&T and Verizon/MCI mergers), with total upstream transit and DIA revenues of \$60 million, while large cable ISPs, such as Comcast and Cox, are ranked 7<sup>th</sup> and 14<sup>th</sup>, with revenues of \$166 million and \$68 million, respectively. Thus, the IDC revenue categories, while the best approximation of Internet backbone functionality from among the five categories that IDC tracks, are still quite imperfect measures.

25. In light of the apparent inaccuracies in the IDC revenue data, as well as the inverse relationship that can exist between price/gigabyte and total traffic carried by different backbones, it

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would seem inadvisable to rely on revenue data instead of eyeballs or traffic as a proxy for the “installed base” of unique customers that lies at the heart of the competitive effects analysis.

**B. Targeted De-Peering**

26. The above analysis shows that this merger poses no credible risk of global de-peering by any reliable measure. Turning to targeted de-peering, such a strategy will not be effective unless AT&T could credibly threaten to de-peer a sufficient number of other Tier 1 IBPs to adversely affect competition in the Tier 1 IBP market. Given the small increment that BellSouth adds to the present AT&T, such ability is lacking and, hence, the FCC’s prior analysis and conclusions remain applicable.

27. As I noted in my reply declaration in the SBC/AT&T transaction, the theory of targeted degradation requires that the targeted backbone (“TB”) must be prevented or seriously impaired from reaching customers of the degrading firm (“DF”), and therefore must be unable to purchase high-quality and competitively priced transit from another IBP that is peered with DF. By hypothesis, however, there will be other IBPs peered with DF since DF is not engaging in global de-peering.

28. Second, even if transit could be blocked, firm DF still faces an uncertain profitability tradeoff. Its quality improves *relative* to TB, but TB *and* DF suffer relative to other backbones that remain peered with both, since those backbones continue to offer universal connectivity. Focusing only on the first effect gives the misleading impression that if one backbone is sufficiently larger than another, then the larger one necessarily will profit from degrading interconnection by gaining a competitive edge over the latter. This ignores the negative second effect – the loss of competitiveness against the significant number of non-degraded rivals that

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remain. Thus, at the theory level, even a large relative size advantage over a rival is not sufficient to make targeted degradation profitable.

29. This conclusion is borne out in reality. As I discussed in my reply declaration in *SBC/AT&T*, prior to its merger with SBC, AT&T engaged in settlement-free peering with backbones that were approximately 1/10<sup>th</sup> AT&T's size, as measured by the amount of Internet traffic that each carried. This empirical evidence is consistent with MCI WorldCom's peering practices in approximately 1999, when the European Commission found that MCI WorldCom maintained 11 settlement free peers notwithstanding its estimated 32-36% share of Internet traffic.<sup>19</sup> Because the current transaction does not materially alter today's relatively balanced market structure, the threat of targeted de-peering is not credible.<sup>20</sup>

## **II. The Transaction Should Not Be Blocked or Conditioned Based on Arguments About "Net Neutrality"**

30. This portion of the Declaration responds to claims that the merger should be blocked or subjected to conditions because it threatens so-called "net neutrality." There is no accepted definition of net neutrality, but the concept generally refers to what regulatory restrictions, if any, should be placed on broadband access providers in their traffic management practices, pricing models and other business practices. Proponents of net neutrality seek to restrict operators' latitude to depart from today's uniform "best-efforts" model for prioritizing Internet traffic and the

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<sup>19</sup> The 11 peers total is derived by subtracting from the seventeen "top level" networks identified by the Commission, the four networks that the Commission added and the two merging parties. See *EC WorldCom/Sprint Decision* ¶¶ 104-105, 116.

<sup>20</sup> The FCC's conclusions in *SBC/AT&T* that the Tier 1 Internet Backbone market was "sufficiently competitive and will remain so post-merger, [and] that the prices and terms of

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traditional pricing models (e.g., pricing to residential end users varies only based on the connection size). Accordingly, “net uniformity” may be a more accurate description than net neutrality.

31. Before exploring the merits of such regulation of the Internet, I first show in Section A that there is no basis to conclude that this proposed merger will have any significant effect on the ability or incentive of the merged company to engage in the practices cited by proponents of net neutrality. Since the supposed concerns are not merger specific, addressing them in the context of a merger review is bad public policy.

32. Section B addresses the merits of Internet regulation, even if applied industry-wide instead of selectively to the merging firms. What is termed “net neutrality” is a complex policy issue that continues to be widely debated, and the merger critics have only scratched the surface. Since the issue is not merger specific, this is not the place to attempt a comprehensive review of the broader debate. Nevertheless, at a high level, my view of the state of the debate is that net neutrality intervention is at best premature for two reasons:

(a) First, the nature and demands of the Internet have changed dramatically and are continuing to evolve. The practices challenged by net neutrality proponents offer clear potential to address these new business realities in an economically efficient manner and benefit consumers. Thus imposing regulation based on our current limited state of knowledge runs a serious risk of being quite damaging.

(b) Second, imposing regulation, especially heavy-handed common carrier type regulation geared to a monopoly regime, is inappropriate given the substantial and growing competition in broadband access. Not only is it wrong to prejudge that competition will be

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interconnection in the market will also be competitive,” *see SBC/AT&T Merger Order* ¶ 132, apply also to the current merger.