

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

In the Matter of )  
 )  
Review of Regulatory Requirements for )  
Incumbent LEC Broadband ) CC Docket No. 01-337  
Telecommunications Services )

**COMMENTS OF WORLDCOM, INC.**

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**COMMENTS OF WORLDCOM, INC.**

WorldCom, Inc. (WorldCom), by its attorneys, submits these comments in response to the Notice of Proposed Rulemaking (*Notice*) released on December 20, 2001 in the above-captioned proceeding.<sup>1</sup>

**I. INTRODUCTION AND SUMMARY**

As competition is introduced in some, but not all, telecommunications markets, it is appropriate for the Federal Communications Commission (FCC) to consider the types of regulations and safeguards that are necessary for each individual market. The *Notice* properly recognizes that demonstrated changes in market structure caused by competitive entry require the Commission to reassess and revise its existing rules to account for those changes.

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<sup>1</sup> *In the Matter of Review of Regulatory Requirements for Incumbent LEC Broadband Telecommunications Services*, Notice of Proposed Rulemaking, CC Docket No. 01-337 (2001) (*Notice*).

Historically, the FCC has followed a “phased” approach to relaxing regulation of dominant carriers as competition supplanted the need for price and other direct restrictions on carrier conduct. For example, the Commission gradually eased price cap restrictions on AT&T as the carrier became subject to increased competition in the long distance market.<sup>2</sup> In addition, when the FCC has relaxed regulation of dominant carriers in a downstream market, it has adopted safeguards to prevent the dominant carriers from leveraging their power in the upstream market into the downstream market.<sup>3</sup>

In this proceeding the Commission should consider the issues that arise when a carrier is dominant in an upstream market (local exchange and exchange access), but faces some competition in the downstream market (broadband services).<sup>4</sup> The Commission must consider what level of regulation to apply to the downstream market, and what safeguards are necessary to prevent a carrier from leveraging its power in the upstream market to affect competition in the downstream market. Consistent with FCC precedent, most recently the *LEC Classification* proceeding,<sup>5</sup> the Commission should not declare a carrier with market power in the upstream market non-dominant in the

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<sup>2</sup> See *Competition in the Interstate Interexchange Marketplace*, Report and Order, 6 FCC Rcd 5880; Second Report and Order, 8 FCC Rcd 3668 (1993); *Motion of AT&T Corp. to be Reclassified as a Non-Dominant Carrier*, Order, 11 FCC Rcd 3271 (1995) (*AT&T Reclassification Order*).

<sup>3</sup> See *Notice* at ¶ 13.

<sup>4</sup> See, e.g., *id.* at ¶ 8. In these comments, we use the term “broadband services” to refer to the wholesale market in which Internet service providers (ISPs) are customers of broadband service providers, such as incumbent local exchange carriers (LECs), competitive LECs and cable companies. As discussed below, there is an additional retail market for Internet access services provided over broadband facilities. These retail services are provided by ISPs to end-user customers.

<sup>5</sup> See *Regulatory Treatment of LEC Provisioning of Interexchange Services Originating in the LEC’s Local Exchange Area*, 12 FCC Rcd 15756 (1997) (*LEC Classification Order*).

downstream market unless there is sufficient evidence of irreversible and meaningful competition in the downstream market.

As the moving party, the carrier seeking to be reclassified as non-dominant has the burden of demonstrating that sufficient facts exist to warrant consideration of the relief requested. Incumbent local exchange carriers (LECs) seeking to be declared non-dominant with respect to broadband services therefore must demonstrate that there is sufficient competition for such services and that they cannot use their market power in the upstream local exchange market to hinder competition in the downstream broadband services market. Specifically, FCC precedent requires that any incumbent LEC seeking to be declared non-dominant in the provision of broadband services must demonstrate that:

- Sufficient competition exists in the relevant product and geographic markets to prevent anti-competitive behavior by the incumbent LEC;
- Competitors in the downstream market for broadband services that are dependent upon the incumbent LECs for inputs are assured of receiving nondiscriminatory, cost-based, and timely access to the inputs provided by the incumbent LEC in the upstream market in which the incumbent LEC remains dominant; and
- Safeguards are in place, or will be put in place, to ensure that the incumbent LEC will not be able to leverage its power in the upstream market to affect competition in the downstream market.

Without passing judgment on whether such a showing could be made given today's market conditions, WorldCom notes that SBC failed to make such a showing in its Petition.<sup>6</sup> Among its other flaws, SBC's Petition:

- Improperly defined the relevant geographic and product markets;

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<sup>6</sup> SBC Petition for Expedited Ruling that it is Non-Dominant in its Provision of Advanced Services and for Forbearance from Dominant Carrier Regulation of those Services, CC Docket No. 01-337 (filed Oct. 3, 2001) (SBC Petition).

- Failed to show that there is more than one other independent competitor for advanced services used to provide Internet access to residential customers;<sup>7</sup>
- Improperly computed share for advanced services provided to business customers;
- Ignored the fact that the incumbent LECs have prevented, and continue to prevent, competitive LECs from competing effectively in the provision of advanced services; and
- Did not adequately address SBC's ability to leverage its power in the market for exchange or exchange access services to harm competition for advanced services.

For these reasons, SBC's Petition should be denied.

## **II. CARRIERS SEEKING TO BE DECLARED NON-DOMINANT MUST DEMONSTRATE THE EXISTENCE OF SUFFICIENT COMPETITION AND SAFEGUARDS IN THE RELEVANT MARKETS**

Consistent with the FCC's approach in the *LEC Classification Order*, an incumbent LEC seeking to be declared non-dominant in the provision of broadband services must: (1) define the product market correctly; (2) define the geographic market correctly; (3) demonstrate that existing competition is sufficient to constrain anti-competitive behavior by the incumbent LEC; and (4) demonstrate that sufficient safeguards are in place to prevent the incumbent LEC from leveraging its power in the upstream local exchange market to affect competition in the downstream broadband services market.

The key issue in this proceeding is competition in the market for broadband services, and the arguments in these comments are centered on this market. The comments also discuss the retail market for Internet access, however, in order to provide a context for the way in which broadband services are used. An examination of the retail

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<sup>7</sup> In its Petition, SBC used the term "advanced services" rather than "broadband services." WorldCom therefore uses the term "advanced services" when discussing

Internet access market is also relevant because a lack of competition in that market indicates a lack of competition in the market for wholesale broadband services.

**A. Carriers Must Define the Relevant Product and Geographic Markets Correctly**

As the *Notice* correctly points out, the first step in assessing what regulatory requirements are appropriate for incumbent LEC-provided broadband services is to define and analyze the relevant markets in which the incumbent LECs provide these services.<sup>8</sup> As the Commission concluded in the *LEC Classification Order*, the 1992 Merger Guidelines provide the proper analytical framework for defining relevant markets in order to assess market power.<sup>9</sup> Within this framework, market definitions are based solely on demand substitutability.<sup>10</sup> Thus, in defining the relevant product market, the Commission considers whether, if all carriers raised the price of a particular service or group of services by a “small but significant and nontransitory” amount, customers would switch to a substitute service at a lower price.<sup>11</sup> Similarly, to define the relevant geographic market, the Commission considers whether, if all carriers in a specified area raised the price of a particular service or group of services by a “small but significant and nontransitory” amount, customers would switch to the same service offered at a lower price in a different area.<sup>12</sup> Supply substitution factors, *i.e.*, possible production responses, are important only in identifying firms that might enter the market in the relevant period.

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SBC’s Petition.

<sup>8</sup> *Notice* at ¶ 17.

<sup>9</sup> *LEC Classification Order* at ¶ 26.

<sup>10</sup> *Id.* at ¶ 27.

<sup>11</sup> *LEC Classification Order* at ¶ 41, n. 119.

<sup>12</sup> *Id.* at ¶ 64, n. 174.

## 1. The Product Markets

In examining product markets for telecommunications services, the Commission has traditionally distinguished between the mass market, made up of residential and small business customers, and the business market, consisting of medium and larger-sized customers.<sup>13</sup> This distinction is equally pertinent to the analysis of broadband services.<sup>14</sup>

### *a. Mass Market*

For mass market customers, there are two distinct markets: (1) a retail Internet access market in which end-user customers are served by Internet service providers (ISPs), and (2) a wholesale broadband services market in which ISPs take service from incumbent LECs, competitive LECs, and, to a limited extent, cable companies.<sup>15</sup>

Incumbent LECs' retail Internet access customers are generally residential consumers and small businesses that purchase high-speed Internet access over DSL from the incumbent LECs' ISP affiliate. The principal customers for the incumbent LECs' wholesale DSL service are ISPs that rely on incumbent LECs' wholesale DSL offerings to provide high-speed Internet access and other information services to their end-user retail customers. Competitive LECs also purchase wholesale DSL services from incumbent LECs to extend their geographic reach.

Incumbent LECs provide retail Internet access services via their ISP operations. These services are provided primarily to residential customers. While they may provide some DSL-based services to larger businesses, the incumbent LECs view DSL essentially

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<sup>13</sup> See, e.g., Notice at ¶ 20.

<sup>14</sup> *Id.* at ¶ 21; SBC Petition at 21. The copper loop-based DSL functionalities that the incumbent LECs offer to mass market customers, for example, are not feasible substitutes for the fiber-based ATM, frame relay, and other high-speed data services provided to larger business customers.

<sup>15</sup> See Notice at ¶ 24.

as a “mass market” offering and typically offer a consumer-grade, mass market DSL service (usually ADSL) intended for residential and small business customers seeking high-speed Internet access service.<sup>16</sup>

Residential and small business end users do not tend to buy stand-alone DSL transport connections.<sup>17</sup> Instead, these customers typically purchase high-speed Internet access service provided over a DSL platform from an ISP – usually an ISP affiliated with the local incumbent LEC. As with narrowband dial-up Internet access, it is the ISPs that market, sell, and provide retail high-speed Internet access directly to end-user

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<sup>16</sup> For example, the FCC’s latest Section 706 report indicates that 92 percent of all ADSL-equipped lines serve residential and small business customers. *In the Matter of Inquiry Concerning the Deployment of Advanced Telecommunications Capability to All Americans in a Reasonable And Timely Fashion*, Third Report, CC Docket No. 98-146 at ¶ 50 ( Feb. 6, 2002) (*Section 706 Third Report*).

<sup>17</sup> DSL circuits can be, and are, used for telecommuting or work-at-home applications. These applications involve access to corporate intranet networks or the Internet, or both. To the extent that the incumbent LEC offers DSL service directly to end-user customers, it is required to make such services available to competitive carriers at a wholesale discount under section 251(c)(4) of the Act. *See* 47 U.S.C. § 251(c)(4); *In the Matter of Application of Verizon New York Inc., Verizon Long Distance, Verizon Enterprise Solutions, Verizon Global Networks Inc., and Verizon Select Services Inc., for Authorization to Provide In-Region, InterLATA Services in Connecticut*, Memorandum Opinion and Order, 16 FCC Rcd 14147, ¶ 30 (2001) (*Connecticut 271 Order*); *In the Matters of Deployment of Wireline Services Offering Advanced Telecommunications Capability*, Second Report and Order, 14 FCC Rcd 19237 (1999) (*Bulk DSL Order*). The FCC is currently considering a proposal that would allow the incumbent LECs to avoid their obligations to resell DSL services by offering only a bundled Internet access-over-DSL service. *In the Matter of Appropriate Framework for Broadband Access to the Internet over Wireline Facilities*, CC Docket No. 02-033 (Feb. 15, 2002) (*Broadband Proceeding*).

customers.<sup>18</sup> The incumbent LEC provides the wholesale broadband telecommunications services (DSL) to the ISPs – including the incumbent LEC’s own ISP operations.<sup>19</sup>

Competitive LECs that offer broadband services in competition with incumbent LECs have similar, though not identical, arrangements with ISPs. Competitive LECs, such as Covad, provide DSL functionality either as a wholesale input to ISPs, or packaged with information services and sold as high-speed Internet access.<sup>20</sup> Cable companies, such as AT&T Broadband and AOL Time Warner, offer combinations of Internet access (most often provided by an ISP affiliated with the cable company)<sup>21</sup> and cable modem functionality (provided by the cable company) to residential end-user customers.

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<sup>18</sup> As the Commission already has found, such retail duties typically include provisioning consumer premises equipment (CPE) and wiring, providing customer service, and assuming sole responsibility for marketing, ordering, installation, maintenance, repair, billing, and collections vis-à-vis the end user subscriber. *Bulk DSL Order* at ¶ 15. More specifically, the incumbent LECs’ ISPs offer and provide email boxes, web storage space, domain name registration, search engine registration, and 24 hour technical support. See Declaration of Daniel Kelley, attached as Attachment A, at ¶ 9 (Kelley Declaration).

<sup>19</sup> Incumbent LECs do not provide these connections to unaffiliated ISPs voluntarily. Instead, under the FCC’s longstanding *Computer II* and *Computer III* rules, the incumbent LECs are obligated to provide such basic telecommunications connections to ISPs on a nondiscriminatory basis – an obligation the incumbent LECs repeatedly have sought to eliminate. See generally, *In the Matter of Amendment of Section 64.702 of the Commission’s Rules and Regulations*, Docket No. 20828 (*Computer II*); *In the Matters of: Amendment of Sections 64.702 of the Commission’s Rules and Regulations*, CC Docket No. 85-229 (*Computer III*).

<sup>20</sup> Although Covad primarily acts as a wholesaler, selling DSL to an ISP, which then sells the package to customer, it also acts as a retailer, selling DSL packaged with ISP service directly to end users. See [www.covad.com/companyinfo](http://www.covad.com/companyinfo). Covad also is beginning to sell DSL lines directly to small businesses. See Julia Angwin, *Covad Provides a Saga of Shakeout Survival*, Wall St. Journal, February 28, 2002, at B7.

<sup>21</sup> AOL Time Warner makes access to its cable facilities available to a limited number of unaffiliated ISPs, pursuant to merger conditions. *Applications for Consent to the Transfer of Control of Licenses and Section 214 Authorizations by Time Warner Inc. and America Online, Inc., Transferors to AOL Time Warner Inc., Transferee*, Memorandum Opinion and Order, 16 FCC Rcd 6547, CS Docket No. 00-30 (2001) (*AOL Time Warner Merger Order*).

*b. Business Market*

In the past, the Commission has declined to carve the larger business market into separate voice and data markets, or an even narrower “ATM and Frame Relay” product market,<sup>22</sup> although it has looked at exchange and exchange access services provided to large business customers as a distinct market.<sup>23</sup> Ignoring this precedent, SBC claims that packet-switched services – specifically, frame relay, asynchronous transfer mode (ATM), Gigabit Ethernet, Switched Multimegabit Data Service (SMDS), and remote LAN access<sup>24</sup> – constitute a separate advanced services business market.<sup>25</sup> Packet-switched services do not comprise a separate market, however. They are merely alternative technologies for moving large amounts of data on behalf of corporate customers,<sup>26</sup> as are DS-1s and DS-3s.<sup>27</sup> All of these alternatives are part of a larger business services market, which includes virtually all voice and data services provided to business customers.<sup>28</sup>

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<sup>22</sup> *In the Matter of Application of WorldCom, Inc. and MCI Communications Corporation for Transfer of Control of MCI Communications Corporation to WorldCom, Inc.*, Memorandum Opinion and Order, 13 FCC Rcd 18025, CC Docket No. 97- 211, ¶¶ 26-27 (1998).

<sup>23</sup> *In re Applications of Ameritech Corp., Transferor, and SBC Communications Inc., Transferee, for Consent to Transfer Control of Corporations Holding Commission Licenses and Lines Pursuant to Section 214 and 310(d) of the Communications Act*, Memorandum Opinion and Order, 14 FCC Rcd 14712, CC Docket No. 98-141, ¶¶ 89-91 (1999) (*SBC/Ameritech Merger Order*).

<sup>24</sup> Remote LAN access allows workers to telecommute by connecting to their employer’s local area network (LAN). *Notice* at ¶ 22, n. 54.

<sup>25</sup> SBC Petition at 31-34; *Notice* at ¶ 22.

<sup>26</sup> *See* SBC Petition at 31.

<sup>27</sup> Competitive carriers also use DSL to provide high-speed transport to business customers – a fact that SBC ignores in its market analysis. For example, WorldCom offers an Enterprise DSL product to businesses that allows them to access WorldCom’s frame relay and ATM services utilizing DSL, which is less expensive than dedicated circuits and is often used for small branch offices.

<sup>28</sup> *See, e.g., SBC/Ameritech Merger Order* at ¶¶ 89-91.

## 2. The Geographic Market

WorldCom agrees with the FCC's conclusion in the *AOL/Time Warner Merger Order* that "[t]he relevant geographic markets for residential high-speed Internet access services are local."<sup>29</sup> As the Commission has explained, "a consumer's choices are dictated by what is offered in his or her locality."<sup>30</sup> SBC improperly defined the relevant geographic market as SBC's entire service area for both mass market and business services.<sup>31</sup> This flaw undermines the remainder of SBC's market analysis.

### **B. Reclassification Depends on a Finding that Sufficient Competition Exists to Curb Anti-Competitive Behavior in the Market for Broadband Services**

Once the relevant product and geographic markets have been correctly defined, the incumbent LECs have the burden of demonstrating that there is sufficient competition in the downstream markets to prevent them from exercising market power. This showing requires evidence that there are competitors currently providing service, with ample capacity to serve the customers of the incumbent LEC. Key elements of this showing include: (1) market share; (2) ease of market entry and exit; and (3) high elasticity of supply.<sup>32</sup> Other relevant factors include cost structure, the number of competitors currently in the market, and behavior in the marketplace.<sup>33</sup>

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<sup>29</sup> *AOL Time Warner Merger Order* at ¶ 74.

<sup>30</sup> *Id.*

<sup>31</sup> SBC Petition at 34. While WorldCom does not object to the alternative "customer aggregation" analysis discussed in paragraph 27 of the *Notice*, this analysis will not support SBC's claim that the relevant geographic area is SBC's entire region, as competitive LEC and cable modem broadband services are not available in all areas in which SBC offers DSL service.

<sup>32</sup> *In the Matter of Policy and Rules Concerning Rates for Competitive Common Carrier Services and Facilities Authorizations Therefor*, First Report and Order, 85 FCC 2d 1, 20-21 (1980); *AT&T Reclassification Order*, 11 FCC Rcd 3271, ¶ 26 (1995); *LEC Classification Order*, 12 FCC Rcd 15756.

<sup>33</sup> See, e.g., *Notice* at ¶ 27.

As the *Notice* suggests, “intermodal competition can reduce the likelihood of anti-competitive behavior.”<sup>34</sup> Under the right circumstances, intramodal competition can also accomplish the same goal. For intermodal competition to be effective, customers (in this case ISPs) must be able to rely on multiple competitors’ (e.g., cable companies’) service as a substitute for incumbent LEC broadband services. Effective intramodal competition requires that competitors (e.g., competitive LECs) have guaranteed access to the inputs provided by incumbent LECs. Neither of these conditions exists in the broadband market today.

#### 1. Competition in the Wholesale Mass Market

ISPs have three potential choices for broadband services: incumbent LECs, competitive LECs, and cable companies.<sup>35</sup> As explained below, competitive LECs are completely dependent on inputs (unbundled network elements (UNEs) and collocation) provided by incumbent LECs. Thus, intermodal competition from cable companies is the only independent alternative to the incumbent LEC.<sup>36</sup> This intermodal competition currently is insufficient to justify reclassifying SBC or any other incumbent LEC as non-dominant in the provision of broadband services, however.

##### a. *Intermodal competition from cable companies*

Several factors make cable broadband services an inadequate alternative to incumbent LEC DSL. Cable companies have no general legal obligations to provide ISPs

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<sup>34</sup> *Id.* at ¶ 30.

<sup>35</sup> Nascent offerings by wireless and satellite providers are not viable alternatives for reaching the vast majority of residential customers. Kelley Declaration at ¶¶ 19-23, 26.

<sup>36</sup> SBC appears to take this view in its Petition, which mentions DBS and fixed wireless services only in passing, and barely discusses competitive LECs’ DSL offerings.

with nondiscriminatory access to underlying transport services.<sup>37</sup> Nor are cable companies obligated to unbundle their broadband platforms or provide last-mile facilities to competitive LECs in order to allow them to offer broadband services to ISPs. Moreover, cable-based high-speed Internet access is rarely available to small business customers because cable plant generally is restricted to residential neighborhoods.<sup>38</sup> Thus, intermodal competition from cable companies does not provide wholesale customers with an adequate alternative to incumbent LEC broadband services.<sup>39</sup>

Even if cable modem service were available to more ISPs in more areas, the FCC has never relied on the presence of only one additional competitor to declare a carrier non-dominant in a local bottleneck market. For example, AT&T's customers enjoyed "numerous choices" – including three facilities-based national competitors, dozens of regional facilities-based carriers, and hundreds of resellers – when AT&T was declared non-dominant in the interexchange market.<sup>40</sup> Similarly, in the *LEC Classification Order*, the Commission relied upon the presence of large and well-established interexchange carriers to constrain any exercise of market power by the incumbent LECs in the provision of interexchange services.<sup>41</sup> By contrast, the only significant competition an

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<sup>37</sup> Because of merger conditions, AOL Time Warner is required to provide nondiscriminatory access to a limited number of unaffiliated ISPs. *See AOL Time Warner Merger Order*. Cable companies are not subject to obligations similar to those imposed on incumbent LECs in the *Computer II* and *Computer III* proceedings, however.

<sup>38</sup> *See, e.g.,* J.P. Morgan, *Industry Analysis: Telecom Services 2001*, November 2, 2001, at 32 (noting that the broadband business market "is largely expected to belong to DSL").

<sup>39</sup> *See* Kelley Declaration at ¶ 29 (noting that significant numbers of consumers may have access to only one supplier of broadband services).

<sup>40</sup> *AT&T Reclassification Order* at ¶¶ 69-72.

<sup>41</sup> *LEC Classification Order* at ¶¶ 96-97.

incumbent LEC faces in the provision of broadband services comes from the local cable company.<sup>42</sup> Two competitors in this market are simply not enough.

As Daniel Kelley explains in his attached Declaration, even in those cases in which the consumer has available both DSL and cable modem service, competition for the underlying broadband transport is not likely to be robust, and the incumbent LECs retain significant market power.<sup>43</sup> Duopoly is much more likely to lead to collusion than a market with several competitors, and economic models show that when markets have a relatively small number of competitors, performance can suffer.<sup>44</sup> An increase in the number of firms from two to three or more can have a dramatic effect on prices in these models. Economic theory indicates that a duopoly will not be sufficient to ensure competition in the market for broadband services.<sup>45</sup>

There is also empirical evidence from the telecommunications industry that a duopoly does not provide competitive performance. Pricing information collected by the FCC demonstrates that prices in the wireless telecommunications market declined over 50 percent in the five years after PCS carriers entered the market in 1995 and began competing with the existing cellular providers.<sup>46</sup> It is reasonable to infer that the change

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<sup>42</sup> In areas that are not served by cable modem service, DSL remains the only viable choice for broadband services.

<sup>43</sup> See Kelley Declaration at ¶ 45.

<sup>44</sup> The BOCs' own experts have concluded that oligopoly – much less duopoly – facilitates coordinated interaction among competitors. See Testimony of Jerry A. Hausman, on behalf of Pacific Bell (u 1001), Before the Public Utilities Commission of the State of California, *In re Request of MCI Worldcom, Inc. and Sprint Corporation for Approval to Transfer Control of Sprint Corporation's California Operating Subsidiaries to MCI WorldCom, Inc. Application No. 99-12-012* at 12 (May 19, 2000); Kelley Declaration at ¶ .

<sup>45</sup> Kelley Declaration at ¶ 32.

<sup>46</sup> *Id.* at ¶ 46.

from two carriers to as many as six or seven carriers resulted in a dramatic increase in competition in the wireless market.<sup>47</sup>

Market conduct provides another indication that broadband transport providers are capable of exercising market power. Broadband cable providers have packaged together the discrete transport and ISP functions, forcing consumers who want to switch broadband providers (or switch from narrowband to broadband) to change their ISP, which requires them to suffer the inconvenience of changing their email address. This limitation on consumer choice reflects the market power wielded by suppliers of broadband services.<sup>48</sup> Thus, it is clear that the broadband transport market is not competitive. Nor is this situation likely to change in the near future. Deregulating incumbent LEC broadband transport service therefore cannot be justified on the basis of existing – or even potential – robust competition in the market.<sup>49</sup>

*b. Intramodal competition from competitive LECs*

In theory, competitive LECs could provide ISPs with a viable alternative to incumbent LEC-provided broadband transport services. The Communications Act, particularly the 1996 Amendments, is designed to promote intramodal competition for local exchange and exchange access services – including DSL – by allowing competitive LECs to purchase UNEs and collocation space from the incumbents. For example, section 251(c) requires incumbent LECs to provide requesting competitive LECs with DSL-ready local loops and to allow competitive LECs to install DSLAMs, splitters, and other equipment in collocation space contained in incumbent LEC central offices. The

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<sup>47</sup> *Id.*

<sup>48</sup> Although cable modem providers have argued in the past that technical barriers prevent them from providing unbundled broadband services to unaffiliated ISPs, it is becoming apparent that these barriers can be overcome. Kelley Declaration at ¶ 36.

Act also entitles competitive LECs to resell the incumbent LECs' DSL service, and requires incumbent LECs to provide a wholesale discount on certain services they provide to competitors for resale.<sup>50</sup>

Despite the pro-competitive provisions of the Act, however, the vast majority of DSL lines are provided by incumbent LECs. According to the Commission's most recent Section 706 report, as of June 30, 2001, incumbent LECs controlled 93 percent of all ADSL lines, compared to only 7 percent for competitive LECs.<sup>51</sup> Even more disheartening is the fact that competitive LECs lost DSL customers in the first part of 2001, while the incumbent LECs' DSL customer base continued to grow rapidly, allowing incumbent LECs to widen their already enormous advantage.<sup>52</sup> This reality is evidenced by the fact that many of SBC's erstwhile advanced services competitive LEC rivals have been forced to exit the business or reduce the scope of their networks. Of the competitive LECs that remain, the largest – Covad – is partly owned by SBC.

*Sections 251 and 271.* The *Notice* asks whether the presence of wholesale statutory requirements, such as section 251(c), 47 U.S.C. §251(c), and implementing

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<sup>49</sup> See *Id.* at ¶ 41.

<sup>50</sup> See *Connecticut 271 Order*, 16 FCC Rcd 14147; *In the Matter of Application of Verizon Pennsylvania Inc., Verizon Long Distance, Verizon Enterprise Solutions, Verizon Global Networks Inc., and Verizon Select Services Inc. for Authorization To Provide In-Region, InterLATA Services in Pennsylvania*, Memorandum Opinion and Order, 16 FCC Rcd 17419 (2001) (*Pennsylvania 271 Order*); see also *Bulk DSL Order* at ¶ 21 (recognizing that incumbent LECs have general Title II common carriage obligations that apply to all DSL-based telecommunications services they offer).

<sup>51</sup> *Section 706 Third Report* at Table 5. In fact, the Sidak/Crandall declaration states that competitive LEC-provided DSL accounts for only approximately two percent of residential high-speed Internet access lines. SBC Petition, Declaration of Robert W. Crandall and J. Gregory Sidak, CC Docket No. 01-337, app. at 26 (filed Oct. 3, 2001) (Crandall/ Sidak Declaration); see also *DSL Behind in Broadband Race*, Reuters, August 27, 2001 (Telechoice reports that the BOCs control 84 percent of the DSL market); Jim Thompson, *Will ISPs Be Trampled in Dance of DSL Titans?*, ISP-Planet (2000), available at <http://www.clec-planet.com/business/augisp.htm> (last viewed Feb. 28, 2002) (incumbent LECs control 80 percent of the DSL market).

regulations, affect the analysis of the level of competition present in the downstream market for broadband services.<sup>53</sup> If competitors in the downstream market are dependent on inputs provided by the dominant provider in the upstream market, the downstream market cannot be categorized as competitive unless downstream competitors are able to obtain non-discriminatory, cost-based, and timely provisioning of inputs. Competitors have no such assurance today. In fact, pending Commission proceedings, including the *UNE Triennial Review*, *UNE Metrics and Broadband* proceedings have created substantial uncertainty about the continued availability of the UNEs required for competitive DSL service.<sup>54</sup>

Section 251(c) of the Act requires incumbent LECs to provide inputs to competitors in a manner that is reasonable, cost-based, and non-discriminatory. The various pro-competitive provisions of that portion of the Act – including interconnection, unbundling, resale, and collocation requirements – are necessary components to developing an environment conducive to robust “intramodal” competition. Non-dominance requires more than just the promise of legally-sanctioned competition, however. The incumbent LECs must demonstrate that they are actually providing the inputs to competitors in a manner that is reasonable, cost-based and non-discriminatory, rather than seeking at every turn to remove the requirement that they provide UNEs and collocation, or eviscerate the ability of the states and the FCC to monitor and enforce incumbent LEC compliance with the rules that are in place.

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<sup>52</sup> *Section 706 Third Report* at ¶ 51 n.110.

<sup>53</sup> *Notice* at ¶ 32.

<sup>54</sup> *See generally* *UNE Triennial Review*, CC Docket No. 01-338; *UNE Metrics Proceeding*, CC Docket No. 01-318; and *Broadband Proceeding*, CC Docket No. 02-033.

Although the showing is one that must be made by the incumbent LECs, the FCC is also in a position to assist in assuring that incumbent LECs will provide inputs to competitors. This, however, would require that the FCC provide certainty with respect to the availability of the necessary inputs, by: (1) having clear rules; (2) announcing that the rules will remain in place for a sufficient amount of time to allow competitors to make business plans; (3) implementing reporting and audit requirements that make it possible for competitive carriers and the FCC to determine whether incumbents are complying with the rules; and (4) in cases of rule violations, imposing penalties frequently enough and severe enough to have a deterrent effect.<sup>55</sup>

It is also worth noting that the section 271 approval process does not provide adequate assurances that sufficient competition exists to declare a Bell Operating Company (BOC) non-dominant. The test for granting in-region, interLATA authority under section 271 is whether the local telecommunications market in the relevant state is open to competition. While this is the appropriate question for determining whether a BOC should be permitted to offer in-region, interLATA services, it does not, by itself, support a finding that BOCs are not dominant in the provision of DSL. For a finding of non-dominance, either there must be actual entry by multiple competitors, or the threat of entry must be significant enough to discipline the incumbent and limit its ability to set prices. In a business such as broadband services, for which actual entry requires significant up-front investment (even with the theoretical availability of UNEs), the mere threat of entry is unlikely to be sufficient. Instead, a carrier seeking to be classified as non-dominant should be required to demonstrate that existing competitive conditions

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<sup>55</sup> See, e.g., WorldCom Reply Comments, CC Docket No. 01-318 at 14 (filed Feb. 12, 2002).

ensure that the carrier can no longer act to set prices in the relevant product and geographic markets.<sup>56</sup>

As the AT&T experience demonstrates, the mere existence of legal requirements, such as those of sections 251 and 271, is not enough to assure competition. Even if properly enforced, it may take time for the legal requirements to achieve the desired result. For example, divestiture in the early 1980s, pursuant to the terms of the Modified Final Judgment, removed many of the legal and theoretical obstacles to competition in the long distance market. Nonetheless, it took over a decade – and clear indicia of robust competitive forces – for the Commission finally to declare AT&T non-dominant in that market. Such a showing has not yet been made with regard to incumbent LEC DSL.

*c. SBC Petition*

As discussed above, SBC has failed to show that there is sufficient competition (either intramodal or intermodal) to support a finding that SBC is non-dominant in the provision of wholesale broadband services.

*Supply Elasticity.* Competitors that rely on the incumbent's facilities do not contribute significantly to supply elasticity as long as the incumbent has the ability to restrict the availability of competitive services by withholding or delaying access to necessary facilities. As the Commission has already found, SBC has every incentive to discriminate against competing providers of advanced services.<sup>57</sup> Moreover, SBC has, in fact, acted to limit competitive supply of advanced services by restricting the availability of unbundled loops and transport or failing to provision such facilities in a timely

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<sup>56</sup> In the *LEC Classification Order*, for example, the Commission relied on the presence of a large number of interexchange carriers, including AT&T, MCI, Sprint, and LDDS, already providing long distance service. *LEC Classification Order* at ¶¶ 96-97.

<sup>57</sup> *SBC/Ameritech Merger Order* at ¶ 186.

manner. Among the tactics that SBC has employed are: (1) delaying the availability of line sharing; (2) refusing to provide unbundled access to loops served through fiber-fed digital loop carriers (DLCs) that SBC has deployed as part of “Project Pronto;”<sup>58</sup> (3) failing to provide loop make-up or loop qualification information to competitors; and (4) failing to provide non-discriminatory access to line-splitting through a single-order process. As long as SBC (or any other incumbent LEC) retains sufficient market power to restrict supply, it cannot be declared non-dominant.

In addition to the SBC-imposed limits on the availability of unbundled loops and transport, the elasticity of supply in the advanced services market is limited simply because competitors’ network “footprints” are smaller than that of SBC. For example, whereas SBC currently offers ADSL in over 1,250 wire centers in its territory alone (a number likely to increase over time), WorldCom – even with the addition of facilities obtained from the bankrupt Rhythms – covers only slightly over 700 wire centers in the nation as a whole. In light of the disparity in network scope, and the costs and delays that SBC imposes on competitors seeking to collocate in additional wire centers, competitive LECs could not “quickly acquire the capacity to take away enough business from [SBC] to make unilateral price increases by [SBC] unprofitable.”<sup>59</sup> This lack of supply elasticity dictates that SBC’s Petition should be denied.<sup>60</sup>

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<sup>58</sup> WorldCom Comments, CC Docket No. 01-194 at 12 (filed Sept. 10, 2001).

<sup>59</sup> *AT&T Reclassification Order* at ¶ 58.

<sup>60</sup> Although cable companies have facilities capable of providing high-speed Internet access to some residential customers, their ability to serve incumbent LEC customers is limited by two factors: (1) the reach of the cable networks, which – unlike the incumbent LECs’ telephone networks – are not ubiquitous; and (2) the extent to which the cable facilities have been upgraded to allow the provision of cable modem service.

*Behavior in the Marketplace.* In the past, the Commission has viewed declining prices as an indicator that the market at issue was becoming more competitive.<sup>61</sup> Prices for advanced services are not declining. In fact, SBC has actually been *increasing* prices for advanced services.<sup>62</sup> Moreover, customers have alleged that SBC discriminates unreasonably in the provision of advanced services. A group of ISPs has filed a complaint with the California Public Utilities Commission alleging that SBC discriminates in favor of its own ISP operations in the provision of DSL services.<sup>63</sup> Similarly, in the *Computer III* remand proceeding, Earthlink and other ISPs have detailed BOC practices that favor their own ISP affiliates.<sup>64</sup> These actions belie SBC's attempts to be declared non-dominant.

## 2. Competition in the Retail Mass Market

The lack of alternatives in the wholesale market for broadband services is troubling because the incumbent LECs' ISP operations dominate the provision of retail high-speed Internet access provided via DSL connections. SBC recently boasted that 80 percent of its total DSL lines are signed up to its own ISP.<sup>65</sup> Other sources put the incumbent LECs' ISPs' share at between 78 and 87 percent.<sup>66</sup> In sharp contrast, the

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<sup>61</sup> *AT&T Reclassification Order* at ¶¶ 78-80.

<sup>62</sup> Under the ADSL tariff of SBC Advanced Solutions Inc. (SBC-ASI), SBC's affiliated advanced data services provider, the lowest rate available is \$35 per line, which is offered only to customers making a commitment of 750,000 lines for four years. SBCASI Tariff FCC No. 1, Section 6.6. By contrast, in 1999, SWBT offered rates as low as \$30 per line with lower volume requirements than in the current SBCASI tariff. SWBT Tariff FCC No. 73, Transmittal No. 2773, 2<sup>nd</sup> revised pg. 14210 (filed August 12, 1999).

<sup>63</sup> *California ISP Association v. Pacific Bell Telephone Co.*, Case No. 01-07-027, before the California Public Utilities Commission (filed July 25, 2001).

<sup>64</sup> Comments of Earthlink, Inc., CC Docket No. 95-20 (filed April 16, 2001).

<sup>65</sup> Eric Krapf, *The Coming DSL Debacle*, Business Communications Review (June 2001) at 6.

<sup>66</sup> Sue Ashdown, *Can America Compete with Bell Lobbying Armies*, Internet Industry Magazine, Fall 2001, at 74-75.

incumbent LECs have only a minimal share of narrowband ISP customers.<sup>67</sup> This striking discrepancy between the incumbent LECs' narrowband and broadband ISP market share, coupled with the fact that broadband ISP growth is roughly three times that of narrowband ISP growth,<sup>68</sup> raises concerns about the future of the independent ISP industry, and the Internet generally. It would be one thing if end-user customers had a choice of five or ten vertically integrated providers of Internet access via broadband facilities; it is quite another if end-user customers have a choice of only two vertically-integrated suppliers: the incumbent LEC and the cable company.

In fact, retail prices for high-speed Internet access over broadband facilities have increased over the past year. In 2001, for example, ARS Inc. estimates that the average monthly rates for cable Internet access service increased from \$39.40 to \$44.22, while the average monthly rates for DSL-based Internet access service increased from \$47.18 to \$51.67.<sup>69</sup> These price increases indicate that an incumbent LEC/cable provider duopoly is developing for residential Internet access services provided over broadband facilities. This lack of competition in the retail market for high-speed Internet access services reflects a lack of competition in the underlying wholesale market for broadband services. Incumbent LECs cannot be considered non-dominant in the provision of broadband services as long as the incumbent LECs and cable providers dominate the market for high-speed Internet access services.

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<sup>67</sup> Patricia Fusco, *Top U.S. ISPs by Subscriber: Analysis of 2001 Year End Reports*, ISP Planet, February 11, 2002; Patricia Fusco, *Top U.S. ISPs by Subscriber*, ISP Planet, February 11, 2002.

<sup>68</sup> Patricia Fusco, *Top U.S. ISPs by Subscriber*, ISP Planet, November 2, 2001.

<sup>69</sup> Shelley Emling, *Tech Sector Lobbyists Pushing Broadband*, *Atlanta-Journal Constitution*, Feb. 10, 2002, at 1 (citing Mark Kersey, analyst for ARS Inc).

### 3. Competition in the Business Market

As discussed above, Frame Relay and ATM are part of the business services market, and are not a separate market. In addition, although they are non-dominant in the provision of interLATA business services, incumbent LECs are still dominant in the provision of exchange and exchange access services – including the provision of high-speed packet-switched services – to business customers. WorldCom, for example, depends on incumbent LEC special access (typically DS-1s) and DSL loops to offer frame relay, ATM, remote LAN, and Gigabit Ethernet services, as well as other data and voice services, to end user customers.<sup>70</sup>

#### a. SBC Petition

As described above, SBC has failed to define the product market correctly. This makes it difficult to evaluate the remainder of SBC's showing, which depends on the flawed market definition. Nevertheless, it may be useful to comment on certain facts, and address certain arguments.

*Market Share.* Even assuming advanced services is a relevant product market, under the Commission's definition of advanced services, xDSL-based advanced services are "exchange service or exchange access."<sup>71</sup> In computing its market share figures,

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<sup>70</sup> *In the Matter of Performance Measurements and Standards for Interstate Special Access Services*, Notice of Proposed Rulemaking, 16 FCC Rcd 20896, CC Docket No. 01-321 (2001) (*Special Access Provisioning Notice*); see WorldCom Comments, CC Docket No. 01-321 (filed Jan. 22, 2002); WorldCom Reply Comments, CC Docket No. 01-321 (filed Feb. 12, 2002).

<sup>71</sup> *Deployment of Wireline Services Offering Advanced Telecommunications Capability*, Order on Remand, 15 FCC Rcd 385, CC Docket No. 98-147 (1999). In the *SBC/Ameritech Merger* proceeding, the Commission stated that advanced services include intrastate or interstate wireline telecommunications services, such as xDSL, Frame Relay, Cell Relay and VPOP-Dial Access Service (an SBC Frame Relay-based service) that rely on packet switched technology and have the capability of supporting transmissions speeds of at least 56 kilobits per second in both directions. *SBC/Ameritech Merger Order*, Appendix C, at 2.

however, SBC improperly included interLATA frame relay and ATM services revenues, not just exchange and exchange access frame relay and ATM revenues. SBC's market share data is therefore meaningless, since it is not limited to the advanced services market.

Even if the Commission's definition of advanced services were not limited to "exchange or exchange access" services, SBC would still be required to analyze market share for exchange and exchange access services. The Commission has always conducted a separate market power analysis for the exchange and exchange access business service market, of which frame relay and ATM services are a part, because it has found that competitive choices in the exchange and exchange access market differ from those in the long distance market.<sup>72</sup> Moreover, SBC is already treated as non-dominant in the provision of interLATA services. Given that SBC is seeking reclassification as a non-dominant carrier, the analysis in this proceeding must necessarily focus on those services for which SBC is currently treated as dominant – exchange and exchange access services.

*Supply Elasticity.* Even using SBC's improperly narrow definition of the business market, it is clear that supply elasticity in the larger business market is limited. In order to offer services to larger businesses, competing providers require circuits from their packet-switches to customers' locations.<sup>73</sup> But less than five percent of commercial office buildings – where frame relay and ATM customers tend to be located – are served

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<sup>72</sup> *In the Application of NYNEX Corp., Transferor, and Bell Atlantic Corp., Transferee, for Consent to Transfer Control of NYNEX Corp. and its Subsidiaries*, Memorandum Opinion and Order, 12 FCC Rcd 19985, ¶ 51 (1997) (*Bell Atlantic/NYNEX Merger Order*).

<sup>73</sup> See SBC Petition at 29 (packet switching networks require "a local facility between an end-user premises and a port on a packet switch").

by competitive carrier local fiber.<sup>74</sup> And competitive carrier facilities reach none of the residential locations that must be served by a competitive LEC seeking to compete with SBC's R-LAN "work at home" service.<sup>75</sup>

Because their loop and transport facilities are so limited in scope, competitors can offer services throughout a service area (e.g., a metropolitan area) only by using SBC facilities. SBC, however, has worked to restrict competitive supply by withholding or delaying the availability of such facilities. For example, end users commonly connect to frame relay and ATM networks using DS-1 circuits, but SBC does not provide DS-1 unbundled loop/transport combinations (EELs) and often refuses to provide even a stand-alone UNE DS-1 loop, claiming facilities are not available. Similarly, competitors seeking to use xDSL to provide lower-speed frame relay services or a "work at home" service to compete with SBC's R-LAN product face the same xDSL loop provisioning and collocation hurdles discussed above.

Because SBC has severely limited the availability of DS-1 and other high capacity unbundled loops and transport, competitors have been forced to use special access circuits obtained from SBC's interstate access tariffs. While such circuits may provide the necessary functionality, SBC's practice of setting prices for special access circuits far above costs precludes competitors from competing effectively in the advanced services market, as discussed in more detail below. Moreover, as the record in the *Special Access*

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<sup>74</sup> See ALTS, *The State of Local Competition 2001*, at 28 (2001), available at <http://www.alts.org/filings/022001annualreport.pdf> (last visited January 18, 2002). Cable companies do not provide an alternative source of broadband services for business customers, since cable networks generally do not extend into business areas.

<sup>75</sup> SBC Petition at 29, n.73.

*Provisioning* proceeding shows, incumbent LECs can limit the supply of competing services through deficient provisioning of special access circuits.<sup>76</sup>

*Cost Structure.* SBC's competitors in the larger business advanced services market face cost disadvantages that are "so great as to preclude the effective functioning of a competitive market."<sup>77</sup> Whereas SBC can self-provision the facilities needed to provide advanced services at cost, SBC's competitors have largely been precluded from obtaining circuits at cost, whether as EELs, unbundled DS-1 loops, or xDSL-compatible loops. Even when special access facilities provide equivalent functionality, their inflated price makes it impossible for rival carriers to compete effectively. For example, SBC's UNE price for DS-1 interoffice transport in urban areas in Texas, which provides a good estimate of SBC's cost of providing such a circuit for its own frame relay service, is only \$0.35 per mile;<sup>78</sup> competitors, however, are typically forced to purchase the same facility from SBC's interstate special access tariff at a price of \$12 per mile or more.<sup>79</sup>

**C. Additional Safeguards are Needed if Incumbent LECs are to be Declared Non-Dominant in the Provision of Broadband Services**

1. Safeguards Required

As part of its non-dominance showing, an incumbent LEC must demonstrate that adequate safeguards are in place to ensure that it will not be able to leverage its market

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<sup>76</sup> See, e.g., WorldCom Comments, CC Docket No. 01-321 at 6-9 (filed January 22, 2002).

<sup>77</sup> *AT&T Reclassification Order* at 57.

<sup>78</sup> In these comments, WorldCom takes no position on whether the state-approved UNE rate is the correct cost-based price under the Act. See 47 U.S.C. § 252(d)(1). WorldCom merely notes that UNE prices have tended to be lower than the special access rates, which are based on embedded costs.

<sup>79</sup> SWBT charges \$12 per mile for DS-1 interoffice transport under a five-year term plan. SWBT Tariff FCC No. 73, Section 7.3.10(F)(37).

power in the upstream market to affect competition downstream.<sup>80</sup> For example, if the FCC is to rely on competitive LEC-provided DSL offerings to constrain the incumbent LECs' behavior in the market for broadband services, the incumbent LECs must demonstrate that they are in full compliance with all aspects of the FCC's local competition rules. This includes providing (1) interconnection, (2) nondiscriminatory access to unbundled network elements, (3) resale of telecommunications services at wholesale rates, and (4) physical collocation of equipment at the incumbent LEC premises.<sup>81</sup>

Pending Commission proceedings provide the FCC with an opportunity to put in place some of the basic prerequisites for a more competitive market. In the *UNE Triennial Review* proceeding, for example, the Commission should ensure that competitors can obtain the facilities that they require in order to connect their packet-switched networks to customer locations at cost, rather than being forced to use overpriced special access circuits. In particular, the Commission should make clear that the incumbent LECs cannot use claims that facilities are not available to evade their obligation to provide unbundled high capacity loops. And, because a significant percentage of the advanced services business customers are served from central offices where competitive transport is not available, the Commission should eliminate the use

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<sup>80</sup> See Notice at ¶ 13.

<sup>81</sup> In addition, on the ISP side, the incumbent LECs at minimum must abide by all aspects of the FCC's *Computer II* and *Computer III* rules, including the ONA rules. The Commission previously has spelled out precisely how those rules apply in the DSL context. *In the Matters of Deployment of Wireline Services Offering Advanced Telecommunications Capability*, Memorandum Opinion and Order, 13 FCC Rcd 24011, ¶ 37 (1998) (*Section 706 Order*).

restrictions imposed on EELs in the *Supplemental Order Clarification*.<sup>82</sup> Similarly, the Commission must ensure that competitors can obtain unbundled access to residential and business customers served from fiber-fed remote terminals, and should maintain and reinforce the line sharing and line splitting requirements. To be effective, the regulatory commitment to nondiscriminatory access cannot be limited to a specific network architecture. Otherwise, incumbent LECs will be able to subvert the pro-competitive goals of the Commission's regulations by making network changes designed to evade their obligation to provide nondiscriminatory access.

Beyond simply requiring that incumbent LECs provide essential inputs to competitors, the Commission must also ensure that the incumbent LECs provision those facilities in a timely and nondiscriminatory manner. Every competitive LEC order that is delayed results in lost revenue and lost goodwill, and puts the competitive LEC at a disadvantage in the marketplace. Accordingly, the Commission should adopt, in the *UNE Metrics* proceeding, comprehensive federal performance measurements and standards that will serve as a minimum baseline for states to follow, as well as a federal enforcement plan designed to complement remedy plans already adopted by some states.<sup>83</sup>

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<sup>82</sup> *Implementation of the Local Competition Provisions of the Telecommunications Act of 1996*, Supplemental Order Clarification, 15 FCC Rcd 9587, CC Docket No. 96-98 (2000).

<sup>83</sup> See WorldCom Comments, CC Docket No. 01-318 (filed January 22, 2002); WorldCom Reply Comments, CC Docket No. 01-318 (filed Feb. 12, 2002).

While special access services are not an adequate substitute for UNEs, the Commission should nonetheless recognize that competitive providers of packet-switched services, such as ATM and frame relay, to business customers often rely on incumbent LEC special access services. As the record in the *Special Access Provisioning* proceeding shows, however, the incumbent LECs have consistently failed to provision special access services within reasonable time frames. To deter such behavior, and to deter incumbent LEC discrimination in favor of their own retail customers, the Commission should adopt, in the *Special Access Provisioning* proceeding, the Joint Competitive Industry Group's proposed ordering, provisioning, and maintenance and repair metrics, as well as an effective enforcement plan.<sup>84</sup> Key competition issues are also under consideration in the Commission's *Triennial Review* proceeding. Specifically, the availability of UNEs and UNE combinations required to promote competition for DSL services by competitive LECs.

The Commission should also ensure that other prerequisites for a competitive market are in place. For example, the incumbent LECs should not be permitted to restrict unilaterally the availability of DSL services subject to the Section 251(c)(4) resale discount. As the Commission has found, restricting the availability of DSL services at a wholesale discount "severely hinders the ability of other carriers to compete" and would be "clearly contrary to the pro-competitive Congressional intent underlying section 251(c)(4)."<sup>85</sup>

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<sup>84</sup> See WorldCom Comments, CC Docket No. 01-321 (filed January 22, 2002).

<sup>85</sup> *Pennsylvania 271 Order* at ¶ 93; *Connecticut 271 Order* at ¶ 32.

The FCC should also require incumbent LECs to abide by all aspects of its *Computer II* and *Computer III* rules, including its ONA rules. As the FCC has explained, the BOCs are obligated to:

unbundle and make available to competing [ISPs]: (1) the network services that underlie the BOCs' own information services (pursuant to the Computer Inquiry proceedings); and (2) additional network services that the BOCs do not use in their information service offerings (pursuant to ONA). We note that BOCs offering information services to end users of their advanced service offerings, such as xDSL, are under a continuing obligation to offer competing ISPs nondiscriminatory access to the telecommunications services utilized by the BOC information services.<sup>86</sup>

## 2. SBC Petition

SBC's discussion of safeguards is completely inadequate. SBC simply asserts that it does not have the ability to leverage its power in the market for exchange or exchange access services – through discrimination, cross-subsidization or a price squeeze – in a way that affects competition for advanced services. In making this assertion, SBC makes the flawed claim that its competitors do not rely on SBC facilities. SBC's contention that its “mass market” competitors “have completely separate networks”<sup>87</sup> fails to acknowledge that the data competitive LECs – SBC's primary competitors in the wholesale market – are dependent on UNEs and collocation obtained from SBC. And SBC's assertion that its competitors in the larger business market “often” do not rely on SBC's local facilities is simply incorrect; as the discussion above shows, the vast majority of commercial office buildings can be reached only over SBC facilities.

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<sup>86</sup> *Section 706 Order* at ¶ 37; see also Robert Cannon, *Where Internet Service Providers and Telephone Companies Compete: A Guide to the Computer Inquiries, Enhanced Service Providers and Information Service Providers*, 9 CommLaw Conspectus 49 (2001).

<sup>87</sup> SBC Petition at 73.

SBC has provided no evidence that existing safeguards are sufficient to preclude SBC from leveraging its control over essential inputs into market power in the advanced services market. Although the Crandall/Sidak Declaration acknowledges that TELRIC pricing of inputs helps to guard against a price squeeze,<sup>88</sup> SBC does not even attempt to show that it actually provides TELRIC-priced inputs to its competitors. Nor could SBC make such a showing. As discussed above, SBC refuses to provide its advanced services competitors with unbundled loop-transport combinations (EELs) and, in most instances, refuses to permit its competitors to convert special access circuits to EELs, thus forcing competitors to use special access circuits priced far in excess of TELRIC.

SBC also fails to demonstrate that existing safeguards are sufficient to ensure that SBC provisions UNEs and other essential inputs to advanced services competitors in a timely and nondiscriminatory manner. Certainly, SBC's behavior since the SBC/Ameritech merger confirms that SBC has the incentive and ability to discriminate against its competitors. SBC has, for example, been fined for violating the Commission's rule requiring incumbent LECs promptly to post notices of premises that have run out of collocation space;<sup>89</sup> has been found apparently liable for failing to provide unbundled elements in accordance with the *SBC/Ameritech Merger Order*;<sup>90</sup> and has been found apparently liable for failing to provide information that the Commission required in order to investigate SBC's "possible discrimination in the provision and maintenance of DSL –

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<sup>88</sup> Crandall/Sidak Declaration at ¶ 94.

<sup>89</sup> *SBC Communications, Inc., Apparent Liability for Forfeiture*, Order of Forfeiture, 16 FCC Rcd 10963 (2001).

<sup>90</sup> *SBC Communications, Inc., Apparent Liability for Forfeiture*, Notice of Apparent Liability for Forfeiture, File No. EB-01-IB-0030 (Jan. 18, 2002).

a technology vital to competition in the ISP marketplace.”<sup>91</sup> Furthermore, the Enforcement Bureau has found that SBC willfully and repeatedly failed to report accurate performance data in accordance with the SBC/Ameritech merger conditions.<sup>92</sup>

SBC clearly has failed to demonstrate that adequate safeguards are in place to ensure competition in the market for broadband services.

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<sup>91</sup> *SBC Communications, Inc., Apparent Liability for Forfeiture*, Notice of Apparent Liability for Forfeiture, 16 FCC Rcd 19370 (2001).

<sup>92</sup> *SBC Communications, Inc., Apparent Liability for Forfeiture*, Order of Forfeiture, 16 FCC Rcd 5535 (2001).

### III. CONCLUSION

The Commission should require incumbent LECs seeking to be treated as non-dominant to demonstrate that, for the relevant product and geographic markets, sufficient competition exists to prevent anti-competitive behavior in the downstream market, and that there are safeguards in place to ensure that incumbent LECs cannot leverage their market power in the upstream market to affect competition in the downstream market. SBC has failed to make such a showing. Its Petition should therefore be denied.

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Dated: March 1, 2002

## ATTACHMENT A

### Declaration of Daniel Kelley

Before the  
Federal Communications Commission  
Washington, D.C. 20554

In the Matter of )  
 )  
Review of Regulatory Requirements for ) CC Docket No. 01-337  
Incumbent LEC Broadband )  
Telecommunications Services )

**Declaration of Daniel Kelley**

**I. ASSIGNMENT**

1. I have been asked by WorldCom, Inc. (“WorldCom”) to comment on market definition and market power issues raised in the Federal Communications Commission’s (“FCC’s or Commission’s) Broadband Non-Dominance Rulemaking.<sup>1</sup> I conclude that Incumbent Local Exchange Carriers (“ILECs”) have market power in relevant broadband markets. Elimination of regulatory safeguards will endanger competition in markets where competitors depend on broadband inputs supplied by the ILECs.

**II. QUALIFICATIONS**

2. My current position is Senior Vice President of HAI Consulting, Inc. (formerly Hatfield Associates, Inc.). My professional experience began in 1972 at the Antitrust Division of the U.S. Department of Justice where I analyzed mergers, acquisitions and business practices in a number of industries, including

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<sup>1</sup> In the Matter of Review of Regulatory Requirements for Incumbent LEC Broadband Telecommunications Services, Notice of Proposed Rulemaking, CC Docket No. 01-337, released December 20, 2001 (“NPRM”).

telecommunications. While at the Department of Justice, I was a member of the U.S. v. AT&T economics staff.

3. In 1979, I moved to the FCC where I held several positions, including Special Assistant to the Chairman, Senior Economist in the Policy and Rules Division of the Common Carrier Bureau and Senior Economist in the Office of Plans and Policy. While at the FCC I was involved in both the Second Computer Inquiry and Competitive Carrier rulemakings. These two rulemakings considered the proper regulation of dominant telecommunications carriers. After leaving the FCC, I was a Project Manager and Senior Economist at ICF, Incorporated, a public policy consulting firm. From September 1984 through July of 1990, I was employed by MCI Communications Corporation as its Director of Regulatory Policy.

4. I conduct economic and policy studies on a wide variety of telecommunications issues, including local competition, dominant firm regulation, and the cost of local service. I have participated in most of the Commission's significant common carrier proceedings over the past 25 years, including the The Third Computer Inquiry, Price Cap proceedings and proceedings involving the implementation of the Telecommunications Act of 1996 ("1996 Act" or "the Act"). My participation in these proceedings has generally been on behalf of new facilities-based entrants or Information Service Providers (ISPs) that compete with the ILECs or depend on ILECs for supply of critical inputs. I have prepared economic studies of the wireless industry and have analyzed several telecommunications mergers. I have advised foreign government officials on telecommunications policy matters and have taught seminars in regulatory economics in a number of countries.

5. I have testified on telecommunications issues before the Arizona, California, Colorado, Connecticut, Florida, Georgia, Hawaii, Maryland, Massachusetts, Michigan, Oregon, Pennsylvania, Utah and Washington Commissions, as well as the FCC and the Federal-State Joint Board investigating universal service reform.

6. I received a Bachelor of Arts degree in Economics from the University of Colorado in 1969, a Master of Arts degree in Economics from the University of Oregon in 1971, and a Ph.D. in Economics from the University of Oregon in 1976. My resume is attached.

### **III. INTRODUCTION**

7. There is very little broadband service competition today. DSL services provided over the ILEC network are often the only broadband alternative available to residential and small business consumers. In those areas where cable modem services are also available, the result is a duopoly. In those extremely limited cases where both fixed wireless Internet service and cable modem service are available, consumers are limited to only three choices. As I discuss below, satellite services are an inferior option for most consumers.

### **IV. ISPS, THE INTERNET AND BROADBAND DATA SERVICES**

8. In this section of the Declaration, I briefly describe the role played by both ISPs and competitive local exchange carriers ("CLECs"). The ISPs have played a critical role in the development of the Internet and will continue to do so if markets are not closed. Independent ISPs such as AOL, Earthlink and literally hundreds of smaller firms facilitated the mass deployment of Internet services by giving consumers access to the Internet backbone over narrowband dial-up connections. ISPs provide the applications,

content, and tailored services that ride on the broadband service and provide competition to ILEC and cable operator-affiliated ISP offerings.

9. The ISP function includes arranging for consumer access to the Internet through local links. The ISP bills consumers for the connection and provides customer support functions. The ISP may also provide content and services such as customized web pages, web hosting, e-mail server provision, e-mail roaming, IP addresses (static or dynamic), access to domain name search and registration, browser and search engines, antispam software tools, Instant Messaging, streaming audio and video feeds, public radio station broadcasts, community bulletin boards and other local content, and technical seminars and workshops. These critical functions are now provided to consumers in a highly competitive market. Although the industry is experiencing consolidation, there still are thousands of ISPs providing consumers with a wide variety of choices.

10. It is important to note that the transport and ISP functions are technically separate. In addition, as noted earlier, the ILECs typically provide ISP functions and DSL services through separate organizations.

11. The entrepreneurial vision and innovations that created the Internet and the world-wide web (“WWW”) succeeded in large part because the monopoly services on which the Internet applications ride were made transparent by regulation. The ILECs were not allowed to limit who provided Internet services or how they were provided. As a result, tremendous innovation and investment took place at the edge of the network free from both government and monopoly control.

12. Although they have obviously encountered severe financial difficulties, the CLECs actually pioneered the commercialization of DSL services. If ILEC markets are

opened by proper enforcement of the Act, opportunities for future innovation on the part of carriers like these will likely be available.

## V. THE WHOLESALE BROADBAND SERVICE MARKET

13. The NPRM asks for a discussion of relevant markets.<sup>2</sup> Market definition exercises are useful only to the extent that they help shed light on the question of how regulatory changes, mergers or other business practices affect consumer welfare. Consumers want access to the Internet. But they also want ancillary services such as web hosting, e-mail hosting, specialized content and customer service. The fact that the underlying transport and ISP functions are bundled does not mean that they are in the same market. For example, carriers are bundling local service, vertical services, and long distance services, even though in the past the Commission has found that these services are in separate markets. For our purposes, it is useful then to define a separate ISP market.

14. Although dial-up Internet access and DSL-based Internet access utilize fundamentally the same local network facilities and infrastructure, and allow consumers to reach a broad array of content and services from the Internet, consumers do not consider narrowband to be an adequate substitute for broadband. Generally speaking, broadband services typically offer (1) always-on connections and (2) greater bandwidth capabilities, leading to (among other things) greater convenience and ease of use, higher download speeds, and a wider potential array of content. These factors tend to have a significant impact on the consumer's use of the Internet. In addition, the prices for DSL-based Internet access are some 2.5 times greater than those for narrowband. In short,

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<sup>2</sup> NPRM, paras. 17-20.

while the underlying network differences may in fact be negligible, broadband and narrowband access constitute two separate markets from the consumer's perspective.

15. The geographic dimension of the market is quite significant. The Commission notes that it has previously considered the broadband market as local. Consumers require service at their fixed locations. The availability of wireless on the other side of the hill or cable in the adjacent community is not a substitute for DSL at their residence. Therefore, the geographic scope of broadband service markets can be quite narrow.

16. DSL is currently offered in a radius around central offices equipped with DSL equipment and generally on all-copper loops only. DSL availability on digital loop carrier ("DLC")-served loops is limited. SBC's Project Pronto, which was advertised as a way to provide DSL over DLC, has been scaled back.<sup>3</sup> Cable modem services are typically offered on a system-by-system basis, and even then often on only certain parts of a system. Whether a particular system provides the service depends on whether the operator has invested the substantial amounts necessary to provide cable modem service. This means that in any given geographic locality, the options available to any given household will depend on the exact location of the household. It would typically be incorrect to define an entire region as a market and include both cable and DSL providers in it because many consumers would not have both technologies available. Some consumers might not have either.

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<sup>3</sup> See, Jim Crawford, "ALTS Criticizes SBC for 'Slowing Pronto' In Illinois," March 28, 2002, Association for Local Telecommunications Services ("ALTS"), [www.alts.org/NewsPress/032801\\_TaylorSBC.pdf](http://www.alts.org/NewsPress/032801_TaylorSBC.pdf), viewed February 28, 2002, criticizing a statement by SBC Chairman Ed Whitacre that he would cancel further deployment of

## VI. BROADBAND SERVICE COMPETITORS

17. The next step is to evaluate the various technologies used to provide broadband services. Several technology platforms are being used to provide broadband service. Broadband service facilities are currently supplied by ILECs using DSL, cable companies using cable modems on upgraded cable plant, fixed wireless companies using MMDS/ITFS and ISM spectrum, as well as satellite providers. Each of these platforms is arguably in the relevant broadband service market.

18. Other technology platforms should not be included in the market. Mobile wireless companies do not currently supply broadband access and will not do so in the next few years. Firms providing fiber to the home (“FTTH”) service, which are essentially cable overbuilders, have an insignificant market presence today. Gigabit wireless technology using ‘pencil-beam’ waves in the upper millimeter-wave bands (frequency spectrum above 70 GHz) shows promise,<sup>4</sup> but widespread commercial deployment awaits Commission action on spectrum licensing. Moreover, the technology will likely be limited to commercial users.

19. Not all of the technology platforms included on the supply-side of the market are equal. Each technology has different quality and speed characteristics and each faces different economic challenges. Both satellite and fixed wireless broadband services have severe limitations.

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Project Pronto in Illinois because of a decision by the Illinois Commerce Commission to allow competitors to lease parts of SBC’s advanced technology.

<sup>4</sup> See, Request for Amendment of the Commission’s Rules for the Point-to-Point Use of the 71.0-76.0 GHz and 81.0-86.0 GHz bands, Petition of Loea Communications, RM-10288.

20. Satellite service is available to consumers with generally southern exposure; i.e., no hills, trees, buildings, etc. in line of sight to the satellite. While there are currently two choices of satellite provider in many parts of the country, the service is significantly more expensive than either cable or DSL. Typical monthly rates are \$75.00 for a service that provides download at 400-500kbps and upload at 128kbps. This service is thus priced higher and provides lower quality than the other broadband services. A \$40.00 per month service is also available, but that requires upload through a separate dial-up telephone line at whatever modem speed is available over a switched telephone network connection.<sup>5</sup>

21. Costs of satellite installation are about \$500-\$525 for equipment and \$200 for installation. The equipment, once purchased, belongs to the customer, but it can only be used for the satellite service for which it was purchased. In other words, the equipment is not interchangeable between satellite service providers. If the customer no longer wants the service, or wants to switch providers, he or she is stuck with the equipment. Professional installation is required, and a three-week wait for installation is typical. The high cost and delay associated with installation constitutes a significant barrier for most consumers.

22. These problems are reflected in the results of a recent survey conducted by PC World Magazine. PC World Reports that “the runt of the broadband litter has always been satellite. Characterized by difficult, expensive installations, notoriously poor service, and suspect performance, the service meant for anyone who can't get cable or

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<sup>5</sup> See PC World, “Ditch Your Dial-Up,” <http://www.pcworld.com/features/article/0,aid,73865,pg,3,00.asp>, viewed February 27, 2002 for a discussion of broadband service features and prices.

DSL has ceased to be a serious option.”<sup>6</sup> In conclusion, it appears that satellite broadband is at best an alternative suited mainly for customers in rural areas or other areas where no other broadband alternative is available.<sup>7</sup>

23. While fixed wireless shows promise, it too faces significant limitations. Fixed broadband wireless systems, operating primarily in MMDS/ITFS and ISM spectrum, offer Internet access and other broadband data services to small to medium size businesses and residential customers in selected markets. These systems do not have the capacity to serve large fractions of the broadband demand in medium to large markets. Furthermore, current equipment used in these frequency bands requires line-of-sight paths between the system hub location and subscriber locations, further restricting the market they can serve. The implication is that the maximum penetration of fixed wireless services in larger markets will be limited to five to ten percent. This upper bound on fixed wireless penetration obviously limits the competitive significance of the service. For these reasons, operators of such systems, including WorldCom, view their service as being complementary to DSL service instead of being in direct competition.

## **VII. THE EXTENT OF CURRENT BROADBAND SERVICE COMPETITION**

24. The current level of competition, at least as measured by the presence of various competitors, is reflected in two recent government reports. The Commission’s Third Report on the Deployment of Advanced Telecommunications Services shows that in almost half of the zip codes where broadband was available, there were only one or

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<sup>6</sup> *Id.*

<sup>7</sup> Also see Jerry A. Hausman, J. Gregory Sidak, and Hal J. Singer, “Residential Demand for Broadband Telecommunications and Consumer Access to Unaffiliated Internet Content Providers,” *Yale Journal on Regulation*, Winter 2001, pp. 129-173. (“Hausman, Sidak and Singer”), at p. 153.

two suppliers.<sup>8</sup> Not all addresses within a zip code are actually eligible for service. A zip code is counted if a service provider serves even one subscriber within the code.

Therefore, even in the areas where there are more than two broadband providers, the number of consumers with access to more than two suppliers might actually be quite small. Moreover, suppliers reporting a presence in a zip code might well be dependent on ILEC facilities.

25. A recent survey conducted by the Department of Commerce's Census Bureau sheds more light on this issue. Of the survey respondents who use broadband Internet access, 97.5 percent reported using cable modem or DSL service.<sup>9</sup> The HHI implied by these data is 5,255, putting this market in the Justice Department's most highly concentrated category.<sup>10</sup> These survey results show the bias in the Commission's methodology.<sup>11</sup> The reasons for the low share gained by other broadband services are discussed above.

26. As discussed above, broadband satellite is not a good substitute for most consumers and fixed wireless rollout is questionable. In practice then, most consumers who have broadband service are using DSL or cable modems. Assuming that DSL and

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<sup>8</sup> See In the Matter of Inquiry Concerning the Deployment of Advanced Telecommunications Capability to All Americans in a Reasonable and Timely Fashion, and Possible Steps to Accelerate this Deployment Pursuant to Section 706 of the Telecommunications Act of 1996, CC Docket No. 98-146, Third Report, released February 6, 2002. Table 9. ("Third Report")

<sup>9</sup> Derived from Figure 4-1, p. 39 of U.S. Department of Commerce, "A Nation Online: How Americans Are Expanding Their Use of the Internet" (2002).

<sup>10</sup> Horizontal Merger Guidelines," U.S. Department of Justice and the Federal Trade Commission Horizontal Merger Guidelines (1992), issued April 2, 1992, revised April 8, 1997.

<sup>11</sup> Hausman, Sidak, and Singer agree that this market is highly concentrated. See Hausman, Sidak, and Singer p. 154.

cable modems are the relevant alternatives, there are four possible states of the world: 1) no broadband competitor, 2) DSL only, 3) cable only, 4) both cable and DSL.

27. The Denver metropolitan area provides an interesting case study. The cable provider for much of the Denver metropolitan area is AT&T Broadband. However, at present, AT&T Broadband provides only limited cable modem service within the Denver city limits. In many of the newer Denver suburbs, DSL service is not available, or is only available at lower service quality levels, due to current limitations on DSL loop length. Sprint, the fixed wireless provider is not marketing service to new customers at this time. Even if Sprint were actively seeking new subscribers, distance and line-of-sight limitations would severely restrict the market they could serve.

28. This pattern may be duplicated in other major markets. The core urban areas are likely to be served by cable plant originally constructed decades ago. Business districts may not be served by cable at all. The cost of upgrading this older plant to provide cable modem services is high.<sup>12</sup> In the newer suburbs the plant is more modern and can be upgraded to provide cable modem services at a much lower cost. On the telephone side, the reduced cost of transport has led telephone companies to deploy DLC instead of adding new wire centers. As suburban areas have developed and grown, wire centers have not been added in the same proportion as lines, and ILECs typically extend service to these areas using DLC. These DLC systems generally require the addition of ancillary equipment or complex upgrades to allow them to accommodate ADSL. Either of these approaches is difficult and expensive, leading to difficulty in provisioning DSL.

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<sup>12</sup> HAI Consulting, Inc., "Enduring Local Bottleneck II." April 30, 1997.

29. The implication is that significant numbers of consumers may have only one supplier and in many cases, that supplier will be an ILEC. Even in those cases where the consumer has both DSL and cable modem service available, the underlying broadband service competition is not likely to be robust. That is, the carriers may have significant market power. The inadequacy of a facilities duopoly for ensuring consumer choice can be demonstrated in several ways. As a theoretical matter, duopoly is much more likely to lead to monopoly behavior. Game theory models show that when markets are occupied by a relatively small number of competitors, performance can suffer. In many models a competitive result requires several carriers to be in the market. The price cost margin in the standard Cournot model of oligopoly interaction is inversely related to the number of competitors.<sup>13</sup> In other words, a duopoly in the broadband service market is not likely to perform competitively.

30. Game theory models typically assume that the competitors recognize their interdependence, but do not explicitly coordinate their behavior. This means that the resulting prices, while higher than the competitive level, may fall short of the monopoly profit maximizing level. By learning how to coordinate their actions, oligopoly firms may be able to raise prices above the Cournot level.

31. A number of factors facilitate the necessary coordination. The basic requirement, of course, is small numbers. In addition, if prices are visible to all the competitors, then cheating on any tacit agreement will be detected and therefore less likely to occur. Similarly, if the firms compete with one another in multiple markets, then they will be less likely to compete aggressively in any one of them due to the risk of

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<sup>13</sup> See, e.g., W. Kip Viscusi, John M. Vernon and Joseph E. Harrington, Jr. Economics

retaliation.<sup>14</sup> Each of these facilitating factors is present in the broadband service business.

32. Among the harshest critics of oligopoly performance are the ILECs. They have been complaining about performance in the long distance market for years, sponsoring studies allegedly showing that this market performs poorly because it is concentrated.<sup>15</sup> I disagree with their empirical assessment. The long distance market has dozens of competitors in a nation-wide market. Entry barriers are relatively low and prices have fallen substantially. However, the economic theory underlying these ILEC claims is correct. As Professor Jerry Hausman concludes, oligopoly facilitates coordinated interaction among competitors.<sup>16</sup> Given the high barriers to entry and the small number of competitors in broadband markets, unregulated oligopoly, and particularly duopoly performance by the ILECs and cable companies, can be expected to be poor.

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of Regulation and Antitrust, Third ed., 2000, p. 108.

<sup>14</sup> See, e.g., F. M. Scherer and David Ross, Industrial Market Structure and Economic Performance, 3<sup>rd</sup> ed., 1990, p. 315

<sup>15</sup> See Testimony of Jerry A. Hausman, on behalf of Pacific Bell (u 1001) May 19, 2000, Before the Public Utilities Commission of the State of California, in re request of MCI Worldcom, Inc. and Sprint Corporation for Approval to Transfer Control of Sprint Corporation's California Operating Subsidiaries to MCI WorldCom, Inc. Application No. 99-12-012, p. 12. ("Hausman California Testimony"). See also, Application by New York Telephone Company (d/b/a Bell Atlantic – New York), Bell Atlantic Communications, Inc., NYNEX Long Distance Company, and Bell Atlantic Global Networks, Inc., for Authorization to Provide In-Region, InterLATA Services in New York, Declaration of Paul W. MacAvoy in Support of Bell Atlantic's Petition to Provide In-Region, InterLATA Telecommunications Services, CC Docket 99-295, September 1999.

<sup>16</sup> See Hausman California Testimony, p. 12. Hausman points out that "the industrial organization literature has explored how, with only two firms, detection of cheating from an agreement is simplified." Citing, A. Jacquemin & M.E. Slade, "Cartels, Collusion, and Horizontal Merger," in R. Schmalensee & R. Willig, Handbook of Industrial Organization Chapter 7 (1989).

33. There is empirical evidence from another telecommunications market that a duopoly does not provide competitive performance. Although incumbent cellular providers, of which there were originally a maximum of two in each service market, argued that prices were competitive prior to entry by PCS carriers, pricing information collected by the FCC demonstrates that prices declined over 50 percent in the five years since PCS entry began in 1995.<sup>17</sup> It is reasonable to infer that the increase in competition when the market increased from two to as many as six or seven carriers was dramatic.

34. There would be less concern about a duopoly of facilities-based providers of broadband services if competitors wishing to offer a bundled local/long distance service could rely on nondiscriminatory access to unbundled network elements to provide service to their customers. Unfortunately this is not the case. The ILECs are seeking an end to the requirement that they provide the UNEs that would enable firms to provide ISPs with alternate broadband services. The competitive broadband providers have obviously not fared well in the market – a fact they have attributed to lack of cooperation from the ILECs.<sup>18</sup>

35. The fact that cable modem penetration is higher than DSL penetration does not mean that ILECs lack power in broadband service markets. Obviously, where cable is not provided, the ILEC is a monopolist. Where both cable and DSL are provided, both firms share in the market power.

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<sup>17</sup> Before the FCC, In the Matter of Annual Report and Analysis of Competitive Market Conditions With Respect to Commercial Mobile Service, FCC Document 00-289, Fifth Report and Order, Release August 18, 2000.

<sup>18</sup> See Shawn Young, “Covad, One of Last DSL Competitors, Blames Troubles on Bell Tactics,” The Wall Street Journal, August 9, 2001, p. B1.

36. Market conduct provides another indication that broadband service providers are capable of exercising market power. Broadband cable providers have bundled the transport and ISP functions forcing consumers who want to switch to broadband from narrowband to change their ISP (and e-mail address) or pay an additional fee to their old ISP. Although cable modem providers have in the past argued that technical barriers are responsible for this bundling, it is becoming apparent that this is not true, to the extent technical barriers exist, they can be overcome. In light of this, it appears that this limitation on consumer choice reflects the fact that suppliers of cable Internet services have market power. Another indicator of the market power held by some cable Internet providers is evident in AT&T's practice of blocking access to certain streaming video sites.<sup>19</sup> These sites are evidently viewed as a threat to AT&T's video programming business. In a competitive broadband marketplace AT&T would not be able to block access to streaming video, because it would lead to customer dissent and lost business. Finally, broadband service providers recently increased their rates, an uncommon step for competitive firms in high-tech markets.<sup>20</sup>

37. In the past, the Commission has justifiably required much greater showings of competition prior to removing safeguards. AT&T was subject to continuing regulation even after dozens of firms had entered the long distance market and achieved significant

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<sup>19</sup> See David Lieberman, "Media Giants' Net Change, Major Companies Establish Strong Foothold On-Line," USA Today, December 14, 1999. (Reporting comments by AT&T Broadband & Internet Services CEO Daniel Somers at the PaineWebber Annual Media Conference in Arlington, VA saying AT&T Broadband will not allow others to freely transmit movies and TV shows via the company's high-speed Internet connections.)

<sup>20</sup> See Third Report, (FCC 02-33), Released: February 6, 2002, para. 106.

shares. Not until 1995, more than ten years after divestiture, was AT&T classified as a non-dominant carrier.<sup>21</sup>

38. In conclusion, broadband service markets are obviously not competitive. This situation is unlikely to change in the near term. Small numbers are the result of underlying market economics. Large economies of scale in wireline and cable networks and significant costs of expansion mean that the numbers of competitors will be limited. Significant numbers of consumers may be stuck with a monopoly provider, and many of those a monopoly DSL provider, for years to come. It is apparent that deregulating ILEC broadband services cannot be justified on the basis of robust competition, or even the near term prospect of such competition.

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<sup>21</sup> In the Matter of Motion of AT&T Corp. to be Reclassified as a Non-Dominant Carrier, FCC 95-427, Order, 11 FCC Rcd 3271 (1995).

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Conducting economic and applied policy analysis of domestic and international telecommunications issues. Recent assignments include investigation of broadband competition and interconnection, antitrust analysis of local telephone company mergers, and costing and interconnection studies in various countries. Other assignments have included analysis of competitive conditions in wireless markets, the economics of cable television regulation, analysis of the prospects for local telephone competition, and measuring the economic cost of local service.

Director of Regulatory Policy, MCI Communications Corporation, 1984-1990.

Responsible for developing and implementing MCI's public policy positions on issues such as dominant carrier regulation, Open Network Architecture, accounting separations and Bell Operating Company line of business restrictions. Also managed an interdisciplinary group of economists, engineers and lawyers engaged in analyzing AT&T and local telephone company tariffs.

Senior Economist and Project Manager, ICF Incorporated, 1982-1984.

Telecommunications and antitrust projects included: forecasting long distance telephone rates; analysis of the competitive effects of AT&T's long distance rate structures; a study of optimal firm size for cellular radio markets; analysis of the FCC's Financial Interest and Syndication Rules, and competitive analysis of mergers and acquisitions in a variety of industries.

Senior Economist, Federal Communications Commission, 1979-1982.

Served as Special Assistant to the Chairman during 1980-1981. Advised the Chairman on proposed regulatory changes in the broadcasting, cable television and telephone industries; analyzed legislation and drafted congressional testimony. Coordinated Bureau and Office efforts on major common carrier matters such as the Second Computer Inquiry and the Competitive Carrier Rulemaking. Also held Senior Economist positions in the Office of Plans and Policy and the Common Carrier Bureau.

Staff Economist, U.S. Department of Justice, 1972-1979.

Analyzed proposals for restructuring the Bell System as a member of the economic staff of U.S. v. AT&T; investigated the competitive effects of mergers and business practices in a wide variety of industries.

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## PAPERS AND COMPLETED RESEARCH

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## Certificate of Service

I, Denise Owusu, hereby certify that on this March 1, 2001 caused a copy of the attached Comments of WorldCom, Inc. to be served by hand delivery to the following:

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