investment.[119] We find this negative impact on deployment and innovation particularly troubling in view of Congress' clear and express policy goal of ensuring broadband deployment, and its directive that we remove barriers to that deployment, if possible, consistent with our other obligations under the Act. It is precisely this negative impact on broadband infrastructure that led the Commission to eliminate other broadband-related regulation over the past two years.[120] These factors, when weighed against the benefits of continuing these regulations, render a different policy result than the judgment reached at the time the *Computer Inquiry* rules were adopted.[121]

45. As outlined in the *Wireline Broadband NPRM*, we seek to adopt a comprehensive policy that ensures, consistent with the Act in general and section 706 specifically, that broadband Internet access services are available to all Americans and that undue regulation does not constrain incentives to invest in and deploy the infrastructure needed to deliver broadband Internet access services. As part of this policy, we believe that we should regulate like services in a similar manner so that all potential investors in broadband network platforms, and not just a particular group of investors, are able to make market-based, rather than regulatory-driven, investment and deployment decisions.

46. Finally, we note that our decision in this Order is consistent with the decision issued by the Ninth Circuit Court of Appeals in 1994. As discussed above,[122] in that decision the Ninth Circuit vacated part of the Commission's *Computer III Order on Remand* concerning implementation of the ONA rules.[123] According to the court, the Commission had failed to explain how its "diluted version of ONA," set forth in the *Order on Remand*, would prevent BOCs from "exploit[ing] their monopoly control over the local networks to frustrate regulators' attempts to prevent anticompetitive behavior."[124] For the reasons discussed herein, we determine that the competitive pressures and technological changes that have arisen since 1990 have reduced the BOCs' incentive and ability to discriminate against unaffiliated ISPs in their provision of broadband Internet access service to the point that structural separation for BOC broadband

[119] *See infra* paras. 65-73; *see also* Catena Comments at 5-6; SureWest Comments at 14; Verizon Nov. 25, 2002 *Ex Parte* Letter at 4; Letter from W. Scott Randolph, Director-Federal Affairs, Verizon, to Marlene H. Dortch, Secretary, FCC, CC Docket No. 02-33, at 1-6 (filed June 26, 2003) (Verizon June 26, 2003 *Ex Parte* Letter); Letter from Lawrence E. Sarjeant, Vice President-Law and General Counsel, USTA, to Marlene H. Dortch, Secretary, FCC, CC Docket No. 02-33, Attach. at 2-3 (filed Apr. 2, 2003) (USTA Apr. 2, 2003 *Ex Parte* Letter).

[120] *See Triennial Review Order*, 18 FCC Rcd at 17141-54, paras. 272-97 (stating that refraining from imposing unbundling obligations on incumbent LEC next-generation networks will stimulate facilities-based deployment, particularly in light of a competitive landscape for broadband infrastructure). In reviewing the Commission's impairment analysis for UNEs under section 251 of the Act, the *USTA II* decision endorsed the importance of considering facilities-based competition and removing barriers to infrastructure investment. *USTA II*, 359 F.3d at 576, 579; *see Multiple Dwelling Unit Reconsideration Order*, 19 FCC Rcd at 15856, para. 1 (finding that fiber loops deployed at least to the minimum point of entry of multiple dwelling units that are predominantly residential should be treated as fiber-to-the-home loops and not be subject to section 251 unbundling obligations); *Broadband 271 Forbearance Order*, 19 FCC Rcd at 21508, para. 25; *Fiber to the Curb Reconsideration Order*, 19 FCC Rcd at 20293, para. 1.

[121] *See NCTA v. Brand X*, slip op. at 29 (noting that "the Commission is free within the limits of reasoned interpretation to change course if it adequately justifies the change").

[122] *See supra* note 80.

[123] *California III*, 39 F.3d at 933. In an earlier decision, the Ninth Circuit accepted the Commission's assessment that, because of ONA, which required fundamental unbundling, *Computer II*'s structural separation was no longer required to prevent access discrimination. *Id.* at 927-28 (citing *California I*, 905 F.2d at 1233).

[124] *Computer III*, 39 F.3d at 929.

Internet access service is no longer necessary. Specifically, we believe that the analysis in this Order that persuades us to eliminate not only the structural separation requirement, but all *Computer Inquiry* obligations, applicable to wireline broadband Internet access service provides the level of detail the Ninth Circuit found lacking in the Commission's prior decision eliminating that requirement.

a) The Wireline Broadband Internet Access Services Marketplace

47. The broadband marketplace before us today is an emerging and rapidly changing marketplace that is markedly different from the narrowband marketplace that the Commission considered in adopting the *Computer Inquiry* rules.[125] Indeed, the Supreme Court recently observed that the Commission's regulatory treatment of wireline broadband Internet access service "is based on history rather than on an analysis of contemporaneous market conditions."[126] Unlike narrowband services provided over traditional circuit-switched networks, broadband Internet access services have never been restricted to a single network platform provided by the incumbent LECs.[127] This is in stark contrast to the information services market at the time the *Computer Inquiry* obligations were adopted, when only a single platform capable of delivering such services was contemplated and only a single facilities-based provider of that platform was available to deliver them to any particular end user. As a consequence, many consumers have a competitive choice for broadband Internet access services today.[128]

48. As an initial matter, we note that the parties marshal sharply contrasting marketplace analyses in support of the positions they urge. On the one hand, the BOCs argue, with regard to the market position of the incumbent LECs, that the relevant product market is retail broadband Internet access service and the relevant geographic market is regional or national.[129] These parties contend that because cable providers currently have a larger share of the retail broadband Internet access service market both regionally and nationally, incumbent LECs must be deemed to lack market power in this market and therefore deregulation is appropriate.[130]

49. In contrast, certain competitive LECs and ISPs maintain that the relevant product market, for purposes of determining whether to deregulate, should be the wholesale market for the transmission component of broadband Internet access service.[131] As discussed above, the *Computer Inquiry* rules

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[125] *See High-Speed Services July 2005 Report*, at Table 3, Chart 6 (showing the growth of high-speed lines and the proportion of high-speed lines by technology from December 1999 to December 2004).

[126] *See NCTA v. Brand X*, slip op. at 30.

[127] Indeed, cable modem service encouraged incumbent LECs' deployment of DSL service. *See Fourth Section 706 Report*, at 14-16; *High-Speed Services July 2005 Report*, at 2, Table 3, Chart 6; Letter from Jonathan Banks, BellSouth, to Marlene H. Dortch, Secretary, FCC, CC Docket No. 02-33, at 22 (filed June 5, 2003) (BellSouth June 5, 2003 *Ex Parte* Letter) (citing independent reports and studies regarding the predominance of cable modem service over DSL service).

[128] BellSouth June 5, 2003 *Ex Parte* Letter at 13 (stating that the competitive nature of the broadband market, including new entrants using new technologies, is driving broadband providers to offer faster service at the same or even lower retail rates).

[129] *See, e.g.*, BellSouth 01-337 Comments at 30; Qwest 01-337 Comments at 15-23, 26-29; SBC 01-337 Comments at 19-28, 34-36.

[130] *See, e.g.*, Qwest 01-337 Comments at 36-43; Verizon Comments 01-337 at 17-19; BellSouth Reply, Harris Decl. at 4, 7-11; USTA 01-337 Reply at 5-6; Verizon Reply at 26-31; BellSouth June 5, 2003 *Ex Parte* Letter at 18-21.

[131] *See, e.g.*, ITAA 01-337 Comments at 3-5; MCI 01-337 Comments at 6-8; AT&T Reply at 12-13.

require that facilities-based carriers that provide broadband Internet access service directly or through an affiliate make the telecommunications transmission component available to unaffiliated ISPs as a common carrier service.[132] These parties argue that the incumbent LECs' intermodal competitors generally do not make the telecommunications component of their broadband Internet access services available to unaffiliated ISPs.[133] Certain competitive LECs and ISPs argue that it would be inappropriate to deregulate the incumbent LECs given the lack of availability of the telecommunications component from providers other than incumbent LECs.[134] They also argue that even if we treat broadband Internet access service as the relevant product, then for the relevant geographic market, we must consider each local market as a separate geographic market and evaluate the choices available in each.[135] They contend that incumbent LECs either are the single provider or one of two providers in virtually all of these relevant geographic markets.[136]

50. We find that the parties' competing analyses, though useful, fail to recognize all of the forces that influence broadband Internet access service deployment and competition, so we adopt neither. The parties' arguments are premised on data that are both limited and static. Most importantly, the competing analyses fail to recognize the dynamic nature of the marketplace forces.[137] We fully recognize that not all American households can choose between cable modem and DSL-based Internet access service today. But a wide variety of competitive and potentially competitive providers and offerings are emerging in this marketplace.[138] Cable modem and DSL providers are currently the market leaders for broadband Internet access service and have established rapidly expanding platforms. There are, however, other existing and developing platforms, such as satellite and wireless, and even broadband over power line in certain locations,[139] indicating that broadband Internet access services in the future will not be limited to cable

[132] *See supra* Part V.A.2.

[133] *See, e.g.*, ITAA 01-337 Comments at 13-15; MCI 01-337 Comments at 11-19; AT&T Reply at 14-15.

[134] *See, e.g.*, Arizona Consumer Council *et al.* Comments at 30-31; AT&T Comments, Willig Decl. at 29-39; DirectTV 01-337 Comments at 5-7; ITAA Comments at 15-18; MCI *et al.* Comments at 32-38; McLeod USA Comments at 2-3.

[135] *See, e.g.*, CompTel 01-337 Comments at 15-16; GCI Comments at 15-18; Wisconsin Commission Comments at 4; MCI 01-337 Comments at 10.

[136] *See, e.g.*, MCI *et al.* Comments at 37; Covad Reply at 11; *see also* AT&T Reply at 42-50.

[137] *See Broadband 271 Forbearance Order*, 19 FCC Rcd at 21505-12, paras. 21-35 (where the Commission concluded, in the context of granting the four BOCs forbearance relief from the requirements of section 271 with regard to broadband elements to the same extent that unbundling relief was granted under section 251, that there is competition from multiple sources and technologies in the rapidly changing broadband market).

[138] *See High-Speed Services July 2005 Report*, at 2-3; *Fourth Section 706 Report*, at 14-24, 45; *Broadband 271 Forbearance Order*, 19 FCC Rcd at 21505-08, paras. 22-26.

[139] *Fourth Section 706 Report*, at 22-23. The Commission noted that broadband over power lines, which uses existing electric power lines as a transmission medium to provide high-speed services, made its debut in 2003. *Id.* at 22. CURRENT Communications Group is an example of a provider that offers broadband over power line service through a joint venture with Cinergy Corp., an electric utility serving Cincinnati, Ohio, and has announced plans to expand its services. *See* CURRENT Communications Group Announces Strategic Investments to Catalyze Broadband over Power Line Deployments, available at http://www.currentgroup.com/news/releases/CURRENT%20Funding%207-07-05.pdf (visited on July 13, 2005); *supra* note 97 (noting recent reported broadband over power line market share statistics).

modem and DSL service.[140] Changes in technology are spurring innovation in the use of networks. As discussed below, there is increasing competition at the retail level for broadband Internet access service as well as growing competition at the wholesale level for network access provided by the wireline providers' intramodal and intermodal competitors.[141] We find that an emerging market, like the one for broadband Internet access, is more appropriately analyzed in view of larger trends in the marketplace, rather than exclusively through the snapshot data that may quickly and predictably be rendered obsolete as this market continues to evolve.

51. At the outset, we note that, while household computer penetration is growing, only 54.6 percent of U.S. households subscribe to either broadband or narrowband Internet access service.[142] We also note that roughly 20 percent of consumers with access to advanced telecommunications capability subscribe to services providing that capability.[143] Some industry analysts predict that over the next decade, nearly 90 percent of all Americans will go on line from home via broadband networks that are dramatically faster than today's broadband networks.[144] We recognize that cable modem service is the most widely used means by which residential and small business obtain broadband service today.[145] As of December 31, 2002, facilities-based providers were providing approximately 17.4 million high-speed lines to American consumers and small businesses.[146] Among these customers, 65 percent received cable modem service, while approximately 32 percent received DSL service and other broadband services provided by incumbent LECs and competitive LECs.[147] As of December 31, 2004, the number of high-speed lines had more than doubled with facilities-based providers providing approximately 35 million high-speed lines to American consumers and small businesses.[148]

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[140] *See, e.g., Fourth Section 706 Report*, at 16-23, 45 (describing broadband technologies generally). Based on the Commission's most recent broadband data report, the combined market share of high-speed lines via emerging broadband platforms is approximately 1.5% (not including new all fiber networks). *See High-Speed Services July 2005 Report*, at Table 1.

[141] *See infra* Part V.B.2.d (discussing various wholesale arrangements and incentives to make these available); *Broadband 271 Forbearance Order*, 19 FCC Rcd at 21508-09, para. 26.

[142] Federal Communications Commission, Wireline Comp. Bur., Industry Analysis & Technology Div., *Trends in Telephone Service*, at 2-10 (Apr. 2005) (*Trends in Telephone Service April 2005 Report*) (citing *NTIA Broadband Report*).

[143] *Fourth Section 706 Report*, at 10, 38 (describing advanced services lines as having transmission speeds of more than 200 kbps capability in the upstream (customer-to-provider) and downstream (provider-to-customer) directions, and high-speed lines as those having a transmission speed of more than 200 kbps capability in at least one direction). The Commission's data collection program requires service providers to identify each zip code in which a provider has at least one high-speed service subscriber (*i.e.*, a subscriber using a high-speed Internet access line). As of December 31, 2004, providers reported that they had subscribers to high-speed services in 95% of the nation's zip codes. In 83% of the nation's zip codes, more than one provider reported having subscribers. The Commission has stated that 99% of the country's population lives in 95% of the zip codes where a provider reports having at least one high-speed service subscriber. *High-Speed Services July 2005 Report*, at 4.

[144] PEW Internet & American Life, *The Future of the Internet*, at 41-42 (Jan. 9, 2005).

[145] *See High-Speed Services July 2005 Report*, at Table 3; *Triennial Review Order*, 18 FCC Rcd at 17135, para. 262 (citing *High-Speed Services December 2002 Report*, at Table 5).

[146] *High-Speed Services June 2003 Report*, at Table 3.

[147] *Id.*

[148] *High-Speed Services July 2005 Report*, at Table 3.

Among these customers, approximately 60.3 percent received cable modem service, while approximately 37.2 percent received DSL service and other broadband services provided by incumbent LECs and competitive LECs.[149]

52. While there is an increasing percentage of broadband users who receive DSL service, cable retains a relatively large share of the market. This reflects, in part, cable providers' substantial efforts to upgrade their individual networks to make them capable of providing cable modem service, among other services. Today, approximately 91 percent of the nation's cable systems have been upgraded to include the two-way digital capability that supports cable modem service.[150] As a result, the cable industry reports that more than 25 percent of cable households subscribe to cable modem service.[151]

53. Similarly, many incumbent LECs have upgraded, or are in the process of upgrading, their wireline networks to provide DSL broadband Internet access. In 2003, parties estimated that approximately 61 percent of the nation's households (66 million households) had access to DSL service, although only 6 percent of the nation's households subscribed to DSL-based Internet access services (6.2 million households).[152] As of December 31, 2004, the number of high-speed DSL lines in service had increased to approximately 13 million lines.[153] Further wireline network upgrades, including the deployment of hybrid fiber/copper loops and fiber to the home (FTTH), should provide additional households with access to wireline broadband service.[154]

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[149] *Id.* at Chart 6.

[150] *Fourth Section 706 Report* at 14; National Cable & Telecommunications Industry, *2004 Year-End Industry Overview* at 9 (*2004 Year-End Industry Overview*).

[151] *2004 Year-End Industry Overview* at 9. We note that the data available regarding cable modem service generally does not distinguish between residential and small business subscribers.

[152] *See* Letter from Ann D. Berkowitz, Project Manager-Federal Affairs, Verizon, to Marlene H. Dortch, Secretary, FCC, CC Docket No. 02-33, Attach. at 4 (filed Apr. 30, 2003) (Verizon Apr. 30, 2003 *Ex Parte* Letter); BellSouth June 5, 2003 *Ex Parte* Letter at 22; *see also High-Speed Services June 2003 Report*, Table 5. The approximately 6.2 million households include households that receive DSL service from competitive LECs as well as households that receive DSL service from incumbent LECs.

[153] *High-Speed Services July 2005 Report*, at Table 3.

[154] *Fourth Section 706 Report*, at 16-18 (describing new fiber technologies). A hybrid loop is a local loop composed of both fiber optic cable, usually in the feeder plant, and copper wire or cable, usually in the distribution plant. By "FTTH loop," we mean a local loop consisting entirely of fiber optic cable (and the attached electronics), whether lit or dark fiber, that connects a customer's premises with a wire center (*i.e.*, from the demarcation point at the customer's premises to the central office). *Triennial Review Order*, 18 FCC Rcd at 17475-17501, Appendix B (adopting section 51.319 of the Commission's rules). The deployment of hybrid loops allows an incumbent LEC to deploy DSLAMs in remote terminals and thus reduce the distance between a DSLAM and an end user's premises to one that can accommodate DSL service. *See, e.g.*, *Collocation Remand Order*, 16 FCC Rcd at 15460-61, para. 46 (recognizing that in order to provide DSL service, a LEC must deploy a DSLAM within a reasonable distance of the end user's premises). Incumbent LECs typically require a distance of no more than 18,000 feet. *Id.* Some competitive LECs will provide DSL service at greater distances. *See, e.g.*, *Petition of Cavalier Telephone LLC Pursuant to Section 252(e)(5) of the Communications Act for Preemption of the Jurisdiction of the Virginia State Corporation Commission Regarding Interconnection Disputes with Verizon Virginia, Inc. and for Arbitration*, WC Docket No. 02-359, Memorandum Opinion and Order, 18 FCC Rcd 25887, 25929-34, paras. 72-81 (2003).

54. Approximately 83.2 percent of DSL subscribers receive broadband service from the BOCs, with another 12.5 percent receiving broadband service from independent incumbent LECs.[155] Competitive LECs provide the remaining DSL subscribers with broadband service as intramodal competitors of the incumbent LECs.[156] Competitive LECs generally provide these services using their own facilities in combination with UNEs leased from incumbent LECs pursuant to section 251(c)(3) of the Act.[157] Some competitive LECs, however, provide DSL services using their own facilities exclusively.[158] Competitive LECs offer consumers broadband Internet access directly or enter into service arrangements with independent ISPs that offer competing broadband Internet access services.[159] Specifically, competitive LECs currently provide wireline broadband Internet access service to approximately 597,000 end-user lines.[160]

55. In sum, while cable modem and DSL clearly have exhibited significant growth over the last few years, market penetration for these two technologies still is far below the size of the potential market. The 20 percent cumulative penetration rate for broadband services stands in marked contrast to other, more mature markets the Commission has examined and regulated to varying degrees. When the Commission determined that AT&T was no longer dominant in the long distance service market, that market was mature. About 94 percent of American households had telephone voice service, and the vast majority of the telephones provided equal access to long distance service.[161] More generally, telephone voice service has had market penetration rates ranging from 91.4 percent to 95.5 percent of all American households over the past 20 plus years.[162] When compared to the market penetration rate for telephone voice service, which typifies a long-established, mature market for network-based services, the market penetration rate

[155] *High-Speed Services July 2005 Report*, Table 5.

[156] *Id.*

[157] The Commission's *Triennial Review Order* expressly reaffirmed the competitive LECs' right to obtain unbundled access to stand-alone copper loops in order to provide broadband transmission services. *See Triennial Review Order*, 18 FCC Rcd at 17128-32, paras. 248-54. In addition, we reaffirmed the incumbent LECs' obligation to provide competitive LECs with the ability to line split (*i.e.*, where one competitive LEC provides narrowband voice service over the same loop that a second competitive LEC uses to provide DSL service). *Id.* at 17130-31, paras. 251-52. In that order, the Commission also grandfathered existing line sharing customers and declined to reinstate the Commission's vacated line sharing rules. The Commission instead established a three-year transition after which any new customer must be served through a line splitting arrangement, through use of the stand-alone copper loop, or through an arrangement that a competitive LEC has negotiated with the incumbent LEC to replace line sharing. Line sharing allowed a competing carrier to provide DSL service over the high-frequency portion of the same loop that the incumbent LEC uses to provide voice service. *Id.* at 17132-41, paras. 255-69. The D.C. Circuit expressly upheld the Commission's decision not to require line sharing. *USTA II*, 359 F.3d at 585. As we discuss in part VI.D, below, the decisions contained in this Order have no affect on competitive LECs' ability to obtain UNEs, or on the section 251(c) obligations of incumbent LECs.

[158] *See* ALTS 01-337 Comments at 3 (stating that competitive LECs have invested over $56 billion to construct new broadband networks since the passage of the 1996 Act).

[159] *See* Qwest May 23, 2003 *Ex Parte* Letter, Attach at 4; SBC Mar. 7, 2003 *Ex Parte* Letter, Attach. at 12.

[160] *High-Speed Services July 2005 Report*, at Table 5.

[161] *Trends in Telephone Service April 2005 Report*, at Table 16; *see also Motion of AT&T Corp. to be Reclassified as a Non-Dominant Carrier*, Order, 11 FCC Rcd 3271 (1995).

[162] *Trends in Telephone Service April 2005 Report*, at Table 1.

for broadband Internet access services indicates that this emerging market has the potential to grow significantly in the years ahead.

56. Given recent trends, the market penetration of cable modem and DSL broadband Internet access services, in particular, could grow dramatically in the future.[163] We expect these two market leaders to continue to compete head-to-head in a way that could result in higher customer penetration rates for one or both services.[164] Cable modem service and DSL broadband Internet access services currently compete directly with each other in certain areas, are marketed against each other, are sold almost exclusively to residential and small business customers, and often may be perceived by consumers as close substitutes for each other.[165] Continuous change and development are likely to be the hallmark of the marketplace for broadband Internet access at both the retail and wholesale levels over the next several years.[166]

57. We expect providers of both platforms will continue to invest and extend the reach of their services. We anticipate that, as the availability of cable modem and DSL broadband Internet access services grows with the modernization of network infrastructure and increased service deployment, more households will have the option of choosing between the cable and DSL broadband options. Increased intermodal and intramodal competition will continue to encourage these two broadband providers to deploy broadband Internet access services throughout their respective service areas.[167] In addition, the threat of competition from other forms of broadband Internet access, whether satellite, fixed or mobile wireless, or a yet-to-be-realized alternative, will further stimulate deployment of broadband infrastructure, including more advanced infrastructure such as fiber to the home.

58. These emerging broadband platforms exert competitive pressure even though they currently have relatively few subscribers compared with cable modem service and DSL-based Internet access service.[168]

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[163] *See Fourth Section 706 Report*, at 13-16 (describing the technology and pricing that is driving the increasing demand for cable modem and DSL services).

[164] *Broadband 271 Forbearance Order*, 19 FCC Rcd at 21505-07, para. 22 (stating that cable providers have a significant role in encouraging the BOCs to provide competitive DSL services).

[165] *Id.* at 21505-07, para. 22; *see also NTIA Broadband Report*, at 7 (explaining generally the growth in market share for cable modem and DSL service); Robert W. Crandall, J. Gregory Sidak, & Hal J. Singer, *The Empirical Case Against Asymmetric Regulation of Broadband Internet Access*, 17 Berkeley Technology L.J. 953, 953-87 (2002). The authors develop an econometric model which estimates own price and cross price elasticities for cable modem and DSL. Based on this model, the authors conclude that price and cross-price elasticities are high, and that cable modem and DSL are substitutes when both are available to the mass market consumer. *Id.* at 957.

[166] *See, e.g.*, *High-Speed Services July 2005 Report*, at Tables 1-2, Charts 1-2 (showing growth of various broadband technologies over the past five years).

[167] *See Fourth Section 706 Report* at 14-16 (describing pricing for cable modem and DSL service). Verizon has recently decreased its prices, both retail and wholesale, for DSL service, http://www22.verizon.com/ForHomeDSL/channels/dsl/forhomedsl.asp?ID=Res announcing Verizon's limited time offer of $19.95 per month for DSL service for the first three months of a one-year commitment. In addition, SBC's retail Internet access rates are now set at an introductory rate of $14.95 per month for a one-year term. "SBC Communications Breaks New Ground for Consumers with Residential DSL for $14.95 When Ordered Online," http://www.sbc.com/gen/press-room?pid=4800&cdvn=news&newsarticleid=21690 announcing SBC's 13-state $14.95 price decrease for its DSL Express service. BellSouth has also lowered its retail DSL prices. Dionne Searcey, *BellSouth Shaves DSL Prices*, Wall St. J. (July 20, 2005) (describing BellSouth's permanent DSL price cut by $10.00 to $32.95 per month for customers who also buy its basic phone service).

[168] *See, e.g.*, BellSouth June 5, 2003 *Ex Parte* Letter at 11-12.

Ku-band satellite service is now available in most areas of the United States and is most attractive in areas that lack access to cable modem and DSL-based Internet access service, largely because this satellite service costs more than those alternatives.[169] Fixed wireless service is also available to provide high-speed Internet access in substantial areas of the nation.[170] By the end of 2002, satellite and fixed wireless providers reported about 257,000 high-speed Internet access service residential and small business subscribers.[171] Today, they report an increased subscriber base of approximately 422,000 lines in service.[172]

59. At the same time as cable modem and DSL broadband Internet access services are increasing market penetration, these other technology-based solutions could gain market share. In the near future, satellite and fixed wireless will likely continue to serve, at the very least, specialized geographic parts of the market not served by DSL or cable modems.[173] If more customers adopt satellite and fixed wireless solutions, the relative prices of those solutions could decline, which would make the services more competitive with cable modem and DSL broadband Internet access services. It is unclear in the current developing market which technology or technologies will serve the majority of customers when the market reaches greater maturity.

60. We recognize that the attributes of the available broadband platforms vary, particularly as to price, speed, and ubiquity. We expect that customers will weigh these attributes for each platform and make service-related decisions based on their specific needs. For example, a customer may select a broadband Internet access service with a somewhat slower speed than that associated with other service platforms in return for the lower price of the selected service.

61. As the Internet and related applications mature and continue to evolve, the demand for broadband Internet access services will likely grow. The presence of more content available through the Internet and the enhanced means of presenting the content, together with growth in broadband-related applications, such as streaming video, will lead more subscribers to seek broadband Internet access service. As the number of subscribers grows, so does the opportunity for alternative technologies and their respective providers. As any provider increases its market share or upgrades its broadband Internet access service, other providers are likely to mount competitive challenges, which likely will lead to wider deployment of broadband Internet access service, more choices, and better terms.[174]

62. We disagree with commenters that equate the ability of *ISPs* to obtain wireline broadband transmission services on a Title II basis with the ability of *consumers* to obtain facilities-based competitive broadband Internet access services.[175] A regulatory regime that promotes a competitive broadband Internet access services market where consumers have a choice of multiple providers is not

[169] *Fourth Section 706 Report*, at 23. Satellite providers are in the process of increasing by a large multiple the amount of bandwidth they make available for broadband, with several launches of new satellites scheduled during the near future. *Id.* at 23, 46. *See supra* note 95. Satellite currently has just less than a 1% broadband market share.

[170] *Fourth Section 706 Report*, at 20-22.

[171] *High-Speed Services June 2003 Report*, at Table 3.

[172] *High-Speed Services July 2005 Report*, at Table 3.

[173] *See Fourth Section 706 Report*, at 18-23.

[174] *See id.* at 44-45 (describing the broadband trends).

[175] *See, e.g.*, AOL Comments at 21-23; EarthLink Comments at 16-27; MCI *et al.* Comments at 24-32; Ad Hoc Reply at 14-18.

necessarily the same as a regulatory regime that mandates that one particular type of broadband Internet access service transmission technology, and one alone, is available, on a nondiscriminatory basis, to any entity that desires to become an ISP.[176] Vigorous competition between different platform providers already exists in many areas and is spreading to additional areas.[177] While we recognize that broadband Internet access service is not ubiquitously available today, this market is rapidly changing and growing.[178] In addition, service providers tend to set prices on a national or regional basis regardless of whether there are multiple broadband providers serving local markets.[179]

63. It is difficult to make a meaningful assessment of the market for wholesale access to the transmission component of broadband Internet access service. Although we recognize that, in many areas, the incumbent LEC is currently the only wholesale provider of this transmission component, this observation, on its own, is not dispositive. At this time, facilities-based wireline carriers are the only providers of broadband Internet access services that are compelled by regulation to make such an offering available. As stated above, this compulsion is not the result of the Commission's analysis of broadband Internet access services specifically, but rather is the product of the application of legacy rules adopted decades ago.[180] Therefore, we cannot state unequivocally that incumbent LECs would not otherwise provide wholesale access, absent this compulsion. In fact, the record shows that incumbent LECs would and indeed already do provide such access, albeit through arrangements other than a mandatory tariff regime that requires a standardized general offering.[181] In addition, this regulatory compulsion of facilities-based wireline carriers may be impeding the development of competitive alternatives, most notably through entry by other broadband Internet access platform providers. Because our rules require a particular type of generalized wholesale offering, they may reduce incentives for ISPs to seek alternative arrangements from other broadband Internet access platform providers and for those other providers to offer such arrangements.[182]

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[176] The Commission concluded in the *Broadband 271 Forbearance Order* that competition from multiple sources and technologies in the retail broadband market, especially from cable modem providers, will encourage the BOCs to utilize wholesale customers to grow their share of the broadband markets and retain their business. *Broadband 271 Forbearance Order*, 19 FCC Rcd at 21508, para. 26.

[177] *See supra* Part V.B.2.a; *Broadband 271 Forbearance Order*, 19 FCC Rcd at 21505-10, paras. 22-29.

[178] *See supra* Part V.B.2.a.

[179] *See, e.g., supra* n.167 (describing the BOCs' regionwide DSL pricing offers).

[180] *See NCTA v. Brand X*, slip op. at 30.

[181] For example, BellSouth indicates that few unaffiliated ISPs continue to take its tariffed DSL transport service. Instead, many ISP competitors have entered into commercial contracts for broadband Internet access capability because it meets their demands better than the *Computer Inquiry* tariffed transmission-only component. *See* Letter from Glenn T. Reynolds, Vice President-Federal Regulatory, BellSouth, to Marlene H. Dortch, Secretary, FCC, CC Docket No. 02-33, Attach. at 8 (filed Apr. 25, 2005) (BellSouth Apr. 25, 2005 *Ex Parte* Letter) (noting that only one percent of the total broadband customers in BellSouth's nine-state region obtain service from ISPs using BellSouth's *Computer Inquiry*-required tariffed DSL transmission offering, but over 26% of the customers are served by ISPs using BellSouth's contract offering (*i.e.*, its regional broadband aggregation network (RBAN) offering).

[182] *See, e.g.*, BellSouth June 5, 2003 *Ex Parte* Letter at 18 ("BellSouth's ability to negotiate and enter into such tailored agreements [for ISPs] is frustrated immensely by the existing regulatory burdens of having to offer the underlying tariff components immediately to any other requesting carrier anywhere in BellSouth's region at tariffed rates.").

64. Based on the record before us, we expect that facilities-based wireline carriers will have business reasons to continue making broadband Internet access transmission services available to ISPs without regard to the *Computer Inquiry* requirements.[183] The record makes clear that such carriers have a business interest in maximizing the traffic on their networks, as this enables them to spread fixed costs over a greater number of revenue-generating customers.[184] For their part, cable operators, which have never been required to make Internet access transmission available to third parties on a wholesale basis,[185] have business incentives similar to those of incumbent LECs to make such transmission available to ISPs, and are continuing to do so pursuant to private carriage arrangements.[186] Given the Supreme Court's decision that cable operators can offer the transmission underlying cable modem service as a functionally integrated part of a finished information service without becoming subject to regulation under Title II,[187] we expect that these wholesale arrangements will continue to evolve. We believe that the convergence of these two factors – increasing competition among facilities-based broadband providers and the potential for competition in wholesale network access – will sustain and increase competitive choice among broadband providers and Internet access products.

b) Technological Innovation

65. We find that application of the *Computer Inquiry* requirements to wireline broadband Internet access services, and any alternative requirements that would guarantee ISPs access to the transmission component of that service, would impede the development and deployment of innovative wireline broadband Internet access technologies and services. As noted above, these requirements slow innovation because vendors do not create new technologies with the *Computer Inquiry* requirements in mind.[188] Deployment to consumers of these technologies then, at best, is delayed and, in many cases, may be avoided altogether. Broadband Internet access services are also not developing in ways that neatly fall within existing regulatory classifications or the current *Computer Inquiry* requirements (*i.e.*, they cannot be easily separated into discrete information service and telecommunications service components).[189] As

[183] *See infra* Part V.B.2.d.

[184] Letter from Jeffry Brueggeman, General Attorney, SBC, to Marlene H. Dortch, Secretary, FCC, CC Docket No. 02-33, Attach. at 8 (filed July 31, 2003) (SBC July 31, 2003 *Ex Parte* Letter); BellSouth June 5, 2003 *Ex Parte* Letter at 16-18; *Broadband 271 Forbearance Order*, 19 FCC Rcd at 21508-09, para. 26.

[185] *NCTA v. Brand X*, slip op. at 30; *Cable Modem Declaratory Ruling*, 17 FCC Rcd at 4823-25, paras. 39-43.

[186] *See, e.g.*, Comcast Corp., 2004 Form 10-K Annual Report filed with the Securities and Exchange Commission, at 7 (Feb. 23, 2005) (stating that Comcast and a number of cable operators have reached agreements to provide unaffiliated ISPs access to their cable systems in the absence of regulatory requirements). In addition, AOL Time Warner, as a result of a consent decree with the Federal Trade Commission, provides certain independent ISPs with access to its network of over 12 million subscribers. *Cable Modem Declaratory Ruling*, 17 FCC Rcd at 4828-29, para. 52 & n.196.

[187] *NCTA v. Brand X*, slip op. at 6-15.

[188] *See, e.g.*, Verizon June 26, 2003 *Ex Parte* Letter at 1-3; Letter from L. Barbee Ponder IV, Senior Regulatory Counsel-D.C., BellSouth, to Marlene H. Dortch, Secretary, FCC, CC Docket No. 02-33, Attach. at 5 (filed May 23, 2003) (BellSouth May 23, 2003 *Ex Parte* Letter) (stating that next generation broadband equipment does not provide demarcations for regulatory purposes, and that vendors have no incentives to create demarcations because only four entities need or want them).

[189] *See* Verizon June 26, 2003 *Ex Parte* Letter at 2 (noting that in past decades, "equipment manufacturers designed central office equipment based on the needs of the Bell companies' and that "[t]oday's manufacturers have broader markets and are designing the next generation of equipment for a broader base of IP network providers").

a result, unlike cable modem providers or other broadband Internet access service competitors, wireline carriers must make either of two less-than-optimal choices when they seek to deploy advanced network equipment: either they must decide not to use all the equipment's capabilities, thereby reducing their operational efficiency;[190] or they must defer deployment while the manufacturer re-engineers it to facilitate compliance with the *Computer Inquiry* rules, thereby creating unnecessary costs and service delays.[191]

66. Wireline commenters argue that their inability to integrate more efficient equipment into wireline networks in a timely and efficient manner limits their ability to offer innovative broadband Internet access services to customers.[192] They also contend that these constraints hinder their ability to respond to requests for new or modified innovative features or services.[193] For example, some commenters argue that manufacturers have little incentive to design next generation broadband equipment that facilitates compliance with the Computer *Inquiry* obligations as the majority of broadband platform providers neither need nor want this capability.[194] As a result, these carriers maintain that they are faced with a decision either to forgo the use of more efficient or innovative equipment or to incur substantial additional costs and development time to have the vendor "de-integrate" the more efficient, integrated equipment simply to comply with the *Computer Inquiry* requirements.[195] These increased costs and delays often deter a carrier from deploying new broadband technologies.[196]

67. Other commenters suggest that because of the BOCs' size and influence, they are well-positioned to demand that vendors meet their requirements that innovative broadband equipment and new functionalities comply with the *Computer Inquiry* obligations.[197] Assuming arguendo that this is true, to

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[190] For example, SBC explains that, in order to comply with the *Computer Inquiry* rules, it often must disable or "turn off" protocol conversion functionality in its broadband Internet access equipment. *See* SBC July 31, 2003 *Ex Parte* Letter at 12.

[191] *See* Verizon June 26, 2003 *Ex Parte* Letter at 3.

[192] *See, e.g.*, SBC Mar. 7, 2003 *Ex Parte* Letter at 8 (arguing that *Computer II*'s stand-alone telecommunications service requirement "[r]estricts full utilization of technology integration in design and evolution of broadband networks" and in "developing broadband services," and, thus, limits SBC's "ability to offer new and innovative integrated broadband services to consumers"); *see also* Verizon May 20, 2003 *Ex Parte* Letter, Attach. at 9; Letter from Ann D. Berkowitz, Project Manager-Federal Affairs, Verizon, to Marlene H. Dortch, Secretary, FCC, CC Docket No. 02-33, Attach. at 10 (filed Mar. 17, 2003) (Verizon Mar. 17, 2003 *Ex Parte* Letter).

[193] *See, e.g.*, BellSouth June 5, 2003 *Ex Parte* Letter at 18. Non-carrier commenters have also argued that the *Computer Inquiry* regime is inappropriate for today's broadband market. *See, e.g.*, Alcatel Comments at 8 (contending that the Commission should seek to remove some of the network unbundling obligations placed on incumbent LECs); HTBC Reply at 3-8 (advocating a minimally regulatory environment for wireline broadband transmission but stating the Commission should require incumbent LECs to make any arrangements with their affiliated ISPs available to unaffiliated ISPs in a nondiscriminatory manner at least for the next two years).

[194] *See, e.g.*, BellSouth Apr. 25, 2005 *Ex Parte* Letter, Attach. at 8; BellSouth May 23, 2003 *Ex Parte* Letter, Attach. at 5; *see also* Catena Comments at 6 (noting that several telecommunications equipment manufacturers have halted or decreased their DSL technology activities as the current regulatory environment is retarding the investment in new technologies).

[195] *See, e.g.*, SBC July 31, 2003 *Ex Parte* Letter at 11-12; Verizon June 26, 2003 *Ex Parte* Letter at 3.

[196] *See, e.g.*, SBC Comments at 26; Verizon May 20, 2003 *Ex Parte* Letter, Attach. at 9-13 (outlining impediments to offering VoIP services).

[197] *See, e.g.*, Letter from Richard S. Whitt, Director-Federal Advocacy, MCI, to Marlene H. Dortch, Secretary, FCC, CC Docket No. 02-33, Attach. at 11 n.13 (filed Oct. 10, 2003) (MCI Oct. 10, 2003 *Ex Parte* Letter); Letter from (continued . . .)

some extent, the fact that BOCs can exert some influence does not necessarily make the *Computer Inquiry* obligations or a less onerous broadband Internet access transmission obligation desirable public policy, nor does it mean that the resulting equipment is as efficient or innovative as it could otherwise be. The issue is not whether the BOCs could have this "de-integrated" equipment produced, rather it is whether the production of this equipment would yield benefits that outweigh the obvious technological costs. These commenters fail to recognize that manufacturers develop broadband equipment that pushes technology in the direction they think will best respond to future consumer demands (which is currently toward equipment that integrates information service and transmission capabilities in a manner that allows functions to be performed at multiple points within a broadband network and closer to the end user than ever before).[198] Our rules should not force technological development in another, less efficient direction.

68. Some carriers argue that compliance with the *Computer Inquiry* obligations requires costly redundant systems and duplicative processes that result in operational inefficiencies.[199] For example, BellSouth states that it incurs significant costs solely to comply with those obligations. These costs are incurred, according to BellSouth, because it must: maintain separate customer service centers, systems, and processes for its telecommunications service and broadband Internet access service operations;[200] dispatch both telecommunications service and information service technicians to install DSL service or respond to customer-reported problems;[201] and incur additional transport costs to comply with the Commission's "two-mile" rule.[202] While other commenters maintain that these costs do not warrant elimination of the *Computer Inquiry* requirements,[203] we find that the costs on the record are sufficient to act as an investment disincentive. As explained below, consistent with our obligations under section 706, we must consider this impact in our overall analysis of the costs and benefits of retaining these rules.

(continued from previous page)

David L. Lawson, Counsel for AT&T, Sidley Austin Brown & Wood LLP, to Marlene H. Dortch, Secretary, FCC, CC Docket No. 02-33, at 5-6 (filed Aug. 14, 2003).

[198] *See supra* paras. 65-66.

[199] *See, e.g.*, Verizon June 26, 2003 *Ex Parte* Letter at 1-4; BellSouth Apr. 2, 2003 *Ex Parte* Letter, Attach. at 6-9.

[200] *See, e.g.*, BellSouth Apr. 2, 2003 *Ex Parte* Letter at 8 (an estimated cost of $13.5 million per year).

[201] *Id.* (costing approximately $6 million per year). BellSouth claims that it incurs these costs because it must treat its broadband Internet access service customer in the same manner as it would treat an independent ISP's customer. Thus, for example, if a BellSouth telephone service technician discovers a problem with a DSL connection, BellSouth must dispatch a different technician to correct that problem for the end-user consumer. *See also id.* at 9 (stating that it incurs approximately $9.5 million per year in other unnecessary system redundancy costs).

[202] *Id.* at 11. The two-mile rule requires BOCs to charge their "collocated enhanced service operations a rate for distance-sensitive transmission equal to a rate for transmission paid by non-collocated operations at a two mile distance from the [central office]." *See Filing and Review of Open Network Architecture Plans*, 5 FCC Rcd 3103, 3110, para. 66 & n.111 (1990). BellSouth maintains that this rule is administratively costly and archaic since all packet traffic is aggregated efficiently at the central office and because ISPs are able to collocate there pursuant to the expanded interconnection rules. BellSouth Apr. 2, 2003 *Ex Parte* Letter at 11.

[203] *See, e.g.*, Letter from Mark J. O'Connor, Counsel for EarthLink, Inc., Lampert & O'Connor, to Marlene H. Dortch, Secretary, FCC, CC Docket No. 02-33, Attach. at 3-7 (filed May 12, 2003) (EarthLink May 12, 2003 *Ex Parte* Letter); *see also* Letter from Kenneth R. Boley, Counsel for EarthLink, Inc., Lampert & O'Connor, to Marlene H. Dortch, Secretary, FCC, CC Docket No. 02-33, Attach. at 2-3 (filed Mar. 19, 2003) (EarthLink Mar. 19, 2003 *Ex Parte* Letter).

69. The fact that carriers incur costs, potentially even significant costs, to comply with our regulations is not, alone, a basis for eliminating such regulations. To the extent such costs are incurred to achieve statutory obligations or important policy objectives, they are a necessary component of operating in a regulated industry.[204] But when, as a relative matter, the regulations' costs outweigh their benefits, or are no longer necessary to achieve the desired objectives, we must evaluate whether our obligations and objectives can be met in a manner that reduces or eliminates such costs. This becomes even more critical if there is evidence that the regulation actually impedes or frustrates the accomplishment of important statutory goals.

70. At the time the *Computer Inquiry* rules were adopted (and even thereafter as they were being revised and refined to better balance costs and benefits), the public benefits with respect to narrowband network-based services justified the costs. For example, it was much clearer at that time that because computer processing occurred at the network's edge or outside the network, the major innovation would occur there too. The *Computer Inquiry* rules themselves reflect a fairly static picture of network development, and an assumption that a line could be drawn between the network functions and computer processing without impeding technological innovation. Today, this line is even more blurred than it was when the Commission adopted its *Computer II Final Decision*. Innovation can occur at all network points and at all network layers as well as in non-network applications and equipment. Continued application of the *Computer Inquiry* rules, however, would prevent much of this innovation from occurring.[205] This by-product of our current regulations is a persuasive factor for their removal.

c) New Services

71. One of the primary purposes of this technological innovation would be to let wireline broadband Internet access services providers, like their competitors, produce new or improved services in response to consumer demands.[206] Several parties argue that the *Computer Inquiry* requirements prevent them from altering business priorities in response to changing market demands, impede their ability to take advantage of business opportunities due to "time to market" issues, and provide competitors with advance notice of innovative service enhancements, thus eliminating any potential wireline broadband competitive advantage *vis-à-vis* cable modem or other platform providers.[207] For example, Qwest points to the inherent regulatory delay that occurs through the network change disclosure process, the web posting requirements, and tariffing requirements, which a BOC must comply with before making *any* change to its network that enhances or upgrades its Internet access services.[208] Verizon contends that before it can decide whether it will provide an ISP customer with a requested new Internet access service capability, it

[204] *See, e.g.*, *IP-Enabled Services*, WC Docket No. 04-36; *E911 Requirements for IP-Enabled Service Providers*, WC Docket No. 05-196, First Report and Order and Notice of Proposed Rulemaking, FCC 05-116, at paras. 3-5, 36-53 (rel. June 3, 2005) (*VoIP E911 Order*), *petitions for review pending sub nom. Nuvio Corp. v. FCC*, D.C. Cir. No. 05-1248 (and consolidated cases) (filed July 11, 2005).

[205] *See, e.g.*, Catena Comments at 5-6; Verizon June 26, 2003 *Ex Parte* Letter at 3-6; BellSouth Apr. 2, 2003 *Ex Parte* Letter, Attach. at 5.

[206] *See Wold Communications*, 735 F.2d at 1475 (citing *Western Union Telegraph v. FCC*, 674 F.2d 160 (2d Cir. 1982) ("newly unleashed market forces" constitute a reasonable regulatory tool). Where technology is fast-moving and arcane, the D.C. Circuit gave the Commission "particular deference" in determining whether the treatment of a service as non-common carrier would bring sufficient public interest benefits. *Id.* at 1468.

[207] *See, e.g.*, Qwest Apr. 10, 2003 *Ex Parte* Letter, Attach. at 11.

[208] *Id.*

must analyze each function of the proposed capability to determine its classification under the *Computer Inquiry* regime[209] and then determine the associated requirements for compliance.[210] Verizon states that this compliance review often involves complex and lengthy new system development or modification to accommodate the *Computer Inquiry* access obligations without any knowledge or assurance that other ISPs will even want such access. As a result, Verizon states that it frequently must deny requests for new Internet access service capabilities because the process to accommodate them under existing *Computer Inquiry* regulations is prohibitively expensive.[211] We find that these costs, inefficiencies, and delays are significant and substantially impede network development. We therefore disagree with commenters that claim that the record contains no evidence that costs, inefficiencies, and investment delays have occurred that would justify the elimination of the *Computer Inquiry* requirements.[212]

72. Based on the record before us, we conclude that eliminating the *Computer Inquiry* rules at this time will make it more likely that wireline network operators will take more risks in investing in and deploying new technologies than they are willing and able to take under the existing regime.[213] Tailored private contractual agreements, in general, provide service providers more flexibility in developing a new technology and more incentives to do so.[214] As the Commission found in the *Transponder Sales Order,* a service provider is more likely to invest in technologies if the service provider is able to obtain assurances through private contracts that the technologies will be used.[215] Private commercial contracts likewise provide assurances to potential customers that capacity will be available.[216] Indeed, a number of carrier commenters indicate that their preferred means of offering wireline broadband transmission service is through customized arrangements tailored to the particular needs of requesting ISP customers.[217] They show, in particular, that through the ability to engage in these types of non-common carrier arrangements

[209] *See supra* n.78 (describing the four "basic service elements").

[210] *See, e.g.*, Verizon June 26, 2003 *Ex Parte* Letter at 4; Verizon May 20, 2003 *Ex Parte* Letter, Attach. at 11-13.

[211] *See, e.g.*, Verizon June 26, 2003 *Ex Parte* Letter at 4-6; Verizon May 20, 2003 *Ex Parte* Letter, Attach. at 11-13; *see also* Letter from L. Barbee Ponder IV, Senior Regulatory Counsel-D.C., BellSouth, to Marlene H. Dortch, Secretary, FCC, WC Docket No. 02-33, at 1-9 (filed July 10, 2003) (BellSouth July 10, 2003 *Ex Parte* Letter); BellSouth Apr. 25, 2005 *Ex Parte* Letter, Attach. at 7-10.

[212] *See, e.g.*, AT&T Comments at 62-72; GCI Comments at 23-27; Ohio ISP Assoc. *et al.* Comments at 56-58; MCI *et al.* Comments at 39-42; AT&T Reply at 35-42; AT&T Mar. 14, 2003 *Ex Parte* Letter at 15; *see also* Covad Comments at 32-36.

[213] *See, e.g.*, Verizon June 26, 2003 *Ex Parte* Letter at 4, 6.

[214] *See, e.g.*, *Transponder Sales Order*, 90 FCC 2d at 1250-52, paras. 31-34; *see also infra* at paras. 87-88 (discussing the benefits of non-common carriage contracts).

[215] *Transponder Sales Order*, 90 FCC 2d at 1250-52, paras. 31-34 (noting typical long lead time between inception of a technology and its deployment).

[216] *See id.*

[217] *See NARUC I*, 525 F.2d at 643 (the inquiry is whether there is reason to believe that the service provider will, in fact, serve the public indifferently even absent a regulatory compulsion to do so). Consequently, we disagree with EarthLink, which argues that the Commission's determination as to whether this service must be a common carrier service begins and ends with the recognition that incumbent LECs provide wholesale DSL transmission to ISPs on a tariffed (*i.e.*, indifferent) basis. EarthLink Apr. 29, 2003 *Ex Parte* Letter at 9-11.

(rather than "cookie-cutter" common carrier offerings available indiscriminately to all ISPs), they will be able to develop more technologically innovative broadband offerings to meet consumer needs.[218]

73. As discussed above, some commenters argue that the transmission component of wireline broadband Internet access service must continue to be regulated as a common carrier service because wireline carriers currently offer these transmission services on such a basis.[219] In doing so, however, these parties fail to recognize that a Commission determination regarding the regulatory status of a service depends on, among other things, what practice and experience indicate the likely character of the service offering would be, assuming the carrier could decide how it would offer the service.[220] Merely because facilities-based wireline carriers offer some common carrier services does not mean that all their services must be similarly offered.[221] The Commission, upheld by the courts, has provided carriers the flexibility to offer services that were previously regulated under Title II on a common carrier or non-common carrier basis.[222]

d) Wireline Broadband Internet Access Service Providers' Business Incentives

74. Given the nature and history of the broadband Internet access services industry, we expect that wireline broadband transmission will remain available to ISPs and others without any *Computer Inquiry* requirements. Incumbent LECs have represented that they not only intend to make broadband Internet

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[218] *See, e.g.*, SBC July 31, 2003 *Ex Parte* Letter at 4-15; Verizon June 26, 2003 *Ex Parte* Letter at 4, 6; BellSouth June 5, 2003 *Ex Parte* Letter at 12 (noting that BellSouth negotiated a private agreement with an independent ISP because BellSouth's tariffed unbundled broadband transmission offering was "cumbersome, inefficient and not competitive"); Qwest May 23, 2003 *Ex Parte* Letter, Attach. at 17-18.

[219] *See infra* Part V.D.

[220] *See Vitelco v. FCC*, 198 F.3d at 924 (citing *NARUC I*, 525 F.2d at 642, for the proposition that the second prong of the *NARUC I* test examines whether there are reasons implicit in the nature of the offering to expect an indifferent holding out to the eligible user public); *see also NARUC I*, 525 F.2d at 643-44 (noting that the inquiry into whether specialized mobile radio service (SMRS) providers will hold themselves out indifferently absent a regulatory compulsion to do so is "highly speculative" because no operating SMRS providers were then in existence); *see also* BellSouth June 5, 2003 *Ex Parte* Letter at 21 (asserting that the previous regulatory compulsion cannot be used as a basis for claiming that carriers have chosen to provide broadband transmission on a common carrier basis).

[221] 47 U.S.C. § 153(10) (defining common carrier); *see, e.g.*, *Southwestern Bell*, 19 F.3d at 1482 (quoting *NARUC v. FCC*, 533 F.2d 601, 608 (D.C. Cir. 1976) (*NARUC II*) ("[I]t is at least logical to conclude that one can be a common carrier with regard to some activities but not others")).

[222] *See, e.g.*, *Vitelco v. FCC*, 198 F.3d at 925-30 (affirming the Commission's grant of a submarine cable operator's application for cable landing rights as a non-common carrier); *Computer and Communications Industry Ass'n v. FCC*, 693 F.2d at 207-14 (The court stated: "In designing the Communications Act, Congress sought to endow the Commission with sufficiently elastic powers such that it could readily accommodate dynamic new developments in the field of communications. Congress thus hoped to avoid the necessity of repetitive legislation. In *Computer II* the Commission took full advantage of its broad powers to serve the public interest by accommodating a new development in the communications industry, the confluence of communications and data processing. Because the Commission's judgment on how the public interest is best served is entitled to substantial judicial deference, the Commission's choice of regulatory tools in *Computer II* must be upheld unless arbitrary or capricious. Our review of the Commission's decision convinces us that the Commission acted reasonably in defining its jurisdiction over enhanced services and CPE. We therefore uphold the Computer II scheme.") (internal quotation marks omitted); *Wold Communications*, 735 F.2d at 1473-79 (affirming the decision in the *Transponder Sales Order* to allow sales of satellite transponder service on a non-common carrier basis); *see also infra* note 280.

access transmission offerings available to unaffiliated ISPs in a manner that meets ISPs' needs, but that they have business incentives to do so.[223] For example, Qwest offers a tariffed wireline broadband DSL service that enables hundreds of independent ISPs to serve end-user customers over Qwest's broadband facilities.[224] Regardless of the outcome of this proceeding, Qwest has stated it will continue to make available a DSL offering that will enable consumers to reach unaffiliated ISPs because consumers demand the choice, and meeting that demand makes its product more attractive.[225] SBC previously entered into a memorandum of understanding with a trade association representing nearly 300 members of the Internet industry, including many independent ISPs, committing to negotiate private commercial arrangements with unaffiliated ISPs for broadband Internet access.[226] Verizon has similarly indicated its intent to enter into commercially reasonable contracts with unaffiliated ISPs for broadband transmission services because it is in its best interest to do so.[227] Finally, BellSouth has also evidenced a willingness, desire, and incentive to deal with unaffiliated ISPs absent a Commission requirement that compels them to do so.[228] For example, BellSouth has indicated that it will benefit financially from providing DSL transmission to independent ISPs, as it has an economic incentive to spread the costs of its network over as much traffic and as many customers as possible regardless of whether such customers are wholesale or retail.[229]

75. We finds these incentives significant, and therefore disagree with the contention of some commenters that a mandatory common carrier broadband transmission requirement is essential for independent ISPs to obtain wireline broadband transmission that meets their needs at reasonable prices.[230] Based on the record before us, we expect that business incentives will compel wireline broadband carriers to offer broadband transmission on a commercially reasonable basis to independent ISPs and will

[223] *See* SBC July 31, 2003 *Ex Parte* Letter at 8 ("SBC will continue to enter into ISP broadband access arrangements as a way of increasing subscriber growth and utilization of its broadband network regardless of any regulatory compulsion to do so."). Indeed, carriers voluntarily have entered into certain non-common carrier agreements already. *E.g.*, Letter from Edward Shakin, Vice President and Associate General Counsel, Verizon, to Marlene H. Dortch, Secretary, FCC, CC Docket No. 02-33, at 1-2 (filed July 29, 2004) (Verizon July 29, 2004 *Ex Parte* Letter) (describing Verizon's Fios services, which are high-speed Internet services provided over Verizon's fiber networks); BellSouth June 5, 2003 *Ex Parte* Letter at 12-13 (describing BellSouth's negotiated RBAN service arrangement with EarthLink).

[224] *See, e.g.*, Qwest Apr. 10, 2003 *Ex Parte* Letter, Attach. at 2 (noting Qwest's "DSL+" access offering to 400 ISPs); Qwest May 23, 2003 *Ex Parte* Letter, Attach. at 5 (describing this service).

[225] Qwest Apr. 10, 2003 *Ex Parte* Letter, Attach. at 2, 10.

[226] *See* Letter from Donald E. Cain, Vice President-Federal Regulatory, SBC, & David P. McClure, USIIA, to Marlene H. Dortch, Secretary, FCC, CC Docket No. 02-33, at 1-2 & Attach. at 2 (filed May 3, 2002) (SBC and USIIA May 3, 2002 *Ex Parte Letter*) (describing memorandum of understanding dated May 2, 2002). This memorandum of understanding has no expiration date. *See id.*, Attach. at 1-2.

[227] *See, e.g.*, Verizon Comments at 31 (explaining that the significant costs to upgrade its network can be recovered through use of its network by other broadband providers.)

[228] *See, e.g.*, BellSouth June 5, 2003 *Ex Parte* Letter at 16-18.

[229] *See id.*

[230] *See, e.g.*, Big Planet Comments at 16-17; EarthLink Comments at 19-20; ITAA Comments at 12-18; Ohio ISP Assoc. *et al.* Comments at 39-41; *Earthlink et al. Streamlining Proposal* at 6-7; Letter from Maura J. Colleton, The BroadNet Alliance, to Marlene H. Dortch, Secretary, FCC, CC Docket Nos. 02-33, 98-10, & 95-20, Attach. at 26-29 ("The Significant Role of Online Service Providers in the Development and Success of the Information Age") (filed July 1, 2002) (BroadNet Alliance July 1, 2002 *Ex Parte* Letter).

motivate wireline carriers to negotiate mutually acceptable rates, terms, and conditions with unaffiliated ISPs. We strongly encourage the parties to work together to develop individual contracts that are mutually beneficial to each party.

76. We also expect that the rapid growth and development of innovative broadband service offerings, including IP telephony, among the different broadband Internet access platform providers, particularly cable modem, will provide significant incentives to facilities-based wireline carriers to increase subscriber usage of wireline-based Internet access services *vis-à-vis* cable modem and other platform providers of broadband Internet access services.[231] That is, to the extent that IP telephony services provided via other broadband platforms erode revenues that the BOCs and other incumbent LECs derive from traditional voice services, these carriers will have incentives to mitigate this potential revenue loss by retaining customers on the wireline broadband platform to the maximum extent possible.[232] Providing wholesale wireline broadband transmission to independent ISPs, whether through partnering, stand-alone transmission agreements, or other types of commercial service arrangements, would ensure that the facilities-based carrier derives some financial benefit from that customer.

e) A Change of Course Is Justified

77. As we have noted above, the Act does not address directly how wireline broadband Internet access service should be classified or regulated.[233] Through section 706, however, it does provide the Commission with a specific mandate to encourage broadband deployment, generally, and to promote and preserve a freely competitive Internet market, specifically.[234] Indeed, Congress mandated that the Commission encourage broadband capability "without regard to any transmission media or technology" and "remove barriers to infrastructure investment."[235]

78. Because our decision necessarily relies, in part, on our predictive judgment regarding a rapidly changing, dynamic industry, we do not pretend that there is a single, clear-cut answer. [236] As with the Commission's previous decisions to adopt and then modify the *Computer Inquiry* requirements, the decision that we must make today – whether or not to retain the *Computer Inquiry* requirements in some form – at its core involves an assessment of the relative costs and benefits of the various alternatives. In making this assessment, we must consider the broadband objectives Congress established in section 706.[237] Those objectives make clear that the Commission must encourage the deployment of advanced

[231] *See, e.g.*, Verizon June 26, 2003 *Ex Parte* Letter at 3 (noting that VoIP is an example of a new and emerging service that incumbent LECs will need to provide to be competitive with cable and other broadband providers).

[232] *See* BellSouth June 5, 2003 *Ex Parte* Letter at 11-13.

[233] *See supra* para. 8.

[234] *See supra* paras. 3, 8.

[235] *See* 47 U.S.C. § 157 nt.

[236] *See Wold Communications*, 735 F.2d at 1475 (noting that the public interest is served if the Commission's powers remain sufficiently elastic to address dynamic developments in the communications field, especially when Congress had taken no "specific action geared to the industry"); *compare Transponder Sales Order*, 90 FCC 2d at 1248-49, para. 28 ("The Communications Act was adopted long before the advent of communications satellites, and therefore it nowhere mandates that domestic satellite operators be regulated as common carriers.").

[237] *See* 47 U.S.C. § 157 nt (§ 706 of the Act). In the *Fourth Section 706 Report*, the Commission concluded, as it did in the previous three section 706 reports, that the overall goal of section 706 is being met, and that advanced telecommunications capability is being deployed to all Americans in a reasonable and timely fashion. In this *Fourth* (continued . . .)

telecommunications capability to all Americans by removing barriers to infrastructure investment. The D.C. Circuit recently upheld a similar Commission balancing approach that considered section 706's goals of swift, ubiquitous broadband deployment in adopting unbundling rules for mass market next generation broadband-capable loops pursuant to section 251(c)(3) of the Act.[238] Therefore, in assessing the alternative regulatory frameworks for wireline broadband Internet access services, we must ensure that the balance struck provides adequate incentives for infrastructure investment.

79. The following factors guide us toward replacing the *Computer Inquiry* obligations for wireline broadband Internet access service providers with a less regulatory framework: the increasing integration of innovative broadband technology into the existing wireline platform; the growth and development of entirely new broadband platforms; the flexibility to respond more rapidly and effectively to new consumer demands; and our expectation of the availability of alternative competitive broadband transmission to the currently required wireline broadband common carrier offerings. We believe our actions today will enhance each of these factors. Fostering the ubiquitous availability of broadband Internet access to all Americans across multiple competitive broadband platforms is best accomplished by recalibrating regulation where it is appropriate to do so.[239] Fulfilling our statutory obligations and policy objectives to maximize the acceleration of all types of broadband infrastructure deployment no longer requires a Commission-mandated wholesale *wireline* broadband Internet access transmission market.[240] Requiring a single type of broadband platform provider (*i.e.*, wireline) to make available its transmission on a common carriage basis is neither necessary nor desirable to ensure that the statutory objectives are met.[241] Indeed, as the evidence demonstrates, continuing this requirement would contravene these objectives. Importantly, this does not mean that we sacrifice competitive ISP choice for greater deployment of broadband facilities. Rather, as we have explained above, our reasoned judgment tells us that sufficient marketplace incentives are in place to encourage arrangements with innovative ISPs. Indeed, the incentives are growing as cable modem and wireline providers compete head-to-head with

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Report, the Commission stated that to continue the further growth of broadband Internet access services, we will need to apply "[m]inimal regulation of advanced telecommunications networks and services." *Fourth Section 706 Report*, at 9.

[238] *USTA II*, 359 F.3d at 578-85; *see Triennial Review Order*, 18 FCC Rcd at 17121, para. 234. Considering these 706 objectives, the Commission imposed only limited unbundling obligations on incumbent LECs' mass market next-generation broadband loop architectures, yet ensured that access to unbundled narrowband facilities was available where appropriate. *Id.* at 17141-54, paras. 272-97.

[239] *See Wold Communications*, 735 F.2d at 1475 (citing *FCC v. WNCN Listeners Guild*, 450 U.S. at 595 (Congress gave the Commission "sweeping authority" over rapidly unfolding enterprises); *CCIA v. FCC*, 693 F.2d at 212; *NARUC I*, 525 F.2d at 645; & *Philadelphia Television Broadcasting Co. v. FCC*, 359 F.2d 282 (D.C. Cir. 1966)) (public interest touchstone permits Commission to substitute marketplace for direct Commission regulation); *see also NCTA v. Brand X*, slip op. at 30 (affirming the Commission's "fresh analysis" of regulations in the wake of changed market conditions).

[240] Our statutory obligations and policy objectives guide us in the direction that maximizes the acceleration of all types of broadband infrastructure deployment. Indeed, Congress specifically directed the Commission to encourage broadband capability "without regard to any transmission media or technology." *See* 47 U.S.C. § 157 nt.

[241] *See, e.g.*, *Wold Communications*, 735 F.2d at 1468 (citing *FCC v. WNCN Listeners Guild*, 450 U.S. at 595 (giving the Commission particular deference with respect to policy judgments and predictions of the direction in which the public interest lies in a "fast-moving field of technology")). Continued *Computer Inquiry* obligations could have a chilling impact not only on the continued deployment of wireline broadband infrastructure, but on other new and innovative technologies.

one another and other platform providers such that wireline platform providers will find it necessary and desirable to negotiate arrangements with unaffiliated ISPs for access to their broadband networks in order to grow the base of users of their broadband infrastructures.

80. Weighing all of these factors, we conclude that the elimination of our *Computer Inquiry* requirements for wireline broadband Internet access service providers, subject to the transitional mechanism described below, best facilitates the accomplishment of our broadband goals and objectives in light of the rapidly changing market conditions for broadband Internet access services.[242] We expect this new framework to enable consumers to reap the benefits of advanced wireline broadband Internet access services that incorporate the latest technologically advanced integrated equipment, on a more widely available and more timely basis than if we maintained the existing regime.

81. In taking this action, we note that some commenters argue that we must undertake a forbearance analysis pursuant to section 10 of the Act before we can remove our *Computer Inquiry* requirements.[243] We do not agree. The Commission is free to modify its own rules at any time to take into account changed circumstances.[244] The *Computer Inquiry* requirements are not mandated by statute but, rather, were adopted prior to the 1996 Act in the exercise of the Commission's policy judgment. Indeed, the Supreme Court affirmed the Commission's determination that the 1996 Act did not "unambiguously freeze[] in time the *Computer II* treatment of facilities based information service providers."[245] As such, in our discretion, subject to reasoned explanation, we are free to alter the policy judgment reflected in those requirements based on our assessment of their relevant costs and benefits in light of changed technological and market conditions.[246]

82. We also find that we need not retain the *Computer Inquiry* regime, or any of its individual requirements, to protect against improper cross-subsidization. When the Commission developed the *Computer Inquiry* rules, wireline carriers, including the BOCs, typically charged rates developed under rate base, cost-of-service regulation. The Commission was concerned that allowing wireline carriers to provide enhanced services would increase the rates captive ratepayers would have to pay for common carrier telecommunications services, as the carriers would have every incentive to include the costs of their enhanced services operations in their cost-of-service calculations for those services. The Commission therefore developed safeguards (*e.g.*, structural separation in *Computer II* and non-structural accounting safeguards in connection with *Computer III*) designed to reduce the potential for improper

[242] *See NCTA v. Brand X*, slip op. at 30 (noting the changed market conditions, *i.e.*, the existence of "substitute forms of Internet transmission").

[243] 47 U.S.C. § 160; Letter from Florence Grasso, Covad, to Marlene H. Dortch, Secretary, FCC, CC Docket No. 02-33, Attach. at 5 (filed Oct. 21, 2002). This situation is different than what the court examined in *Association of Communications Enterprises v. FCC*, 235 F.3d 662 (D.C. Cir. 2001) (*ASCENT v. FCC*), where the court held that the Commission could not relieve an entity of section 251 obligations without conducting a section 10 analysis.

[244] *NCTA v. Brand X*, slip op. at 9 (citing *Chevron U.S.A. Inc. v. Natural Resources Defense Council, Inc.*, 467 U.S. 837, 863-64 (1984), for the propositions that an agency interpretation "'is not instantly carved in stone'" but rather the "'agency must consider varying interpretations and the wisdom of its policy on a continuing basis'").

[245] *NCTA v. Brand X*, slip op. at 24 (affirming that the Commission's *Computer II* rules were not a function of statutory definitions, "but instead of a choice by the Commission to regulate more stringently, in its discretion, certain entities that provided enhanced services").

[246] *See NCTA v. Brand X*, slip op. at 15 ("Nothing in the Communications Act or the Administrative Procedure Act makes unlawful the Commission's use of its expert policy judgment to resolve these difficult questions.").

cross-subsidization.[247] In 1994, the Ninth Circuit affirmed the Commission's judgment that the non-structural accounting safeguards had eliminated any need to retain structural separation as a safeguard against cross-subsidization.[248] The court stated, in particular, that price cap regulation had left the BOCs "with little incentive to shift costs" from their enhanced services operations to tariffed telecommunications services because they were not "able to increase regulated rates to recapture those costs."[249]

83. The Commission's ratemaking methods and those of our state counterparts have changed considerably since the Ninth Circuit addressed the need for structural separation as a safeguard against cross-subsidization in 1994.[250] We conclude that changes have further reduced the potential that the BOCs could increase rates for tariffed telecommunications services through cost shifting. Indeed, unlike the situation before the Ninth Circuit in 1994, the BOCs' costs are no longer used to determine the BOCs' price cap rates.[251] In view of this reduced potential, we find that there is no need to retain either the *Computer II* structural separation requirement or the *Computer III* nonstructural safeguards to keep the BOCs from cross-subsidizing their broadband Internet access service operations with revenues from the telecommunications services operations. The benefits we anticipate from the elimination of these structural and nonstructural safeguards, including the increased infrastructure investment that our new framework should generate, outweigh any protection against cross-subsidization that those safeguards provide.

84. Based on the record before us, it is not necessary to make a finding of market non-dominance as to the incumbent LECs in the provision of broadband Internet access transmission, as some parties have asked us to do, before we may eliminate the *Computer Inquiry* obligations. We decline to do so.[252] Nor

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[247] *See, e.g.*, *Computer II Final Decision*, 77 FCC 2d at 462, para. 205 (structural separation); *Joint Cost Order*, 2 FCC Rcd at 1310-34, paras. 94-289 (non-structural accounting safeguards).

[248] *California III*, 39 F.3d at 926-27; *see also supra* n.80.

[249] *California III*, 39 F.3d at 926.

[250] *See, e.g.*, *Multi-Association Group (MAG) Plan for Regulation of Interstate Services of Non-Price CAP Incumbent Local Exchange Carriers and Interexchange Carriers*, CC Docket No. 00-256, Report and Order and Second Further Notice of Proposed Rulemaking, 19 FCC Rcd 4122, 4153-55, paras. 70-72 (2004) (*MAG Order*) (tracing evolution of our ratemaking from cost-of-service ratemaking through price caps with sharing to the current Coalition for Affordable Local and Long Distance Service (CALLS) regime); Letter from Richard T. Ellis, Director-Federal Regulatory Advocacy, Verizon, to Marlene H. Dortch, Secretary, FCC, at 3 (filed Jan. 6, 2004) (Verizon Jan. 6, 2004 *Ex Parte* Letter) (pointing out that, in most states, cost allocation results do not affect rates for local telephone services).

[251] The price cap plan in place in 1994 contained two mechanisms – "sharing" (which required a price cap carrier to return to ratepayers a portion of earnings above a specified level) and low-end adjustments (which provided for increases in the price cap indices upon a showing that a price cap carrier had earned returns below a specified level in a given year – whose operation would have enabled a BOC to profit from shifting costs to tariffed interstate services. In 1997, the Commission eliminated the sharing mechanism. *See Price Cap Performance Review for Local Exchange Carriers*, CC Docket No. 94-1, Fourth Report and Order, CC Docket No. 96-262, Second Report and Order, 12 FCC Rcd 16642, 16700-03, paras. 148-55 (1997), *aff'd in part & rev'd in part sub nom. USTA v. FCC*, 188 F.3d 521 (D.C. Cir. 1999). In addition, each of BOCs has foregone its opportunity to seek low-end adjustments as a condition of using our pricing flexibility rules to price access services. *See generally MAG Order*, 19 FCC Rcd at 4154, para. 72.

[252] A determination to compel the provision of a service by regulation is not equivalent to a finding that the provider of the service is dominant in the market for that service. Each issue is the subject of a distinct inquiry. Therefore, it (continued . . .)

do we think it necessary or appropriate to make findings about dominance or non-dominance with respect to the retail market for broadband Internet access.[253] The Commission developed its distinction between dominant carriers, which possess individual market power, and non-dominant carriers, which lack individual market power, to enable it to develop a regulatory environment appropriate for a telecommunications industry that was in the early stages of evolving from one "where service was provided largely on a monopoly basis to one where a degree of competition [existed] for the provision of some communications services."[254] As discussed above,[255] this market environment differs markedly from the dynamic and evolving broadband Internet access marketplace before us today where the current market leaders, cable operators and wireline carriers, face competition not only from each other but also from other emerging broadband Internet access service providers. This rapidly changing market does not lend itself to the conclusions about market dominance the Commission typically makes to determine the degree of regulation to be applied to well-established, relatively stable telecommunications service markets.[256] On the contrary, any finding about dominance or non-dominance in this emerging broadband Internet access service market would be premature.

85. In addition, our long-standing *Computer Inquiry* regulations, which apply only to wireline facilities-based carriers, have required wireline carriers to provide wholesale transmission for Internet access, whether broadband or narrowband, since the genesis of the Internet. This mandated participation by these providers has affected the wholesale market for broadband Internet access transmission. Applying a traditional market dominance analysis to a situation where the facilities-based wireline carriers have been required to provide service on specified terms and conditions while the market was still relatively undefined (and remains dynamic and evolving even today) would lead to a result that would be misleading and could be self-fulfilling. Therefore, we believe that a conclusive finding about dominance or non-dominance of these carriers in this context is ill-suited and inappropriate. Instead, for an emerging market that cannot be characterized with certainty at this particular point in time, and will likely be subjected to rapid technological and competitive developments, we find that the public interest is best served if we permit competitive marketplace conditions to guide the evolution of broadband Internet access service.[257]

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is not necessary that we affirmatively find incumbent LECs to be non-dominant as a prerequisite to taking the steps set forth in this Order.

[253] Were we to do so, however, given the relative market share of cable modem service providers *vis-à-vis* wireline broadband Internet access service providers, we find it highly unlikely that wireline broadband Internet access service providers would be found to be dominant.

[254] *Policies and Rules Concerning Rates for Competitive Common Carrier Services and Facilities Authorizations Therefor*, CC Docket No. 79-252, Notice of Inquiry and Proposed Rulemaking, 77 FCC 2d 308, 309 (1979) (*Competitive Carrier NOI and NPRM*). Dominant carriers under Title II are subject to a broad range of regulatory requirements that are generally intended to protect consumers from unjust and unreasonable rates, terms, and conditions, and unreasonable discrimination in the provision of regulated services. In contrast, non-dominant carriers now are subject to significantly reduced regulation.

[255] *See supra* Part V.B.2.a.

[256] The analysis we conduct in this Order is different from the impairment analysis we relied upon in the *Triennial Review Order*, which also considered generally the potential market power of the incumbent LEC.

[257] *See, e.g.*, CompTel 01-337 Comments at 3 (maintaining that "[t]he broadband market is in a state of flux, and any market delineations that may tentatively exist today could be changed or eliminated tomorrow").

C. New Regulatory Framework for Wireline Broadband Internet Access Service Providers

86. We adapt our regulatory requirements, consistent with the Act, to correct for restrictions on wireline broadband Internet access service providers' ability to incorporate advanced integrated technology into their broadband offerings, impediments to responding rapidly and efficiently to changing broadband market demands due to outdated existing rules,[258] and constraints on broadband innovation and infrastructure investment.[259] We eliminate the *Computer Inquiry* obligations as applied to facilities-based providers of wireline broadband Internet access service, and, in particular, the obligation to offer the transmission component of wireline broadband Internet access service on a stand-alone common carrier basis. Facilities-based wireline broadband Internet access service providers, subject to a one-year transition period which we also adopt, may choose to offer the transmission component of wireline broadband Internet access services to both affiliated and unaffiliated ISPs or others on a non-common carrier basis or a common carrier basis.[260] We incorporate this flexibility into our new framework to account for the differing business issues affecting different wireline broadband Internet access service providers. For example, associations of rural incumbent LECs have indicated that their members may choose to offer broadband Internet access transmission service on a common carrier basis.[261] Thus, unlike previous Commission initiatives (*e.g.*, the deregulation of CPE),[262] we are not eliminating carriers' ability to offer wireline broadband transmission on a Title II basis. Indeed, as we discuss below, enabling carriers to offer broadband Internet access transmission in alternative ways furthers our policy objectives and is consistent with precedent.

1. Wireline Broadband Internet Access Service Providers May Offer Transmission Service on a Non-Common Carrier Basis or a Common Carrier Basis

a) Non-Common Carriage Arrangements

87. The record demonstrates that allowing non-common carriage arrangements for wireline broadband transmission will best enable facilities-based wireline broadband Internet access service providers, particularly incumbent LECs, to embrace a market-based approach to their business relationships with ISPs, providing the flexibility and freedom to enter into mutually beneficial commercial arrangements with particular ISPs.[263] Facilities-based wireline carriers as well as certain

[258] *See supra* Part V.B.2.b (discussing the current constraints on innovative integrated broadband offerings)

[259] *E.g.*, SBC Comments at 25 ("Not only do the existing requirements limit the way wireline broadband providers may design and engineer their facilities, they also constrain the way such providers structure their relationships with ISPs"); *see, e.g.*, BellSouth Comments at 19-20; Verizon Comments at 18-21; SBC Reply at 22-23; USTA Apr. 2, 2003 *Ex Parte* Letter at 3.

[260] As discussed in paragraphs 98-99 below, existing common carrier wireline broadband Internet access transmission service offerings provided to current ISP and other customers must continue to be made available to those customers during the one-year transition period.

[261] *See, e.g.*, Letter from L. Marie Guillory, NTCA, to Marlene H. Dortch, Secretary, FCC, CC Docket No. 02-33, Attach. at 1 (filed Mar. 7, 2003) (NTCA Mar. 7, 2003 *Ex Parte* Letter).

[262] *See Computer II Final Decision*, 77 FCC 2d at 438-47, paras. 140-60 (explaining that CPE must be de-tariffed because it is a commodity severable from the provision of transmission services and because the offering of CPE in conjunction with regulated services has a direct effect on rates charged for the services).

[263] *See, e.g.*, BellSouth Apr. 2, 2003 *Ex Parte* Letter, Attach. at 3 (stating that contract carriage increases the ability of customers to negotiate service arrangements that best address their particular needs); SBC Mar. 7, 2003 *Ex Parte* Letter at 9, 13; *see also supra* n.222.

portions of the ISP community and broadband equipment manufacturers agree that market-based commercial arrangements will better serve the interests of ISPs, broadband providers, and consumers.[264]

88. Non-common carriage contracts will permit ISPs to enter into various types of compensation arrangements for their wireline broadband Internet access transmission needs that may better accommodate their individual market circumstances.[265] For example, ISPs and facilities-based carriers could experiment with revenue-sharing arrangements or other types of compensation-based arrangements keyed to the ISPs' marketplace performance, enabling the ISPs to avoid a fixed monthly recurring charge (as is typical with tariffed offerings) for their transmission needs during start-up periods.[266] Non-common carriage also enables parties to a contract to modify their arrangement over time as their respective needs and requirements change without the inherent delay associated with a tariffed offering that must be made available to all ISPs.[267] Moreover, it encourages other types of commercial arrangements with ISPs, reflecting business models based on risk sharing such as joint ventures or partnership-type arrangements, where each party brings their added value, benefiting both the consumer (through the ability to obtain a new innovative service) and each party to the commercial arrangement.[268] Such arrangements may also encourage unaffiliated ISPs to develop innovative applications and services that differentiate them from other ISPs. The ability to deliver such innovative services over their platforms in order to attract customers will likely motivate wireline facilities-based broadband transmission providers to negotiate mutually beneficial arrangements that enable the wireline facilities-based broadband transmission provider to share the financial rewards of bringing the new Internet access applications or services to consumers.

b) Common Carriage Offerings

89. A number of parties have indicated that some carriers may nevertheless choose to offer the transmission component of broadband Internet access service as a common carrier service absent the *Computer Inquiry* requirements.[269] Other parties have indicated they would avail themselves of the

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[264] *See, e.g.*, Alcatel Comments at 10; SBC Reply (attaching memorandum of understanding between SBC and USIIA, dated May 2, 2002); *see also* BellSouth Comments at 20-22; HTBC Reply at 6-7.

[265] For example, certain unaffiliated ISP niche-market providers develop service applications tailored to particular customer market segments (*e.g.*, health care providers, the real estate industry, and corporate telecommuters) providing features such as enhanced security that can only occur on the ISP side of the Internet. We expect that non-common carrier arrangements will encourage the development of greater niche-market services as ISPs negotiate customized arrangements that pair their specialized niche offerings with the BOCs' transmission capabilities.

[266] *See, e.g.*, Verizon May 20, 2003 *Ex Parte* Letter, Attach. at 17; Verizon Nov. 25, 2002 *Ex Parte* Letter, Attach. at 5.

[267] Verizon May 20, 2003 *Ex Parte* Letter, Attach. at 17; *see also* BellSouth Apr. 2, 2003 *Ex Parte* Letter, Attach. at 3.

[268] *See, e.g.*, *Cable Modem Declaratory Ruling*, 17 FCC Rcd 4828-29, paras 52-53 (discussing various types of non-common carriage arrangements between cable modem broadband providers and unaffiliated ISPs); *see also* Verizon June 26, 2003 *Ex Parte* Letter at 4.

[269] *See, e.g.*, Letter from Richard A. Askoff, Executive Director, Regulatory and Government Relations, NECA, Dan Mitchell, Vice President, Legal and Industry, NTCA, Stuart Polikoff, Director of Government Relations, OPASTCO, David W. Zesiger, Executive Director, ITTA, James W. Olson, Vice President, Law & General Counsel, USTA, & Derrick Owens, Director of Government Affairs, Western Telecommunications Alliance, to Marlene H. Dortch, Secretary, FCC, CC Docket No. 02-33, Attach. at 1-2 (filed July 22, 2005) (NECA July 22, (continued . . .)

opportunity to offer certain types of broadband Internet access transmission on a common carrier basis and other types of broadband Internet access transmission on a non-common carrier basis.[270] Our primary goal in this proceeding is to facilitate broadband deployment in the manner that best promotes wireline broadband investment and innovation, and maximizes the incentives of all providers to deploy broadband. We find that we can best further this goal by providing all wireline broadband providers the flexibility to offer these services in the manner that makes the most sense as a business matter and best enables them to respond to the needs of consumers in their respective service areas.

90. We therefore conclude that providers of wireline broadband Internet access service that offer that transmission as a telecommunications service after the effective date of this Order may do so on a permissive detariffing basis.[271] Such providers thus may, in lieu of filing tariffs with the Commission setting forth the rates, terms, and conditions under which they will provide broadband Internet access transmission service, include those rates, terms, and conditions in generally available offerings posted on their websites.[272] Each such provider electing not to tariff the broadband Internet access transmission that it offers as a telecommunications service also must make physical copies of its offering reflecting the rates, terms and conditions available for public inspection at a minimum of one place of business.

91. While we do not believe that we need to perform a forbearance analysis under section 10 of the Act to allow permissive detariffing,[273] we find that each of the three forbearance criteria is nonetheless met. Specifically, the reasons that persuade us not to require that the transmission component of wireline broadband Internet access service be offered as a telecommunications service under Title II also persuade

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2005 *Ex Parte* Letter); NTCA Mar. 7, 2003 *Ex Parte* Letter at 2. These associations, which represent rural incumbent LECs, indicate that their members may choose to offer some wireline broadband transmission on a common carrier basis even if we eliminate the *Computer Inquiry* requirements. These associations also explain that their members' progress in deploying broadband in rural areas to date has been attributable to an ability to lower the costs of deployment through participation in the National Exchange Carrier Association, Inc. (NECA) pooling arrangements or other tariffed rate structures that reflect rate of return regulation. *See, e.g.*, NCTA Mar. 7, 2003 *Ex Parte* Letter at 2. To participate in a NECA pool, a carrier must offer an interstate telecommunications service pursuant to a federally filed, NECA tariff that contains the same rates, terms, and conditions of service for all participating carriers. The rates for these services are based on the pooled or averaged costs of each participating carrier. Without the ability to continue tariffing broadband transmission services, rural incumbent LECs explain that they would be unable to afford the investment necessary to deploy facilities necessary to provide broadband Internet access services.

[270] For example, Qwest has indicated it may continue offering a common carrier DSL transmission service to end users (*i.e.*, its current retail "DSL+" transmission service), while entering into individually tailored arrangements with ISPs for other types of broadband transmission. *See* Qwest May 23, 2003 *Ex Parte* Letter, Attach. at 3-5 (describing Qwest's "DSL+" access offering); *see also infra* para. 95 (specifying that a facilities-based wireline broadband Internet access provider may not simultaneously offer the same type of broadband Internet access transmission on both a common carrier and a non-common carrier basis).

[271] *See infra* paras. 98-101 (explaining the one-year transition and granting blanket certification to discontinue the provision of common carrier broadband Internet access transmission services to existing customers).

[272] Carriers electing to offer new transmission services on a permissive detariffing basis must comply with section 63.71 if they later decide to cease offering such service on a common carrier basis. By contrast, carriers electing permissive detariffing for existing transmission services during the transition period are covered by our blanket certification to discontinue the provision of those existing common carrier broadband Internet access transmission services. *See infra* para. 101.

[273] 47 U.S.C. § 160.

us that application of the tariffing provisions in Title II is "not necessary to ensure that the charges, practices, classifications, or regulations by, for, or in connection with that telecommunications carrier or telecommunications service are just and reasonable and are not unjustly or unreasonably discriminatory" within the meaning of section 10(a)(1).[274] In particular, competition from other broadband Internet access service providers, particularly cable modem service providers, will pressure wireline carriers that choose to provide broadband Internet access transmission as a common carrier service to offer their customers rates, terms, and conditions that are just, reasonable, and not unreasonably discriminatory. These carriers, like wireline carriers that offer broadband Internet access transmission on a non-common carrier basis, will have business incentives to attract both end user and ISP customers to their networks in order to spread network costs over as much traffic and as many customers as possible.[275] These incentives, in combination with the requirements that the carrier publish and make generally available any rates, terms, and conditions for broadband Internet access transmission offered on a common carrier basis,[276] should provide protection against unjust, unreasonable, and unjustly or unreasonably discriminatory rates, terms, and conditions comparable to that available under a tariffing regime.

92. The need to attract end user and ISP customers also makes clear that tariffing "is not necessary for the protection of consumers" within the meaning of section 10(a)(2).[277] On the contrary, permissive detariffing will enable broadband Internet access service providers to respond to changing consumer demands more quickly than would be possible under a tariffing regime. Thus, in comparison to a mandatory tariffing regime, permissive detariffing will benefit consumers by making it more likely that they will be offered innovative service arrangements responding to their changing needs.

93. Finally, the public interest considerations that persuade us not to mandate a telecommunications service offering in the first place also persuade us that a permissive tariffing regime for voluntary broadband Internet access telecommunications service offerings "is consistent with the public interest" within the meaning of section 10(a)(3).[278] In particular, we find that mandatory tariffing of these voluntary offerings would unnecessarily constrain how wireline carriers may offer broadband Internet access transmission as a telecommunications service. We also find that by removing this unnecessary constraint, permissively detariffing these telecommunications service offerings will promote competitive market conditions. Since we find that each of the statutory forbearance criteria is met, we forbear from application of these tariffing provisions in Title II to voluntary offerings of broadband Internet access transmission as a telecommunications service.[279]

94. Consequently, to enable facilities-based wireline Internet access providers to maximize their ability to deploy broadband Internet access services and facilities in competition with other platform providers, under a regulatory framework that provides all market participants with the flexibility to determine how best to structure their business operations, facilities-based carriers are able to choose whether to offer wireline broadband Internet access transmission as non-common carriage or common carriage. In addition, to the extent they choose to offer that transmission as common carriage, they may do so either under tariff or on a non-tariffed basis. The Commission, on numerous occasions, has

[274] 47 U.S.C. § 160(a)(1).

[275] *See supra* Part V.B.2.d.

[276] *See supra* para. 90.

[277] 47 U.S.C. § 160(a)(2).

[278] 47 U.S.C. § 160(a)(3).

[279] 47 U.S.C. §§ 203-05.

determined that a particular service can be offered on a non-common carrier or common carrier basis at the service provider's option.[280] Similarly, here, we conclude that it is appropriate to provide facilities-based wireline broadband Internet access service providers with freedom to determine how to provide the broadband transmission capabilities of such services.[281]

95. In order to ensure that this flexible approach is consistent with statutory requirements, efficient, and administrable, we specify that a facilities-based wireline broadband Internet access provider may not simultaneously offer the same type of broadband Internet access transmission on both a common carrier and non-common carrier basis. It may, however, choose to make available one type of broadband Internet access transmission on a common carrier basis and *another type of such transmission* on a non-common carrier basis. Of course, any transmission offering that a facilities-based wireline broadband Internet access provider makes available on a tariffed common carrier basis will be subject to the terms contained in its tariff and, consistent with Title II of the Act, the provider may charge customers for that service only at the rates contained in the tariff.[282]

[280] In several prior instances, the Commission has permitted carriers to decide how to offer a service (*i.e.*, as non-common or common carriage). *See, e.g.*, 47 C.F.R. §§ 27.10 (designated wireless communication services), 90.1309 (wireless broadband services); 101.533 (24 GHz fixed microwave services); 101.1017 (local multipoint distribution service). In an order concerning multichannel video and data distribution service, for example, the Commission found that "the option of choosing either common carrier and/or non-common carrier status will provide maximum flexibility and restrict unnecessary regulatory burden for this service." *See Amendment of Parts 2 and 25 of the Commission's Rules to Permit Operation of NGSO FSS Systems Co-Frequency with GSO and Terrestrial Systems in the Ku Band Frequency Range*, ET Docket No. 98-206, RM-9147, RM-9245, Memorandum Opinion and Order and Second Report and Order, 17 FCC Rcd 9614, 9676, para. 157 (2002). Similarly, with respect to wireless carriers, the Commission stated that it will "allow the service offering selected by a [wireless communications service] licensee to determine its regulatory status." *See Wireless Operations in the 3650-3700 MHZ Band*, ET Docket No. 04-151; *Rules for Wireless Broadband Services in the 3650-3700 MHZ Band*, ET Docket No. 05-96; *Additional Spectrum for Unlicensed Devices Below 900 MHZ and in the 3 GHZ Band*, ET Docket No. 02-380; *Amendment of the Commission's Rules with Regard to the 3650-3700 MHZ Government Transfer Band*, ET Docket No. 98-237, Report and Order and Memorandum Opinion and Order, 20 FCC Rcd 6502, paras. 35-36 (2005) (allowing providers to offer wireless broadband services on a common carrier or non-common carrier basis because such an approach will provide them with the greatest flexibility to use the spectrum for service applications that are best suited for their needs, and encourage multiple entrants and stimulate expansion of wireless broadband services); *Amendment of the Commission Rules to Establish Part 27, the Wireless Communications Service ("WCS")*, GN Docket No. 96-228, Report and Order, 12 FCC Rcd 10785, 10847-48, paras, 120 & 122 (1997); *see also Amendment to the Commission's Regulatory Policies Governing Domestic Fixed Satellites and Separate International Systems*, IB Docket No. 95-41, Report and Order, 11 FCC Rcd 2429, 2436, paras. 45-50 (1996) (giving fixed satellite service operators the choice of operating as common carriers or non-common carriers, and allowing the opportunity to elect their regulatory classifications in their applications). In this latter order, the Commission modified its policy set forth in the *Transponder Sales Order* by concluding that market forces had eliminated any need to require domestic satellite licensees to provide capacity on a common carrier basis. *Id.* at 2436, paras. 45-46 & 49 (citing *Transponder Sales Order*, 90 FCC 2d at 1252).

[281] *See infra* paras. 87-88.

[282] *See Orloff v. FCC*, 352 F3d 415, 418 (D.C. Cir. 2003) (*citing MCI Telecom. Corp. v. AT&T*, 512 U.S. 218, 220 (1994)).