

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

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In the Matter of)
)
Appropriate Framework for Broadband)
Access to the Internet over Wireline Facilities)
)
Universal Service Obligations of Broadband)
Providers)
)
Computer III Further Remand Proceedings:)
Bell Operating Company Provision of)
Enhanced Services; 1998 Biennial Regulatory)
Review – Review of Computer III and ONA)
Safeguards and Requirements)

CC Docket No. 02-33

CC Dockets Nos. 95-20, 98-10 /

Notice of Proposed Rulemaking

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Commissioner Copps concurring in part, dissenting in part, and issuing a statement;
Commissioner Martin approving in part, dissenting in part, and issuing a statement

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when they provide broadband telecommunications services.¹³ Third, in the *Triennial UNE Review Notice*, we address, among other things, the incumbent LECs' wholesale obligations under section 251 to make their facilities available as unbundled network elements to competitive LECs for the provision of broadband services.¹⁴ These latter two proceedings thus investigate how Title II regulation applies to broadband service provided as telecommunications services and whether facilities that can be used to provide broadband services should be subject to Title II unbundling obligations. By contrast, this Notice addresses the fundamental definitional and classification questions for wireline broadband Internet access services. Because the instant inquiry overlaps with the Commission's pending *Computer III Further Remand*, we incorporate the *Computer III Further Remand* proceeding by reference insofar as it relates to the BOCs' access obligations with respect to broadband services.¹⁵

B. Scope of this Proceeding

9. In this fourth proceeding of our comprehensive broadband policy, we examine broadband Internet access services provided by entities that are using the traditional telephone platform to offer that service. This proceeding is the functional equivalent to the *Cable Modem NOI*, which considers broadband Internet access services provided over the cable plant. Consistent with the Act and the policy goals and principles outlined above, we launch this rulemaking to classify the provision of wireline broadband Internet access services, and to consider the regulatory implications of that classification.

10. The development of the Internet,¹⁶ the main driver behind the current proliferation of broadband Internet access services, has been astonishing. After a period of government

¹³ *Review of Regulatory Requirements for Incumbent LEC Broadband Services; SBC Petition for Expedited Ruling That it is Non-Dominant in its Provision of Advanced Services and for Forbearance From Dominant Carrier Regulation of These Services*, CC Docket No. 01-337, Notice of Proposed Rulemaking, FCC 01-360, 16 FCC Rcd 22745 (rel. Dec. 20, 2001) (*Incumbent LEC Broadband Notice*).

¹⁴ *Review of Section 251 Unbundling Obligations of Incumbent Local Exchange Carriers*, CC Docket No. 01-338; *Implementation of the Local Competition Provisions of the Telecommunications Act of 1996*, CC Docket No. 96-98; *Deployment of Wireline Services Offering Advanced Telecommunications Capability*, CC Docket No. 98-147, Notice of Proposed Rulemaking, FCC 01-361, 16 FCC Rcd 22781 (rel. Dec. 20, 2001) (*Triennial UNE Review Notice*).

¹⁵ *Computer III Further Remand Proceedings: Bell Operating Company Provision of Enhanced Services; 1998 Biennial Regulatory Review – Review of Computer III and ONA Safeguards and Requirements*, CC Dockets Nos. 95-20; 98-10, Further Notice of Proposed Rulemaking, 13 FCC Rcd 6040 (1998) (*Computer III Further Remand*); Report and Order, 14 FCC Rcd 4289 (1999) (addressing certain portion of the *Computer III Further Remand*) (*Computer III March 1999 Order*), *recon.*, 14 FCC Rcd 21628 (1999); see also *Further Comment Requested to Update and Refresh Record on Computer III Requirements*, CC Dockets Nos. 95-20; 98-10, Public Notice, DA 01-620 (rel. Mar. 7, 2001) (asking whether information service providers (ISPs) can obtain, under the open network architecture (ONA) framework, the telecommunications inputs they require from the bell operating companies (BOCs), including DSL service).

¹⁶ Fundamentally, the Internet is a global, packet switched network that enables interconnection between networks using Internet Protocol (IP). The Supreme Court has described the Internet as “an international network of interconnected computers.” *Reno v. ACLU*, 521 U.S. 844, 849-50 (1997). The Internet traces its beginnings to a government-sponsored networking project known as the ARPANET. Begun as a Defense Department network, the (continued....)

broadband² infrastructure has become the central communications policy objective of the day.³ It is widely believed that ubiquitous broadband deployment will bring valuable new services to consumers, stimulate economic activity, improve national productivity, and advance economic opportunity for the American public. The promise of broadband generally, and the proliferation of broadband Internet access services specifically, are fostering the creation, adoption and use of multimedia applications that can meet consumers' broad communications, entertainment, information, and commercial needs and desires. These factors demand that the Commission develop general principles and policy goals that form the foundation of our broadband policymaking.

2. Before outlining these principles and goals, however, it is appropriate to note that the Commission's broadband policy will first and foremost be guided by, and grounded in, the Communications Act. Furthermore, as a policy matter, we recognize that the statutory objectives to promote competition and universal service have not changed.

3. In this proceeding, we are guided by the following principles and policy goals: *First*, it is the Commission's primary policy goal to encourage the ubiquitous availability of broadband to all Americans. Indeed, Congress has explicitly charged the Commission to "encourage the deployment on a reasonable and timely basis" of broadband capabilities to "all Americans," and gave the Commission authority to "take immediate action to accelerate deployment of such capability by removing barriers to infrastructure investment," if necessary.⁴ In addition, Congress has expressly stated that it is the policy of United States to "promote the continued development of the Internet and other interactive computer services and other

² The Commission has recognized that the terms "broadband" and "broadband services" are elusive concepts, as they have come to mean many different things to many different people. See *Inquiry Concerning the Deployment of Advanced Telecommunications Capability to All Americans in a Reasonable and Timely Fashion, and Possible Steps to Accelerate Such Deployment Pursuant to Section 706 of the Telecommunications Act of 1996*, Third Report, CC Docket 98-146, FCC No. 02-33 at para. 11 and n.23 (rel. Feb. 6, 2002) (*Third Section 706 Report*); accord *Inquiry Concerning the Deployment of Advanced Telecommunications Capability to All Americans in a Reasonable and Timely Fashion, and Possible Steps to Accelerate Such Deployment Pursuant to Section 706 of the Telecommunications Act of 1996*, Second Report, 15 FCC Rcd 20913, 20920, para. 11 (2000) (*Second Section 706 Report*). The Commission, therefore, has separately defined "advanced telecommunications capability and advanced services," for the purposes of section 706 Reports as having the capability to support both upstream and downstream speeds in excess of 200 Kbps in the last mile. *Third Section 706 Report*, FCC No. 02-33 at para. 9 (internal quotations omitted); accord *Second Section 706 Report*, 15 FCC Rcd at 20919-20, para. 10. The Commission has "denominate[d] as 'high-speed' those services with over 200 kbps capability in at least one direction." *Second Section 706 Report*, 15 FCC Rcd at 20920; accord *Third Section 706 Report*, FCC No. 02-33 at para. 9.

³ As noted by the Computer Science and Telecommunications Board of the National Research Council, the costs and benefits of "broadband are being discussed in communities, state and regional government entities, and in the Federal Communications Commission and Congress at the national level—as well as in trade associations, consumer advocacy and other public interest groups, and by civic organizations, telecommunications Internet policy scholarship forums, and groups concerned with international economic development." Committee on Broadband Last Mile Technology, National Research Council, *Broadband: Bringing Home the Bits*, 1-2 (Prepublication Copy 2001) (*Bringing Home the Bits*).

⁴ § 706(a) and (b) of the Telecommunications Act of 1996 (1996 Act), Pub. L. 104-104, Title VII, Feb. 8, 1996, 110 Stat. 153, reproduced in the notes under 47 U.S.C. § 157nt.

telephone network infrastructure.¹⁹ Our most recent data show that this incremental network buildout enabled large increases in high-speed Internet access subscribership.²⁰

12. As demand for broadband Internet access services has grown, telephone companies have increased the speed and capacity of their networks by deploying fiber closer to the end user to support emerging high-bandwidth applications and to enhance network performance. The logical technological evolution of the network is the complete or near-complete replacement of copper lines with end-to-end fiber optic transmission facilities. Given the expense of deploying end-to-end fiber, however, facilities-based providers are engaged in incremental infrastructure investment that builds on existing technology. While fiber optic platforms can deliver speeds well in excess of existing xDSL technologies, in the residential market, the “last mile” to the customer is almost always bridged through existing technologies such as xDSL. Although providers have already deployed some next-generation optical technologies in the core of the network, they are only now making these technologies available at the edges of the network, closer to the end-user. We recognize that xDSL may be the prevailing technology of the day for the last mile, but ongoing advances in technology may someday replace it as fiber moves close to or into the home.²¹ Cable operators have likewise invested in upgrades in their systems that allow them to provide high-speed Internet access services and have also deployed fiber closer to the end user.²² In this proceeding, we focus on the efforts of the telephone industry and their provision of broadband Internet access services utilizing the traditional telephone infrastructure, and the outgrowths of that infrastructure.

¹⁹ With the addition of certain electronics to the telephone line, carriers can transform the copper loop that already provides voice service into a conduit for high-speed traffic. Generally speaking, xDSL networks connect end user modems to twisted copper loops which in turn, connect end user modems to Digital Subscriber Line Access Multiplexers (DSLAMs) located in telephone company central offices or remote terminals. DSLAMs synchronize end user addresses with telephone company equipment and also separate the voice frequency signals from the high-speed data traffic. Behind the DSLAM, telephone companies have typically deployed fiber optic connections and asynchronous transfer mode (ATM) switching equipment to carry requests for Internet content to and from end-users. In this manner, ATM “cells” envelope IP packets and transport the IP packets to their destination on the Internet where IP-based information is returned and again transported inside ATM cells. Like other broadband platforms, xDSL networks utilizing ATM transport also may provide for protocol processing, IP address number management, domain name resolution through domain name servers (DNS), network security and encryption and caching.

²⁰ In the past 18 months, high-speed Internet access services subscribership increased by 350 percent. As of June 2001, there were 9.6 million high-speed lines in service. Subscription by residential and small business customers to xDSL services has increased from about 350,000 lines in December 1999 to 2.7 million in June 2001. *Third Section 706 Report*, FCC No. 02-33 at App. C, Table 1, 3.

²¹ For example, SBC has announced the deployment of a Broadband Passive Optical Networking (BPON) architecture. See www.sbc.com/data/BPON_Fact_Sheet.doc (viewed Jan. 24, 2002).

²² The typical upgrade employs what is commonly known as an HFC architecture. In an HFC-upgraded system, fiber optic cables are deployed from a cable operator's headend (the origination point for signals in the cable) to neighborhood nodes. Located at the headend is a Cable Modem Termination System (CMTS), which manages the flow of data between cable subscribers and the Internet or other equipment.

computer services, unfettered by Federal and State regulation.”⁹ At the same time, however, the Commission must always be alert and ready to act against anticompetitive risks and discriminatory provisioning by dominant providers that result in consumer harm.

6. *Fourth*, the Commission will strive to develop an analytical framework that is consistent, to the extent possible, across multiple platforms. Our regulatory framework will derive from the unique attributes of broadband Internet access. The Commission will avoid simply extending existing rules that were crafted to govern legacy services provided over legacy networks. Over many years, several distinct major networks have been deployed and optimized to provide very specific services. Legacy regulations were based on technical and market assumptions concerning these networks and the services they delivered.

7. Service providers across platforms are now in the process of re-engineering these legacy networks to provide broadband Internet access. We recognize that because these legacy networks have historically been regulated differently, the migration to digital broadband systems may raise different questions for different platforms. We believe that the statute and our precedent suggest a functional approach, focusing on the nature of the service provided to consumers, rather than one that focuses on the technical attributes of the underlying architecture.¹⁰ For this reason, we expressly recognize that a consistent analytical framework may not lead to identical regulatory models across platforms. Indeed, legal, market, or technological distinctions may require different regulatory requirements between platforms, or between certain types of providers of one particular platform. At the same time, there are overarching policy objectives that are similar regardless of platform and should be harmonized to the greatest extent possible. This will become increasingly more important, for as fiber is deployed closer to the home, the nature and character of different platforms may well become less distinguishable.

8. The Commission has initiated three other proceedings that focus on the regulatory treatment of broadband. These proceedings, together with the policies discussed above, and this Notice, build the foundation for a comprehensive and consistent national broadband policy. First, near the end of 2000, the Commission launched the *Cable Modem NOI*.¹¹ This considers, among other issues, the appropriate regulatory classification for cable modem service, which is used to provide high-speed Internet access.¹² Second, in the *Incumbent LEC Broadband Notice*, we examine whether incumbent LECs that are dominant in the provision of traditional local exchange and exchange access service should also be considered dominant

⁹ 47 U.S.C. § 230(b)(2).

¹⁰ This functional regulatory approach is embodied in the Act’s classification of distinct service categories, such as “information services,” “cable service,” and “telecommunications services.” See discussion *infra* Section II; see also *Federal-State Joint Board on Universal Service*, CC Docket No. 96-45, Report to Congress, 13 FCC Rcd 11501, 11520, para. 39 (rel. Apr. 10, 1998) (*Report to Congress*).

¹¹ *Cable Modem Notice*, 15 FCC Rcd at 19287.

¹² See *id.* at 19293-98, paras. 15-24.

service providers. Thus, classifying Internet access as an information service in this context left open significant questions regarding the treatment of Internet (and information) service providers that own their own transmission facilities and that engage in data transport over those facilities to provide an information service.²⁹ In addition, the Commission did not explicitly address the regulatory classification of wireline broadband Internet access services.

15. We again confronted the issue of how to address the regulatory treatment of Internet access service provided over a carrier's own transmission facilities in the recent *Missouri/Arkansas 271 Order*.³⁰ Specifically, SBC argued in that proceeding that it provides three categories of DSL-related services: retail telecommunications services which it offers for resale at a discount, wholesale telecommunications services which it offers to unaffiliated ISPs, and retail information services. With respect to the latter two categories of services, SBC argued that it does not provide DSL telecommunications service at retail and thus, had no obligation to make these services available for resale pursuant to the section 251(c)(4) discount. We concluded that neither the Act nor Commission precedent explicitly addressed the situation where an incumbent LEC does not offer DSL transport at retail, but instead offers only an Internet access service.³¹ We noted that how we would decide questions about the regulatory treatment of the DSL transmission facilities underlying SBC's Internet access service could have far-reaching implications for a wide range of issues that would be more appropriately handled in a separate proceeding.³²

16. This Notice seeks to answer many of the questions left unanswered in both the *Report to Congress* and the *Missouri/Arkansas 271 Order*. This Notice is divided into several parts. In section II, we address the appropriate classification of wireline broadband Internet access services. We tentatively conclude that wireline broadband Internet access services – whether provided over a third party's facilities or self-provisioned facilities – are information services subject to regulation under Title I of the Act, and we ask for comment on this tentative conclusion.” As noted above, we have already sought comment on the regulatory classification for cable modem service, and this issue will be resolved in a separate proceeding.³³ In section III, in furtherance of our guiding principles and policy goals discussed in section I.A., we address the appropriate regulatory framework for wireline broadband Internet access services. We seek comment on what regulations should apply in the future if these broadband offerings are found to

²⁹ *Id.* at 11534, para. 69.

³⁰ See *Joint Application by SBC Communications Inc., Southwestern Bell Telephone Company, and Southwestern Bell Communications Services, Inc. d/b/a Southwestern Bell Long Distance Pursuant to Section 271 of the Telecommunications Act of 1996 to Provide In-Region, InterLATA Services in Arkansas and Missouri*, CC Docket No. 01-194, Memorandum Opinion and Order, 16 FCC Rcd 20719, 20759-60, paras. 81-82 (2001) (*SBC MO/AR 271 Order*).

³¹ See *id.* at 20758-60, paras. 80-82.

³² See *id.* at 20759-60, para. 82 and n.256 (citing *Report to Congress*, 13 FCC Rcd at 11532-37, paras. 66-75).

³³ *Cable Modem Notice*, 15 FCC Rcd at 19293, para. 14.

stewardship that lasted from the 1960s to the early 1990s, the Internet entered a commercial phase characterized by more widespread network interconnection, an explosion of applications and access to a growing universe of websites utilizing common, interoperable protocols.¹⁷ Today, many of these websites have evolved into content-rich information portals that are matched to the broad commercial, educational or entertainment demands of Internet users.

11. As applications proliferated and demand for Internet access services grew, service providers augmented network capacity, first to offer dial-up narrowband Internet access and later to offer broadband Internet access services.¹⁸ Traditional telephone providers and new entrants made improvements to their networks that built upon and leveraged existing public switched

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military portion of Defense Advanced Research Project Agency network (ARPANET), was integrated into the Defense Data Network in the early 1980s and the civilian ARPANET was taken out of service in 1990. Around this time, the National Science Foundation's NSFNET, a transmission control protocol (TCP)/IP network, experienced increased usage and eventually eclipsed the ARPANET in terms of total users connected. See Kevin Werbach, *Digital Tornado: The Internet and Telecommunications Policy*, Office of Plans and Policy Working Paper Series 29, 15 (1997).

¹⁷ The Supreme Court noted that:

[a]nyone with access to the Internet may take advantage of a wide variety of communication and information retrieval methods," such as "electronic mail, automatic mailing list services ('mail exploders,' sometimes referred to as 'listserves'), 'newsgroups,' 'chat rooms,' and the 'World Wide Web.' All of these methods can be used to transmit text; most can transmit sound, pictures, and moving video images. Taken together, these tools constitute a unique medium—known to its users as 'cyberspace'—located in no particular geographic location but available to anyone, anywhere in the world.

Reno v. ACLU, 521 U.S. at 851.

¹⁸ Dial-up or narrowband Internet access utilizes the same public switched telephone network (PSTN) infrastructure that telephone subscribers use to place traditional circuit-switched voice calls. In the mid- to late-1990s, residential dial-up Internet access achieved throughput speeds generally between 14.4 kbps and 53 kbps. *Id.* at 24. Today residential xDSL services are offered at a range of speeds from less than 500 kbps to 7 Mbps. See generally *Third Section 706 Report*, FCC No. 02-33 at paras. 79-88.

“telecommunications service” as “the offering of telecommunications for a fee directly to the public, or to such classes of users as to be effectively available to the public, regardless of facilities used.”³⁹

19. The Act defines “telecommunications” as “the transmission, between or among points specified by the user, of information of the user’s choosing, without change in the form or content of the information as sent and received.”⁴⁰ Under this definition, an entity *provides* telecommunications only when it both provides a transparent transmission path *and* it does not change the form or content of the information.⁴¹ If this offering is made directly to the public for a fee, it is deemed a “telecommunications service.”⁴² On the other hand, “[w]hen an entity offers subscribers the ‘capability for generating, acquiring, storing, transforming, processing, retrieving, utilizing or making available information *via telecommunications*,’ it does not *provide* telecommunications, it is *using* telecommunications.”⁴³

20. Applying this statutory framework, we tentatively conclude that providers of wireline broadband Internet access service offer more than a transparent transmission path to end-users and offer enhanced capabilities. Thus, we tentatively conclude that this service is properly classified as an “information service” under section 3 of the Act.⁴⁴ We base this tentative conclusion on the fact that providers of wireline broadband Internet access provide subscribers with the ability to run a variety of applications that fit under the characteristics stated in the information service definition.

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Rules and Regulations (Computer III Phase I Order), CC Docket No. 85-229, Report and Order, 104 FCC 2d 958 (1986). That distinction was between basic data transmission service on the one hand and, on the other, a combination of that transmission and computer-mediated offerings. That combination produces “enhanced” or information services. This distinction was incorporated into the Modification of Final Judgment, which governed the BOCs after the bell system break-up, and into the 1996 Act. *Federal-State Joint Board on Universal Service*, CC Docket No. 96-45, Report to Congress, 13 FCC Rcd 11501, 11536, para. 75 (1998) (*Universal Service Report*), citing *United States v. Western Electric Co.*, 673 F. Supp. 525 (D.D.C. 1987), and 714 F. Supp. 1 (D.D.C. 1988), *rev’d in part*, 900 F.2d 283 (D.C. Cir. 1990).

³⁹ 47 U.S.C. § 153(46).

⁴⁰ *Id.* § 153(43).

⁴¹ *Report to Congress*, 13 FCC Rcd at 11521, para. 41. Therefore, “an entity offering a simple, transparent transmission path, without the capability of providing enhanced functionality, *offers* ‘telecommunications.’” *Id.* at 11520, para. 39 (emphasis added).

⁴² The Commission rejected the argument that “a service qualifies as a ‘telecommunications service’ whenever the service provider transports information over transmission facilities, without regard to whether the service provider is using information-processing capabilities to manipulate that information or provide new information.” *Id.* at 11520-21, para. 40.

⁴³ *Id.* at 11521, para. 41 (emphasis added).

⁴⁴ This is consistent with the finding in the *Report to Congress* that “Internet access services are appropriately classed as information, rather than telecommunications, services.” *Id.* at 11536, para 73. The Commission noted that “Internet access providers do not offer a pure transmission path; they combine computer processing, information provision, and other computer-mediated offerings with data transport.” *Id.*

13. The Commission has in the past faced similar situations involving the need to classify new services under existing regulatory and statutory frameworks. The classification of wireline broadband Internet access services, however, raises challenging legal, regulatory, and policy questions resulting from unique issues associated with these capabilities, including differing market and technical characteristics, and the fact that broadband technologies may ultimately replace legacy narrowband networks. Because wireline broadband Internet access services fuse communications power with powerful computer capabilities and content, these services appear to fall within the class of services that the Commission has traditionally identified as “information services,” which blend communications with computer processing. Yet, broadband offerings may differ in form and scope from previous information services. The Commission has viewed information services such as voice mail, telemessaging, or credit card validation to be an incremental extension of the existing narrowband telecommunications network. It has described information services as using the “existing telephone network to deliver services that provide more than a basic transmission offering,”²³ or as “enhancements that build upon basic services.”²⁴ Today, however, the capabilities made possible by broadband capable facilities enable the deployment of new, bandwidth-intensive, multimedia information services, which in turn drive the use and further deployment of broadband capable facilities.

14. We recognize that the legal and policy issues associated with classifying Internet access service as either a telecommunications service or an information service under the Act have been raised previously, but not fully resolved, in two Commission proceedings. Specifically, in 1998, the Commission addressed the status of information services in its *Report to Congress* on universal service.²⁵ In that report, the Commission reaffirmed its understanding that “the categories of ‘telecommunications service’ and ‘information service’ in the 1996 Act are mutually exclusive.”²⁶ The Commission generally concluded that Internet access services²⁷ are information services, not telecommunications services.²⁸ The Commission recognized, however, that its analysis focused on ISPs as entities procuring inputs from telecommunications

²³ See *Computer III March 1999 Order*, 14 FCC Rcd at 4293, n.11 (citations omitted).

²⁴ *Amendment of Section 64.702 of the Commission’s Rules and Regulations*, CC Docket No. 20828, Final Decision, 77 FCC 2d 384, 429, para. 117 (1980) (*Computer II*), *recon.*, 84 FCC 2d 50 (1980) (*Computer II Reconsideration Order*), *further recon.*, 88 FCC 2d 512 (1981), *aff’d sub nom.*, *Computer and Communications Indus. Ass’n v. FCC*, 693 F.2d 198 (D.C. Cir. 1982), *cert. denied*, 461 U.S. 938 (1983).

²⁵ See generally *Report to Congress*, 13 FCC Rcd at 11501.

²⁶ See *id.* at 11520, para. 39 and 11530, para. 59 (reiterating that the categories of “telecommunications service” and “information service” are “mutually exclusive”); see also *Implementation of the Non-Accounting Safeguards of Sections 271 and 272 of the Communications Act of 1934, as Amended*, CC Docket No. 96-149, First Report and Order and Further Notice of Proposed Rulemaking, 11 FCC Rcd 21905, 21955-56, para. 102 (1996) (*Non-Accounting Safeguards Order*).

²⁷ The Commission has defined “Internet access services” as services that “alter the format of information through computer processing applications such as protocol conversion and interaction with stored data.” *Report to Congress*, 13 FCC Rcd at 11516-17, para. 33 (citations and internal quotations omitted); see also 47 C.F.R. § 54.4 (defining “Internet access” for universal service regulation in Part 54).

²⁸ *Report to Congress*, 13 FCC Rcd at 11529-40, paras. 56-82.

description of the *Computer II* and *Computer III* regulatory framework,⁵¹ the obligations deriving from those proceedings currently apply to the provision of wireline broadband Internet access services by facilities-based telephone companies.

23. In the *Frame Relay Order*, the Common Carrier Bureau stated that it would “treat[] frame relay service as a basic service [because doing so] provides competitive access to the underlying basic service of facilities-based carriers.”⁵² The Bureau added that it would require AT&T to “unbundle the basic frame relay service, regardless of whether the [AT&T’s] offering also provides a combined, enhanced protocol conversion and transport service for those customers who require it.”⁵³ While not addressing the classification of the transmission component directly, the Commission also recognized in the 1998 *Computer III Further Notice* that the 1996 Act established terminology and safeguards that could impact the *Computer III* regime, including for the provision of Internet access service.⁵⁴ In the *Report to Congress* described above, the Commission stated that information services “necessarily require a transmission component in order for users to access information.”⁵⁵ The Commission has also more recently addressed a carrier’s provision of xDSL as a transmission service to competitive Internet service providers.⁵⁶

24. We analyze whether wireline broadband Internet access service provided over the provider’s own facilities is an information service, a telecommunications service, or both. As an initial matter, we tentatively conclude that nothing about the nature of wireline broadband Internet access services offered over a provider’s own facilities changes the fact that the end-user service is an information service. Consistent with the statutory analysis described above, a provider of end-user wireline broadband Internet access service delivered over its own facilities provides the end-user the “capability for generating, acquiring, storing, transforming, processing, retrieving, utilizing, or making available information via telecommunications.”⁵⁷ We believe that the end user is receiving an integrated package of transmission and information processing capabilities from the provider. We believe that the fact that the provider owns the transmission

⁵¹ See discussion *infra* paras. 33-42.

⁵² *Indep. Data Communications Manuf. Ass’n, Inc. Petition for Declaratory Ruling and Am. Tel. and Tel. Co. Petition for Declaratory Ruling*, 10 FCC Rcd 13717, 13722, para. 35 (1995) (*Frame Relay Order*).

⁵³ *Id.* at 13722-23, para. 41 (citations omitted). The Bureau also referred to section 202 as being applicable to the basic transmission service used to provide enhanced services. *Id.* at 13719, para. 13.

⁵⁴ See *Computer III Further Remand*, 13 FCC Rcd at 6045-46, 6064-67, 6090-92, at paras. 5, 37-42, 92-96 and n.232.

⁵⁵ *Report to Congress*, 13 FCC Rcd at 11529, para. 57.

⁵⁶ *Policy and Rules Concerning the Interstate, Interexchange Marketplace; Implementation of Section 254(g) of the Communications Act of 1934, as amended; 1998 Biennial Regulatory Review—Review of Customer Premises Equipment and Enhanced Services Unbundling Rules in the Interexchange, Exchange Access and Local Exchange Markets*, CC Docket Nos. 96-61 and 98-183, Report and Order, 16 FCC Rcd 7418, 7445-46, para. 46 (2001) (*CPE/Enhanced Services Unbundling Order*).

⁵⁷ 47 U.S.C. § 153(20).

be information services subject to Title I of the Act.³⁴ Specifically, we examine implications of Title I classification for wireline broadband offerings for non-discriminatory access and other core communications policy objectives.³⁵ In light of these objectives, we seek comment on whether to modify or eliminate existing access obligations on providers of self-provisioned wireline broadband Internet access services. We seek comment on how this regulatory classification may impact other obligations, such as those associated with public safety and welfare. In addition, we seek comment generally on the role of the states with respect to regulating wireline broadband Internet access services. Finally, in section IV, we seek comment broadly on whether facilities-based providers of broadband Internet access services provided over wireline and other platforms, including cable, wireless and satellite, should be required to contribute to universal service.³⁶

II. APPLICATION OF STATUTORY CLASSIFICATIONS TO WIRELINE BROADBAND INTERNET ACCESS SERVICES

17. In this section, we examine the appropriate classification for wireline broadband Internet access service. As discussed more fully below, we tentatively conclude that, as a matter of statutory interpretation, the provision of wireline broadband Internet access service is an information service. Specifically, we tentatively conclude that when an entity provides wireline broadband Internet access service over its own transmission facilities, this service, too, is an information service under the Act. In addition, we tentatively conclude that the transmission component of retail wireline broadband Internet access service provided over an entity's own facilities is "telecommunications" and not a "telecommunications service." We seek comment on these tentative conclusions and ask additional questions with regard to the proper classification of wireline broadband Internet access service.

18. In classifying wireline broadband Internet access service, we look first and foremost to the text of the Act. In 1996, Congress created a definition of "information service" that is distinct from "telecommunications service."³⁷ The Act defines "information service" as "the offering of a capability for generating, acquiring, storing, transforming, processing, retrieving, utilizing, or making available information via telecommunications."³⁸ The Act defines

³⁴ See discussion *infra* paras. 30 – 61.

³⁵ These access questions are limited; we do not address access for cable. That issue is handled in the Cable Modem proceeding. See *Cable Modem Notice*, 15 FCC Rcd at 19295, 19298-19306, paras. 20, 25-49.

³⁶ For purposes of this Notice, we use the term "facilities-based" to refer to providers of broadband Internet access services that furnish their own last-mile connection, irrespective of the transmission medium, to the customer.

³⁷ See discussion *supra* para. 14.

³⁸ 47 U.S.C. § 153(20). Congress further specified that the term "information service" includes "electronic publishing, but does not include any such capability for the management, control, or operation of a telecommunications system or the management of a telecommunications service." *Id.* The term "information service" follows from a distinction the Commission drew in the *First, Second, and Third Computer Inquiries* ("Computer I," "Computer II," and "Computer III"). See generally *Regulatory and Policy Problems Presented by the Interdependence of Computer and Communication Services and Facilities*, Docket No. 16979, Notice of Inquiry, 7 FCC 2d 11 (1966) (*Computer I*); *Computer II*, 77 FCC 2d 384; *Amendment of Section 64.702 of the Commission's* (continued....)

“telecommunications service” under the Act.⁶² If xDSL is being offered on a wholesale basis as an input to ISPs’ information services, is it being offered “directly to the public”? In this regard, commenters should discuss how judicial and Commission definitions of common carriage might apply, and address whether ISPs – as a class – might be interpreted as the “public” under the statutory definition of “telecommunications service.”⁶³ Commenters should also discuss the circumstances under which owners of transmission facilities offer broadband transmission on a private carriage basis. Specifically, we seek comment on whether and how the Commission might regulate incumbent LEC provision of broadband to third-party ISPs as private carriage. Further, to the extent that a carrier continued to offer xDSL transmission under tariff, would *all* xDSL transmission services offered by that carrier be deemed “telecommunications services,” or could certain xDSL services be concurrently offered through individually negotiated contracts as private carriage?⁶⁴ Commenters should discuss both statutory and policy rationales in support of their suggested classification.

27. Although we tentatively conclude that wireline broadband Internet access service is an information service, we ask parties to comment on whether it should be classified as something other than an information service. For example, is there anything about the self-provision of this service that alters the function provided to the end user such that the service should be classified as a telecommunications service? Alternatively, should it be classified as two separate services, both an information service and a telecommunications service? Should it instead be classified as a new kind of hybrid communications service, neither an information service nor a telecommunications service?⁶⁵

28. As we indicated above, we are also considering concurrently with this proceeding in the *Incumbent LEC Broadband Notice* whether incumbent LECs that are dominant in the provision of local exchange and exchange access service should also be considered dominant when they provide broadband telecommunications services. In order to consider broadband

⁶² The Commission has determined that xDSL transport services provided by incumbent LECs to ISPs generally will not be considered services provided “at retail,” and are designed to be “an input component to the Internet Service Providers’ retail high-speed Internet service.” *Deployment of Wireline Services Offering Advanced Telecommunications Capability*, Second Report and Order, 14 FCC Rcd 19237, 19244-45, paras. 15, 17 (1999).

⁶³ See, e.g., *State of Iowa v. FCC*, 218 F.3d 756 (D.C. Cir. 2000); *Federal-State Joint Board on Universal Service*, Order on Remand, CC Docket No. 96-45, 16 FCC Rcd 571 at paras. 8-13 (2001) (“legal restrictions on the class of authorized users are not necessarily relevant to [common carrier status under *NARUC I*] but availability of “indiscriminate service” among entities within each class of users is important); see also *Deployment of Wireline Services Offering Advanced Telecommunications Capability*, CC Docket No. 98-147, Second Report and Order, 14 FCC Rcd 19237, 19247 para. 21 (1999) (AOL Bulk Services Order).

⁶⁴ Commenters, to the extent relevant, should discuss the standards for private carriage and common carriage that they deem appropriate for broadband transmission, whether using xDSL or other wireline technologies. See, e.g., *NARUC v. FCC*, 525 F.2d 630, 641, 644 n.76 (D.C. Cir. 1976); *NARUC v. FCC*, 533 F.2d 601, 608-609 (D.C. Cir. 1976); see also *Frame Relay Order*, 10 FCC Rcd at 13723-24, paras. 50-52.

⁶⁵ But see *Report to Congress*, 13 FCC Rcd at 11529-30, paras. 56-60 (concluding that hybrid services are information services).

21. For example, in the case where a wireline broadband Internet access service allows end-users to retrieve files from the World Wide Web, an end-user must have the capability to interact with information stored on the facilities of the provider of the wireline broadband Internet access service. Furthermore, to the extent to which a provider offers end-users the capability to store files on service provider computers to establish “home pages” on the World Wide Web, the consumer is utilizing a “capability for ... storing ... or making available information” to others. It seems, from these factual situations, and others, that providers of wireline broadband Internet access services provide end-users with more than pure transmission, “between or among points selected by the user, of information of the user’s choosing, without change in the form or content of the information service.”⁴⁵ Therefore, we tentatively conclude that Congress intended the definition of information service to include the capabilities provided by wireline broadband Internet access services. As mentioned above, we have interpreted the categories of information service and telecommunications service to be mutually exclusive.⁴⁶ In defining “information service,” Congress recognized that a transmission component is embedded within, and not separate and distinct from, the information service. As such, we view wireline broadband Internet access service as not consisting of two separate services, but as a single integrated offering to the end-user. We seek comment on this tentative conclusion and the supporting statutory analysis. In particular, we ask parties to offer any factual evidence that would suggest a contrary application of the statute.

22. In the past, the Commission has referred to the transmission aspect of traditional information services provided by facilities-based common carriers variously as a “service,” a “component,” a “facility,” and “capacity.” In *Computer II*, which we describe in more detail in section III *infra*, the Commission stated, “because enhanced services are dependent upon the common carrier offering of basic services, a basic service is the building block upon which enhanced services are offered.”⁴⁷ The Commission, however, also recognized the “existence of a communications component” within enhanced services.⁴⁸ Overall, the Commission defined “enhanced services” as “services offered over common carrier transmission facilities, which employ computer processing applications that act on the format, content, code, protocol or similar aspects of the subscriber’s additional, different or restructured information; or involve subscriber interaction with stored information.”⁴⁹ In *Computer III*, also described in section III *infra*, the Commission referred to the “basic services and basic service functions that underlie the carrier’s enhanced service offering” and required them to be “unbundled from other basic service offerings” and offered to competitive enhanced service providers.⁵⁰ As we state below in our

⁴⁵ 47 U.S.C. § 153(43).

⁴⁶ See discussion *supra* note 38.

⁴⁷ *Computer II Order*, 77 FCC 2d at 475, para. 231.

⁴⁸ *Id.* at 435, para. 132.

⁴⁹ *Id.* at 420, para. 97; 47 C.F.R. § 64.702(a).

⁵⁰ *Computer III Phase I Order*, 104 FCC 2d at 1040, para. 158.

that applied to the precursors of what the Act later defined as “information services” when those services are provided by facilities-based common carriers. As we will discuss, that framework was constructed to accomplish certain goals in a world in which the services at issue were more akin to voicemail and other narrowband applications, rather than to broadband Internet access. We ask below whether we should maintain the same framework for wireline broadband Internet access service given the technical and market characteristics of this service. We also ask what the implications would be for other regulatory requirements, including public safety and welfare, if we were to modify the access obligations.

32. We begin our inquiry by briefly summarizing the *Computer Inquiry* regime. In addition, we note that we undertake this proceeding in conjunction with the *Incumbent LEC Broadband Notice* in which we address whether we should modify the regulatory framework applied to broadband telecommunications services that are appropriately classified under Title II of the Act. As we describe below, we ask commenters to address how we can ensure that we undertake a consistent approach to broadband regulation in our pending proceedings, particularly as they address the potential implications of classification under either Title I or Title II of the Act.

A. Background on the *Computer Inquiry* Regime

33. The history of the Act and its implementation by the Commission shows that both Congress and the Commission have repeatedly modified and amended the existing regulatory regime to accommodate new services and technologies. In 1934, Congress defined two categories of regulated entities and their corresponding services: common carriers regulated under Title II and users of the radio spectrum regulated under Title III. Services generally fit neatly into these different categories because each service had discrete physical plant and readily identifiable service characteristics. For example, broadcasting services clearly fit under Title III because they depended almost entirely on wireless transmission for their point-to-multipoint communications, while telephony clearly fit under Title II because it used physical wires to establish point-to-point communications.

34. Over time, however, providers offered new services that did not fit neatly into either category. For example, cable services used wireline infrastructure for point-to-multipoint communications. After the Commission decided that it would not treat cable services as Title II common carrier services, Congress created a separate legislative regime under Title VI of the Act. Information services were another example of newly developed services that did not fit neatly into the existing regulatory framework. The Commission defined what would later be defined as “information services” under the 1996 Act as a distinct class of services in its *Computer Inquiry* line of decisions.⁶⁸ These decisions addressed the regulatory and policy issues

⁶⁸ *Regulatory and Policy Problems Presented by the Interdependence of Computer & Communications Services and Facilities*, 28 FCC 2d 267 (1971), *aff'd in part sub nom. GTE Service Corp. v. FCC*, 474 F.2d 724 (2d Cir. 1973), decision on remand, 40 FCC 2d 293 (1973) (*Computer I*); *Computer II*, 77 FCC 2d 384; *Computer III Phase I Order*, 104 FCC 2d 958, *recon.*, 2 FCC Rcd 3035 (1987) (*Phase I Recon. Order*), *further recon.*, 3 FCC Rcd 1136 (1988) (*Phase I Further Recon. Order*); *second further recon.*, 4 FCC Rcd 5927 (1989) (*Phase I Second Further Recon.*), *Phase I Order and Phase I Recon. Orders, vacated, California v. FCC*, 905 F.2d 1217 (9th Cir. 1990) (*California I*); *Phase II*, 2 FCC Rcd 3072 (1987) (*Phase II Order*), *recon.*, 3 FCC Rcd 1150 (1988) (*Phase II Recon. (continued....)*)

does nothing to change the nature of the service to the end-user.⁵⁸ Accordingly, we tentatively conclude that wireline broadband Internet access service provided over a provider's own facilities is an information service.

25. Additionally, we now tentatively conclude that, as a logical extension of our determination that the provision of wireline broadband Internet access service over a provider's own facilities is an information service, the transmission component of the end-user wireline Internet access service provided over those facilities is "telecommunications" and not a "telecommunications service." As stated above, an entity provides "telecommunications" (as opposed to merely using telecommunications) when it both provides a transparent transmission path and it does not change the form or content of the information. The provision of telecommunications rises to the level of a "telecommunications service" when it is offered "for a fee directly to the public."⁵⁹ As stated above, we tentatively conclude that providers of wireline broadband Internet access service that provision the service over their own facilities do not offer "telecommunications for a fee directly to the public." Indeed, it seems as if a provider offering the service over its own facilities does not offer "telecommunications" to anyone, it merely uses telecommunications to provide end-users with wireline broadband Internet access services, which, for the reasons we discuss above, we believe is an information service. Therefore, we tentatively conclude that in the case where an entity combines transmission over its own facilities with its offering of wireline Internet access service, the classification of that input is telecommunications, and not a telecommunications service. We seek comment on these tentative conclusions and the statutory analysis underlying them.

26. We also seek comment on our prior conclusion that an entity is providing a "telecommunications service" to the extent that such entity provides only broadband transmission on a stand-alone basis, without a broadband Internet access service.⁶⁰ Commenters should address what the appropriate statutory classification of broadband transmission should be when it is not coupled with the Internet access component.⁶¹ Commenters should also address whether the provision of wholesale xDSL transmission should be considered "telecommunications" or

⁵⁸ As the Commission stated in the *Report to Congress*, "[w]hen the information service provider owns the underlying [transmission] facilities, it appears that it should be treated as providing the underlying telecommunications. That conclusion, however, speaks only to the relationship between the facilities owner and the information service provider (in some cases the same entity); it does not affect the relationship between the information service provider and its subscribers." *Report to Congress*, 13 FCC Rcd at 11534, para. 69, n.138 (emphasis added).

⁵⁹ 47 U.S.C. § 153(43).

⁶⁰ See *Deployment of Wireline Services Offering Advanced Telecommunications Capability*, CC Docket No. 98-147, Memorandum Opinion and Order and Notice of Proposed Rulemaking, 13 FCC Rcd 24012, 24029, para. 35 (1998) (finding that advanced services such as xDSL constitute telecommunications services when offered to the public directly or on a stand-alone basis).

⁶¹ See Letter from William P. Barr, Verizon, to Michael K. Powell, Chairman, Federal Communications Commission (Jan. 9, 2002) (on file with Commission).

lead in deployment. In the context of this competition, telephone companies and various Internet and technology companies have begun to advocate that the Commission take steps that, to the extent the Act allows, would reduce the regulatory burdens and regulatory uncertainties the telephone companies face, and thereby provide incentives for those companies to continue or accelerate their investments in critical broadband infrastructure.

38. It was prior to the development of these very different legal, technological and market circumstances that the Commission initiated its *Computer Inquiry* line of cases. In *Computer I*, the Commission addressed the questions of whether data processing services should be subject to regulation under Title II of the Act, and whether, and under what conditions, all common carriers should be permitted to compete in the market for data processing services. Finding that the computer data services industry “is one characterized by open competition and relatively free entry,” the Commission concluded that it “should not, at this point, assert regulatory authority over data processing as such.”⁷⁰ Moreover, the Commission found that allowing common carriers to provide computer data services would likely benefit the public through “new and improved services and lower prices.”⁷¹ Yet the Commission also recognized that common carriers might be able to “favor their own data processing activities by discriminatory services, cross-subsidization, improper pricing of common carrier services, and related anticompetitive practices and activities.”⁷² Thus, the Commission required common carriers to furnish data processing services through a separate corporate entity that could not use regulated communications facilities to provide unregulated services.⁷³ Finally, the Commission prohibited common carriers from discriminating in favor of their data processing affiliates.⁷⁴

39. In *Computer II*, the Commission created the regulatory categories of “basic” services and “enhanced” services in order to more clearly distinguish regulated common carrier services from unregulated computer-data services.⁷⁵ It defined basic transmission service as limited to the Title II common carrier offering of transmission capacity for the movement of information.⁷⁶ Enhanced services, on the other hand, were described as using computer processing applications to act on the content, code, protocol or other aspects of the subscriber’s information.⁷⁷ The Commission further found that it possessed jurisdiction over enhanced

⁷⁰ *Computer I*, 28 FCC 2d at 270, at para. 11.

⁷¹ *Id.*

⁷² *Id.* at 270-71, para. 12.

⁷³ *See Computer II*, 77 FCC 2d at 389-91, paras. 14-18.

⁷⁴ *Id.* at 392-93, paras. 21-22.

⁷⁵ *Id.* at 417-23, paras. 86-101.

⁷⁶ *Id.* at 419-20, paras. 93-96.

⁷⁷ *Id.* at 420-21, paras. 97; *see also* 47 C.F.R. § 64.702(a) (Enhanced services are “services, offered over common carrier transmission facilities used in interstate communications, which employ computer processing applications that act on the format, content, code, protocol or similar aspects of the subscriber’s transmitted information; provide the subscriber additional, different, or restructured information; or involve subscriber interaction with stored (continued....)”).

issues in a consistent manner, we ask parties to comment on whether issues raised in that proceeding have an impact on the statutory classifications we are considering in this proceeding.

29. We also note that the 1996 Act uses and defines the term “advanced telecommunications capability” in section 706.⁶⁶ To date, the Commission has utilized this term for purposes of collecting data to measure the deployment of advanced telecommunications. We seek comment on whether wireline broadband Internet access services should be classified as an “advanced telecommunications capability.” We seek comment on the relevance, if any, that section 706 has to the issues raised in this proceeding.⁶⁷

III. REGULATORY FRAMEWORK FOR WIRELINE BROADBAND INTERNET ACCESS SERVICES

30. In determining the appropriate regulatory framework for wireline broadband Internet access service, we recognize that the relevant statutory classification is a first, albeit critical, step. Assuming that we adopt our tentative conclusion that wireline broadband Internet access services are information services under the Act, we must then determine what regulations, if any, should apply to the provision of these services. Above, we tentatively conclude that wireline broadband Internet access service is an “information service,” and that the transmission aspect of that service is “telecommunications.” One question that arises as we consider the regulatory implications of these tentative conclusions concerns what regulatory requirements, if any, should attach to the “telecommunications” input. We seek comment on this question. In particular, should any regulatory requirements imposed on the “telecommunications” input mirror those that generally apply to the provision of “telecommunications service” or “common carriage” under the Act? Or, should any such obligations follow some other model? Alternatively, in the event the Commission ultimately concludes that the transmission component of wireline broadband Internet access should be defined as “telecommunications service,” what obligations should flow from that classification? Commenters should address with specificity their justifications for whichever regulatory obligations they advocate.

31. But our inquiry regarding what regulations, if any, should apply to the provision of wireline broadband Internet access services is not limited to examining the obligations that should attach to the transmission aspect of such services. In particular, we recognize that several years ago the Commission adopted a regulatory framework (referred to as the *Computer Inquiry*)

⁶⁶ See 47 U.S.C. § 157nt.

⁶⁷ The notes to Section 157 of the Act define “advanced telecommunications capability” as “high-speed, switched, broadband telecommunications capability that enables users to originate and receive high-quality voice, data, graphics, and video telecommunications using any technology.” 47 U.S.C. § 157nt. This term is defined “without regard to any transmission media or technology.” *Id.* In addition, we have defined “advanced telecommunications capability” as “having the capability of supporting, in both the provider-to-customer (downstream) and the customer-to-provider (upstream) directions, a speed (in technical terms, ‘bandwidth’) in excess of 200 kilobits per second (kbps) in the last mile” and “high-speed services” to mean those services and facilities capable of providing speeds equal to or higher than 200 kbps in at least one direction. *Second Section 706 Report*, 15 FCC Rcd at 20919-20, paras. 10-11; *First Section 706 Report*, 14 FCC Rcd at 2406, para. 20. For an explanation of the rationale for these definitions, see *Second Section 706 Report*, 15 FCC Rcd at 20919-21, paras. 10-12.

requirements.⁸⁵ The Commission initially applied the *Computer III* rules to both AT&T and the BOCs, and then later relieved AT&T of most of the requirements. In 1994, the Commission extended the ONA requirements to GTE.⁸⁶

42. In sum, as a result of the requirements in *Computer II* and *Computer III*, BOCs that provide information services are required to offer the transmission component of the information service separately pursuant to tariff, and must also acquire such transmission for their own information service offerings pursuant to their tariff. The Commission has also stated that non-dominant common carriers owning transmission facilities and providing enhanced services must unbundle their basic from enhanced services and offer transmission capacity to other enhanced service providers under the same tariffed terms and conditions under which they provide such services to their own enhanced service operations.⁸⁷

B. Appropriate Regulatory Framework

1. Access Safeguards

43. We seek comment on whether the *Computer Inquiry* requirements should be modified or eliminated, and whether such requirements are overly broad or under inclusive as applied to the nascent broadband market. Specifically, we seek comment on the necessity and usefulness of these requirements as applied to self-provisioned wireline broadband Internet access service and whether it may be appropriate to impose alternative requirements to better address the technology and market characteristics of these services.

44. Because the rules adopted in the *Computer Inquiries* were based on assumptions shaped largely by certain service and market characteristics prevalent at the time, we seek comment on whether those assumptions, and the resulting rules, should be modified in the context of wireline broadband Internet access to account for such changes. For example, we seek comment on what significance we should place on the extent to which broadband Internet access services can be or are provided over a variety of differentiated network platforms, such as cable, wireless, and satellite. We note the Commission's recent *Incumbent LEC Broadband Notice* is examining the competitive characteristics of the domestic broadband telecommunications

⁸⁵ CEI is a nonstructural safeguard that requires that if a BOC offers enhanced service, it must offer network interconnection opportunities to competitive enhanced service providers that are comparably efficient to the interconnection that its own enhanced service operation enjoys. See *Computer III Phase I Order*, 104 FCC2d at 1019, para. 112. Both the BOCs and AT&T were initially subject to CEI requirements. *Id.* at 1026-27, paras. 129-31. In subsequent orders, the Commission first modified, and then relieved, AT&T of the CEI requirements. See *Computer III March 1999 Order*, 14 FCC Rcd at 4294-95, n.17-18 (and cases cited therein). The Commission has never imposed CEI requirements on GTE or any other independent LEC. ONA is the overall design of a carrier's basic network services to permit all users of the basic network, including the enhanced service operations of the carrier and its competitors, to interconnect to specific basic network functions and interfaces on an unbundled and equal access basis.

⁸⁶ See *Computer III Further Remand*, 13 FCC Rcd at 6043, n.5 (and citations therein).

⁸⁷ See *CPE/Enhanced Services Bundling Order*, 16 FCC Rcd at 7442, para. 40 (confirming access obligations for non-dominant carriers).

raised by the convergence of computer processing with communications and, in particular, how to differentiate between these services when they are provided by the same entity. The decisions also sought to consider whether the Commission should apply certain access and interconnection requirements where traditional telephone companies also provide computer processing applications to ensure a competitive environment for the new computer services.

35. We note at the outset that the *Computer Inquiry* line of decisions was initiated at a time when very different legal, technological and market circumstances presented themselves to the Commission. First and foremost, the Telecommunications Act of 1996 introduced a mandate that the Commission promote competition, deregulation and innovation wherever possible in the communications market. The Act clearly evidences Congress' intent to involve as many potential providers as possible to bring consumers the benefits of newer, better and more cost-effective products and services. Moreover, the Act introduced for the first time a number of core statutory-based policy objectives associated with the development of the Internet and the deployment of advanced services.⁶⁹

36. Second, with respect to technology, the core assumption underlying the *Computer Inquiries* was that the telephone network is the primary, if not exclusive, means through which information service providers can obtain access to customers. This network was optimized primarily to carry voice traffic and narrowband data applications, such as voicemail. Yet now information service providers may access customers over a variety of network platforms, such as cable, wireless and satellite. Some of these platforms are broadband, rather than narrowband, and they carry traffic to and from companies, educational institutions, organizations and other users through a global interconnected packet-switched network called the Internet. This technology allows users to interact with media, with information and with each other in ways and at speeds that were scarcely considered when the *Computer Inquiry* was begun.

37. Third, the technological evolution that enabled other network platforms to be used to provide information service enabled cable, wireless and satellite providers to begin to compete with the telephone network. In the broadband arena, the competition between cable and telephone companies is particularly pronounced, with cable modem platforms enjoying an early

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Order, further recon., 4 FCC Rcd 5927 (1989) (*Phase II Further Recon. Order*), *Phase II Order vacated*, *California I*, 905 F.2d 1217 (9th Cir. 1990); *Computer III Remand Proceedings*, 5 FCC Rcd 7719 (1990) (*ONA Remand Order*), recon., 7 FCC Rcd 909 (1992), *pets. for review denied*, *California v. FCC*, 4 F.3d 1505 (9th Cir. 1993) (*California II*); *Computer III Remand Proceedings; Bell Operating Company Safeguards and Tier I Local Exchange Company Safeguards*, 6 FCC Rcd 7571 (1991) (*BOC Safeguards Order*), recon. dismissed in part, *Order*, CC Docket Nos. 90-623 and 92-256, 11 FCC Rcd 12513 (1996); *BOC Safeguards Order vacated in part and remanded*, *California v. FCC*, 39 F.3d 919 (9th Cir. 1994) (*California III*), cert. denied, 115 S.Ct. 1427 (1995); *Computer III Further Remand*, 13 FCC Rcd 6040, Report and Order, 14 FCC Rcd 4289, recon., 14 FCC Rcd 21628 (1999).

⁶⁹ See 47 U.S.C. §§ 230(b)(1) and (2) (stating that the policy of the United States should be "to promote the continued development of the Internet and other interactive computer services and other interactive media" and "to preserve the vibrant and competitive free market that presently exists for the Internet and other interactive computer services, unfettered by Federal and State regulation"); *id.* § 157nt (encouraging "the deployment on a reasonable and timely basis of advanced telecommunications capability to all Americans . . .")

costs and benefits of those access requirements. For example, one alternative approach may be a policy that declines to impose certain *Computer III* requirements with respect to broadband Internet access services to the extent a BOC is achieving certain performance levels in the delivery of non-broadband services. Similarly, could requirements be imposed generally and then be removed on a state-by-state basis once a BOC has received section 271 authority from the Commission to provide long distance in that state and thereby demonstrated that it has opened its local exchange market to competition? Is it possible that once a certain amount of competition exists in the provisioning of key telecommunications functions, requirements like those of CEI and ONA may not be necessary to ensure that competing information service providers obtain the necessary inputs for delivery of their high-speed services? We seek comments on these potential alternatives and welcome the suggestion of others. To the extent the Commission adopts a modified *Computer III* regime, should we also adopt an analogous regime for the *Computer II* requirements? In addition, we ask parties to comment on how any requirements the Commission may modify or eliminate with respect to the provision of wireline broadband Internet access should affect the requirements for making available the underlying transmission path of "narrowband" services.

49. In responding to the questions raised in this part of the Notice, we ask parties to comment with specificity upon whether the various goals articulated in the *Computer II* and *Computer III* inquiries are equally valid today. Parties should explain the basis for their conclusions, and also explain what other goals should be taken into account, given the significant changes in the technological and competitive landscapes. Further, we seek comment on the analyses employed in the *Computer Inquiries*, including the factors the Commission relied upon in promulgating the *Computer II* and *III* regimes. Are those factors still relevant today? Should they be modified, or given less weight? Are there additional factors that should be taken into account today by the Commission as it considers whether to modify the *Computer II* and *III* regimes?

50. To the extent we decide that none of the existing *Computer III/III* nondiscriminatory access obligations should apply to carriers providing wireline broadband Internet access services, we seek comment on whether alternative access obligations should be applied. We note that ISPs currently purchase transmission services under tariff to provide their own information services. Commenters should address how entities have used means other than those provided through the *Computer III/III* access requirements to acquire the transmission necessary to provide their information service offerings, including reliance on negotiated contractual arrangements. In addition, we seek comment on how any proposed alternative regulatory or contractual access obligations might be priced in the context of a minimal regulatory Title I regime. For example, commenters should consider whether, under a new regulatory approach, self-provisioning wireline broadband providers should be required to do no more than make transmission available to competitors at market-based prices, or whether they should be required to make transmission available to competitors at commercially reasonable rates. Or, is some alternative set of pricing regulations preferable?

51. If a regulatory framework is necessary, parties should comment on how such a framework could reduce the regulatory burdens on wireline broadband providers while promoting the availability of broadband to both competitors and consumers. Such an approach

services under Title I, even as it re-affirmed and bolstered its justification for not imposing common carrier obligations on enhanced service providers. It declined to exercise that jurisdiction and regulate enhanced services, however, because it found that market to exhibit “effective competition.”⁷⁸ It reserved the right to exercise its Title I jurisdiction and to intervene should problems involving enhanced services arise.⁷⁹

40. In *Computer II*, while underscoring the continued need for safeguards, the Commission also recognized the costs to carriers associated with “maximum separation.” The Commission acknowledged, in particular, the impact of such costs on smaller carriers, and the fact that small carriers with a limited network were unlikely to be able to “gain any significant competitive advantage by restricting the access of its competitors to a very limited network of underlying facilities.”⁸⁰ Based on these considerations, the Commission concluded that it should continue to impose full structural separation requirements only on those carriers having control over local exchange facilities and sufficient market power to engage in anticompetitive activity on a national scale, namely AT&T and GTE.⁸¹ The Commission required those carriers that own common carrier transmission facilities and provide enhanced services, but are not subject to the separate subsidiary requirement, to acquire the necessary basic services pursuant to tariff.⁸² The Commission also required these carriers to give competing enhanced service providers access to their facilities on the same rates, terms and conditions.⁸³

41. In *Computer III*, the Commission revisited the issue of the appropriate competitive safeguards for the provision of enhanced services by common carriers. Recognizing the costs associated with structural separation, the Commission adopted revised rules that allowed AT&T, the BOCs and GTE the option of moving from full structural separation to a system of non-structural safeguards, which it found would prevent discriminatory behavior while avoiding the costs and inefficiencies associated with the separate subsidiary requirements.⁸⁴ The non-structural safeguards included Comparably Efficient Interconnection (CEI) and Open Network Architecture (ONA), as well as quality, installation and maintenance reporting

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information.”). Examples of services that the Commission has treated as enhanced include voice mail, e-mail, store-and-forward services, interactive voice response, protocol processing, gateway and audiotext services. See *Bell Operating Companies Joint Petition for Waiver of Computer II Rules*, Order, 10 FCC Rcd 13758, 13770-774, App. A (Com. Car. Bur. 1995).

⁷⁸ *Computer II*, 77 FCC 2d at 432-33, paras. 124-27.

⁷⁹ *Id.*

⁸⁰ *Id.* at 468, para. 219.

⁸¹ *Id.* at 469-70, 473-74, paras. 223-24 and n.228.

⁸² *Id.* at 474-75, para. 231.

⁸³ *Id.*

⁸⁴ See *Computer III Phase I Order*, 104 FCC 2d at 1011-13, paras. 98-100.

services market and the appropriate regulatory framework that should apply to the incumbent LEC provision of these services.⁸⁸ We seek comment on how findings in that proceeding, specifically those related to market definition and market power, could inform our decision here. For example, to the extent that the Commission finds that there is sufficient competition in the broadband telecommunications services market to warrant elimination or modification of some or all *Computer II* and *Computer III* requirements, but not enough competition to warrant complete deregulation, what should those alternative requirements be?

45. As noted above, in contrast to narrowband facilities, it appears that broadband facilities support an ever-increasing variety and number of services and applications. As a result, a provider's decision to invest in redundant transmission facilities may be based on fundamentally different assumptions than those a provider relied upon in the past. We seek comment on whether and how this difference in the nature of service should affect an entity's access obligations.

46. In particular, in connection with the *Computer II* unbundling requirements, we ask parties to comment on the need for these requirements for wireline broadband Internet access service. Is there a legal or policy justification for imposing these requirements on the provision of wireline broadband Internet access service? In addition, how should the Commission define the scope of their application? For example, should these *Computer II* unbundling requirements be designed to apply only to carriers that we conclude have market power in the provision of wireline broadband Internet access service?⁸⁹ Or, should it be applied to neither dominant and nondominant facilities-based carriers providing such services? As we ask in greater detail below, what type of incentives would the Commission be creating if these requirements were imposed asymmetrically on different types of facilities-based carriers?

47. We similarly seek comment with respect to the application of the *Computer III* requirements to the BOCs' provision of broadband Internet access services. We note that the CEI and ONA requirements were specifically designed to address the technical characteristics of the BOCs' basic network facilities as they existed at the time the *Computer III* regime was developed over 15 years ago.⁹⁰ The broadband capabilities that wireline providers use today or in the future to provide broadband Internet access services are, and will be, different from the analog services for which the *Computer III* regimes were designed, and we ask commenters to consider any relevant implications of these differences. We seek comment specifically on whether a modified version of the current *Computer III* framework should be imposed on the BOC provision of broadband Internet access services, such as xDSL-based Internet access.

48. We ask parties to identify the elements of the existing *Computer III* framework that they believe should be modified or eliminated, and address in a comprehensive manner the

⁸⁸ See also *Incumbent LEC Broadband Notice*, FCC No. 01-360 at para. 1.

⁸⁹ As stated above, we are considering this question in the *Incumbent LEC Broadband Notice*. See discussion *supra* para. 44.

⁹⁰ See *Computer III Phase I Order*, 104 FCC 2d at 1011, para. 97.

interactive media.”⁵ These “congressional policies underlying the Telecommunications Act of 1996”⁶ serve as the basis of our policymaking to ensure consumers have access to infrastructures that provide broadband capabilities.

4. *Second*, the Commission’s regulatory framework will conceptualize broadband broadly to include any and all platforms capable of fusing communications power, computing power, high-bandwidth intensive content, and access to the Internet. As we have noted in the past, broadband is evolving across multiple electronic platforms as traditional wireless, cable, satellite and wireline providers have expended substantial investments in broadband capable infrastructures.⁷ We believe that by promoting the development and deployment of multiple platforms, competition in the provision of broadband capabilities can thrive, and thereby ensure that the needs and demands of the consuming public are met.⁸ To this end, the Commission will commit to preserving opportunities for broadband competition. In promoting this competition, however, the Commission must be cautious not to embed particular technologies. We recognize, as discussed below, that current networks and technologies that enable the end-user to engage in broadband capabilities are evolving and that the infrastructure of today may be insufficient to support the applications of tomorrow. Therefore, the Commission should avoid policies that have the unintended consequence of embracing too quickly any one technology or service.

5. *Third*, broadband services should exist in a minimal regulatory environment that promotes investment and innovation in a competitive market. We recognize that substantial investment is required to build out the networks that will support future broadband capabilities and applications. Therefore, our policy and regulatory framework will work to foster investment and innovation in these networks by limiting regulatory uncertainty and unnecessary or unduly burdensome regulatory costs. In so doing, we will strive, as directed by Congress, to “preserve the vibrant and competitive free market that presently exists for the Internet and other interactive

⁵ 47 U.S.C. § 230(b)(1).

⁶ *National Cable Telecommunications Ass’n v. Gulf Power Co.*, 122 S. Ct. 782 (Jan. 16, 2002) (Thomas, J. concurring in part, dissenting in part) (noting that an “interpretation of the 1996 amendments to the Act” that led to a conclusion that the Commission lacked the authority to regulate rates for pole attachments providing commingled cable television programming and high speed Internet access, “would be in substantial tension with” the policies announced in sections 157nt and 230(b)(1)).

⁷ *Second Section 706 Report*, 15 FCC Rcd at 20924-20938, paras. 23-59; see also *Bringing Home the Bits* at S-2 (“Following roughly a decade of development and experimentation, residential (and small business) broadband services have been available in selected markets for several years and more recently have become mass-market. Cable operators, incumbent local exchange carriers (ILECs), and competitive local exchange carriers offering data services (data CLECs) have been the largest players, complemented by overbuilders (using [hybrid fiber-coaxial (HFC)], wireless, or fiber) and satellite-based providers”).

⁸ The pursuit of multiple platform competition should also serve to further the congressionally stated goal “to encourage the development of technologies which maximize user control over what information is received by individuals, families, and schools who use the Internet and other interactive computer services.” 47 U.S.C. § 230(b)(3); see also, e.g., *Bringing Home the Bits*, at S-7 (arguing that “[f]acilities-based competition, and associated pressures to attract and retain customers, could help propel performance upgrades”).

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I. INTRODUCTION AND BACKGROUND

A. Overview

1. Through this proceeding, we launch a thorough examination of the appropriate legal and policy framework under the Communications Act of 1934, as amended, for broadband access to the Internet provided over domestic wireline facilities.¹ The widespread deployment of

¹ 47 U.S.C. § 151 *et seq.* As described more fully below, the classification inquiry we undertake herein is limited to domestic wireline broadband Internet access services, meaning over the existing and future infrastructure of the traditional telephone network. Unless otherwise specified, we will refer to these services as “wireline broadband Internet access services” throughout this Notice. Therefore, this proceeding does not address classification issues of broadband Internet access services provided over traditional or new cable, wireless, (satellite, mobile, or fixed wireless), power line (electric grid), or all-fiber networks that do not have any roots in traditional telephone networks. We recognize that the wireline platform over which these services are delivered is predominantly digital subscriber line (xDSL) presently, but we note that it could also include fiber or other wireline technologies in the future. We have already sought comment on the regulatory classification of cable modem service, and that issue will be resolved in a separate proceeding. See *Inquiry Concerning High-Speed Access to the Internet Over Cable and Other Facilities*, Notice of Inquiry, 15 FCC Rcd 19287 (2000) (*Cable Modem Notice*).

might encourage market participants to deploy broadband networks more expeditiously and increase facilities-based competition. We seek comment on the benefits and costs, as well as concrete details of market-based approaches to broadband regulation,⁹¹ and encourage interested parties to offer other proposals designed to encourage the deployment of broadband. We also ask parties to comment on what the appropriate classification would be of any broadband transmission services required to be offered to independent ISPs.⁹² We also seek comment on the applicability of sections 201 and 202 to any such stand-alone broadband offerings, and how those sections should inform any determination we may make about the pricing of broadband transmission provided to third parties.

52. As referenced above, we ask parties to comment specifically on the incentives that the Commission would create were it to impose requirements other than the *Computer IIIII* requirements on the provision of wireline broadband Internet access service. For example, were the Commission to modify or eliminate the requirements that the underlying transmission be made available to other ISPs on a nondiscriminatory basis, how would this affect the deployment of broadband? How would competing ISPs that do not own transmission facilities obtain the inputs they need to provide competing broadband Internet access services? Would the removal of all unbundling requirements motivate incumbent LECs, including BOCs, to only provide broadband transmission as part of integrated information services in order to restrict its availability, or would there be countervailing reasons why carriers would still choose to provide high-speed transmission to other entities on a stand-alone basis? Will these incentives be affected to the extent that these broadband Internet access services begin replacing traditional telecommunications services? Commenters arguing that removal of the requirements will lead to a significant reduction in the availability of high-speed transmission to non-facilities-based ISPs should address with specificity why this situation cannot be addressed through private, unregulated contractual arrangements or other marketplace solutions. Alternatively, if the Commission were to continue to impose unbundling requirements only on incumbent LECs or BOCs, how would this affect their incentive to continue deploying new and innovative broadband information services?

53. In addition, we invite parties to comment on whether any alternative framework could reduce regulatory costs by providing self-enforcing access obligations that can be structured in such a way that they can be implemented and used by all the parties in a timely manner.

2. Other Obligations

54. We seek comment on the extent to which other obligations might be affected by classifying wireline broadband Internet-access services as information services. We ask

⁹¹ See Letter from Thomas J. Tauke, Senior Vice President, Verizon Communications, to Michael Powell, Chairman, Federal Communications Commission, at 4 (filed Nov. 6, 2001) (Verizon November 6, 2001 Ex Parte) (cited in *Triennial UNE Review Notice*, FCC 01-361 at para. 23 and n.67).

⁹² See *Deployment of Wireline Services Offering Advanced Telecommunications Capability*, 13 FCC Rcd at 24029, para. 35.

questions about the relevance of three basic public protection obligations of telecommunications service providers – (i) national security, (ii) network reliability, and (iii) consumer protection – to wireline broadband Internet-access services. We also ask questions about how this classification may affect unbundling obligations pursuant to sections 251 and 252 of the Act.

55. We ask commenters to discuss how our tentative conclusion that wireline broadband Internet access service is an information service will affect the scope of the CALEA assistance capabilities that telecommunications carriers must offer to law enforcement authorities.⁹³ Commenters should address what effect, if any, the USA PATRIOT Act of 2001 may have on an entity that provides information services.⁹⁴ While section 222 of the USA PATRIOT Act states that “nothing in this Act shall impose any additional technical obligation or requirement on a provider of wire or electronic communication service or other person to furnish facilities or technical assistance,”⁹⁵ commenters may wish to discuss how the expansion of surveillance authority to electronic communications under various provision of the USA PATRIOT Act might affect providers of wireline broadband Internet access service if these services were classified as information services.⁹⁶ More generally, we ask for comment on how designating wireline broadband Internet access service as an information service may affect other national security or emergency preparedness obligations applicable to service providers and their networks.

56. Second, commenters should discuss what role, if any, the Commission or its designees should have in ensuring the network reliability and interoperability of wireline broadband Internet access services. For telecommunications service providers, the Commission has found that network reliability is of paramount importance in any number of settings⁹⁷ and, in particular, has directed the Network Reliability and Interoperability Council (NRIC) to explore and recommend measures that would enhance network reliability and interconnectivity.⁹⁸

⁹³ See generally, e.g., *Communications Assistance for Law Enforcement Act*, Report and Order, CC Docket No. 97-213, 14 FCC Rcd 16794, 16795-96, paras. 2-3 (1999).

⁹⁴ *Uniting and Strengthening America by Providing Appropriate Tools Required to Intercept and Obstruct Terrorism Act of 2001*, Pub. L. No. 107-56, 115 Stat. 272 (2001) (USA PATRIOT Act) (codified in scattered sections of 18 U.S.C., 47 U.S.C., 50 U.S.C.)

⁹⁵ *Id.* § 222.

⁹⁶ *Id.* §§ 201, 202, 206, 210, 211.

⁹⁷ See, e.g., *Telephone Number Portability*, First Memorandum Opinion and Order on Reconsideration, CC Docket No. 95-116, 12 FCC Rcd 7236, 7285, para. 83 (1997) (*Telephone Number Portability Reconsideration Order*) (subsequent history omitted) (finding network reliability of paramount importance in determining the implementation of telephone number portability requirements).

⁹⁸ See generally *2000 Biennial Regulatory Review - Telecommunications Service Quality Reporting Requirements*, Notice of Proposed Rulemaking, CC Docket No. 00-229, 15 FCC Rcd. 22113, 22126, para. 40 (2000); see also 47 U.S.C. § 256 (directing the Commission to promote nondiscriminatory accessibility by users and vendors of communications products to public telecommunications networks through coordinated planning and improved interconnectivity and “to ensure the ability of users and information providers to seamlessly and transparently transmit and receive information between and across telecommunications networks”).

Commenters should address the costs and benefits of authorizing NRIC to make technical interconnectivity and interoperability recommendations with respect to wireline broadband Internet access service.

57. Third, commenters should address how classification of wireline broadband Internet access as an information service would affect existing consumer protection requirements. For instance, section 214 of the Communications Act limits the ability of a telecommunications carrier to unilaterally discontinue telecommunications service to customers.⁹⁹ Commenters should address the extent to which it is appropriate or necessary to apply such a requirement to the provision of wireline broadband Internet access service if we classify such services as information services.

58. Consistent with the Communications Act,¹⁰⁰ the Commission restricts how telecommunications carriers use, disclose, and access customer proprietary network information derived from the provision of a telecommunications service (CPNI).¹⁰¹ Section 258 prohibits

⁹⁹ 47 U.S.C. § 214(a); 47 C.F.R. § 63.71. While a domestic carrier must apply to discontinue service, these applications are routinely granted and, in many cases, automatically granted on the thirty-first day after public notice of the application is released. See 47 C.F.R. § 63.71(c). Even in cases where a domestic carrier is dominant with respect to the service being provided, the Commission authorizes proposed discontinuance of service unless it is shown that customers or other end users would be unable to receive service or a reasonable substitute from another carrier, or that the public convenience and necessity is otherwise adversely affected. See 47 C.F.R. § 63.71(a)(5); see also, e.g., *Comments Invited on TSI Telecommunication Services Inc. Application To Discontinue Domestic Telecommunications Services*, NSD File No. W-P-D-542, Public Notice, DA-01-2792, 2001 WL 1524470 (F.C.C.) (rel. Nov. 30, 2001).

¹⁰⁰ 47 U.S.C. § 222(a); see also 47 U.S.C. § 222(c)(1) (“Except as required by law or with the approval of the customer, a telecommunications carrier that receives or obtains customer proprietary network information by virtue of its provision of a telecommunications service shall only use, disclose, or permit access to individually identifiable customer proprietary network information in its provision of (A) the telecommunication service from which such information is derived, or (B) services necessary to, or used in, the provision of such telecommunications service, including the publishing of directories.”).

¹⁰¹ 47 C.F.R. §§ 64.2001-2009; *US West v. FCC*, 182 F.3d 1224 (10th Cir. 1999) (vacating portions of first CPNI order; finding that opt-in rule for customer-specific CPNI violated First Amendment), *cert. denied*, 530 U.S. 1213 (2000); *Implementation of the Telecommunications Act of 1996: Telecommunications Carriers' Use of Customer Proprietary Network Information and Other Customer Information: Implementation of the Non-Accounting Safeguards of Sections 271 and 272 of the Communications Act of 1934, as Amended*, CC Docket Nos. 96-115, 96-149, Clarification Order and Second Further Notice of Proposed Rulemaking, 16 FCC Rcd 16506, 16510, para. 7 and n.23 (rel. Sept. 7, 2001) (*CPNI Clarification Order*) (finding that the Commission's CPNI rules remain in effect following *US West* with the exception of Section 64.2007(c)). CPNI is information derived from the telecommunications carriers' provision of telecommunications services and includes information concerning where, when, and to whom a customer places a call, as well as the types of service offerings to which the customer subscribes and the extent to which the service is used. See *Implementation of the Telecommunications Act of 1996: Telecommunications Carriers' Use of Customer Proprietary Network Information and Other Customer Information and Implementation of the Non-Accounting Safeguards of Sections 271 and 272 of the Communications Act of 1934, as Amended*, CC Docket Nos. 96-115, 96-149, Order and Further Notice of Proposed Rulemaking, 13 FCC Rcd 8061, 8064, para. 2 (1998) (*CPNI Order*).

telecommunications carriers from changing consumers' carriers without prior consent.¹⁰² The Commission has also adopted truth-in-billing principles and guidelines to ensure that telephone bills provide consumers with information they may use to protect themselves from fraud and make informed choices in the competitive telecommunications marketplace.¹⁰³ How would classification of wireline broadband Internet access service as an information service affect the applicability of these requirements?

59. In addition, section 255 requires a provider of telecommunications service to ensure the service is accessible and usable by individuals with disabilities, if that is readily achievable.¹⁰⁴ How would classification of wireline broadband Internet access service as an information service affect the applicability of such requirements? Similarly, section 201 contains obligations applicable to the furnishing of service and charges for "communication service" and section 202 makes it unlawful for a common carrier to unreasonably discriminate with regard to like "communications service."¹⁰⁵ How would our classification affect these obligations? Commenters should refer to specific sections of the Act when they are addressing these issues.

60. Commenters should address whether these requirements are needed to protect the interests of consumers in the context of a minimally intrusive regulatory regime for wireline broadband Internet access service. As we have noted in the *Incumbent LEC Broadband Notice*, the present broadband services market differs from the historic market for the provision of analog voice services. We stated that, "[i]n particular, the one-wire world for customer access appears to no longer be the norm in broadband services markets as the result of the development of intermodal competition among multiple broadband platforms, including DSL, cable modem service, satellite broadband service and terrestrial and mobile wireless services."¹⁰⁶ Accordingly, commenters should discuss whether there are adequate incentives absent additional regulation for providers of wireline broadband Internet access to protect consumers' varied interests.

¹⁰² 47 U.S.C. § 258; 47 C.F.R. § 64.1100 *et seq.* The passage of section 258 of the Telecommunications Act of 1996 significantly expanded the Commission's existing authority to deter and punish slamming, which is the unauthorized change of a consumer's presubscribed telecommunications carrier. *See, e.g., Implementation of the Subscriber Carrier Selection Changes Provisions of the Telecommunications Act of 1996; Policies and Rules Concerning Unauthorized Changes of Consumers' Long Distance Carriers*, CC Docket No. 94-129, Second Report and Order and Further Notice of Proposed Rule Making, 14 FCC Rcd 1508 (1998) (*Section 258 Order*), *stayed in part, MCI WorldCom v. FCC*, No. 99-1125 (D.C. Cir. May 18, 1999); First Order on Reconsideration, 15 FCC Rcd 8158 (2000); *stay lifted, MCI WorldCom v. FCC*, No. 99-1125 (D.C. Cir. June 27, 2000); Third Report and Order and Second Order on Reconsideration, 15 FCC Rcd 15996 (2000), Errata, DA No. 00-2163 (rel. Sept. 25, 2000), Erratum, DA No. 00-2192 (rel. Oct. 4, 2000), Order, FCC 01-67 (rel. Feb. 22, 2001); First Report and Order in CC Docket No. 00-257 and Fourth Report and Order in CC Docket No. 94-129, 16 FCC Rcd 11218 (2001); *reconsiderations pending.*

¹⁰³ 47 C.F.R. § 64.2400 *et seq.*; *see also Truth-in-Billing and Billing Format*, CC Docket No. 98-170, First Report and Order and Further Notice of Proposed Rulemaking, 14 FCC Rcd 7492 (1999), *reconsideration granted in part, Order on Reconsideration*, 15 FCC Rcd 6023 (2000); Errata, 15 FCC Rcd 16544 (Com. Carr. Bur. 2000).

¹⁰⁴ 47 U.S.C. § 255.

¹⁰⁵ 47 U.S.C. §§ 201, 202.

¹⁰⁶ *Incumbent LEC Broadband Notice*, FCC 01-360 at para. 5.

61. Finally, we seek comment on the implications of our tentative conclusions that the provision of wireline broadband Internet access service over a provider's own facilities is an "information service" and that the transmission component of such service is "telecommunications" and not a "telecommunications service." In particular, we are interested in the implications of this analysis for incumbent LECs' obligations to provide access to network elements under sections 251 and 252.¹⁰⁷ Because "network element" is defined as a "facility or equipment used in the provision of a telecommunications service,"¹⁰⁸ how could an incumbent LEC provider of wireline broadband Internet access service over its own facilities be required to provide access to those facilities as "network elements" if those facilities are used by the incumbent LEC exclusively to provide information services? For example, what would be the implications for the Commission's line sharing and line splitting rules?¹⁰⁹ If an incumbent LEC provider of wireline broadband Internet access service over its own facilities uses certain facilities to provide both information services and telecommunications services, to what extent would the LEC be required to provide access to such shared-use facilities as "network elements?" We seek comment on whether the Commission could compel the unbundling of network elements used in the provision of information services, pursuant to Title I or some other statutory authority. Does the Commission's Title I authority allow us to limit such obligations to certain types of providers, such as incumbent LECs, or would the Commission be required to adopt rules of general applicability under Title I? In addition, because section 251(c)(3) allows a requesting carrier to request access to network elements "for the provision of a telecommunications service," would a provider be prohibited from using network elements pursuant to section 251 to provide wireline broadband Internet access service?¹¹⁰

3. Impact on Federal and State Responsibilities

62. We seek comment generally on the role of the states with respect to wireline broadband Internet access services if the Commission were to find it to be appropriately classified as an information service under Title I of the Act. The Commission has previously found that when xDSL transmission is used to provide Internet access services, these services are

¹⁰⁷ 47 U.S.C. §§ 251, 252.

¹⁰⁸ 47 U.S.C. § 153(29).

¹⁰⁹ See 47 C.F.R. § 51.319(h) (requiring incumbent LECs to provide non-discriminatory access to the high frequency portion of the loop in accordance with Commission rules); see also *Deployment of Wireline Services Offering Advanced Telecommunications Capability and Implementation of the Local Competition Provisions of the Telecommunications Act of 1996*, Third Report and Order in CC Docket No. 98-147 and Fourth Report and Order in CC Docket No. 96-98, 14 FCC Rcd 20912 (1999) (*Line Sharing Order*) (adding the high frequency portion of the loop to the list of elements that must be unbundled on a national basis) (subsequent history omitted).

¹¹⁰ We note that in the *Local Competition First Report and Order* the Commission concluded that information service providers that do not also provide telecommunications services, and therefore are not telecommunications carriers within the meaning of the Act, may not interconnect under section 251. See *Implementation of the Local Competition Provisions of the Telecommunications Act of 1996*, CC Docket No. 96-98, First Report and Order, 11 FCC Rcd 15499, 15990, para. 995 (1996).

interstate and, thus, subject to Commission jurisdiction.¹¹¹ We seek comment on whether, and if so how, classification of wireline broadband Internet access service as an information service would affect the balance of responsibilities between the Commission and the states. We ask parties to comment on what they consider an appropriate role for the states in this area, taking into account both policy considerations and legal constraints, including any applicable limitations on delegations of authority to the states under Title I of the Act. Additionally, parties should comment on whether current state regulations, if any, should be preempted to any extent if the Commission were to find that wireline broadband Internet access service is appropriately classified under Title I of the Act. Parties should be specific in identifying such state regulations and in explaining how such regulations would interfere with the Commission's oversight under Title I. In addition, we note that the Ninth Circuit Court of Appeals affirmed the Commission's authority to preempt state regulation of jurisdictionally mixed enhanced services.¹¹² Parties should address whether any such existing state laws are in fact subject to preemption under that decision.

63. Commenters should also address how the dual state-federal ratemaking framework might be affected by the regulatory classification of wireline broadband Internet access service as an information service. For instance, if wireline broadband Internet access service is an information service, how should joint and common costs of facilities used to provide both those services and telecommunications services be allocated under Part 64.901 of our rules? Should we modify our current cost allocation rules, and, if so, how?

64. Commenters should also address the implications for jurisdictional separations of the issues addressed in this proceeding.¹¹³ We specifically encourage state members of the Federal-State Joint Board on Separations (Separations Joint Board) to submit comments on the issues addressed above.¹¹⁴

IV. UNIVERSAL SERVICE OBLIGATIONS OF ALL PROVIDERS OF BROADBAND INTERNET ACCESS

65. In this proceeding, the Commission will continue to pursue and protect the core objectives of universal service, as reflected in our statutory mandates and in many of our precedents.¹¹⁵ We recognize, however, that the manner in which we preserve and advance

¹¹¹ See *GTE Telephone Operating Cos., GTOC Tariff No. 1, GTE Transmittal No. 1148*, CC Docket No. 98-79, Memorandum Opinion and Order, 13 FCC Rcd 22466 (1998).

¹¹² *California v. FCC*, 39 F.3d 919, 931-33 (9th Cir. 1994) (subsequent history omitted).

¹¹³ Jurisdictional separations is the process by which incumbent LECs separate their regulated costs between the federal and state jurisdictions. Neither ISPs, nor competitive LECs are subject to separations.

¹¹⁴ Pursuant to section 410(c) of the Act, the Commission will refer any issues regarding jurisdictional separations to the Separations Joint Board. 47 U.S.C. § 410(c).

¹¹⁵ Universal service historically consisted of high-cost loop support, which provides support to eligible carriers serving high-cost areas, and Lifeline/LinkUp, which provides support to low-income consumers for telephone service and installation. Section 254 of the Act also directed the Commission to create the schools and libraries program and the rural health care program, which both provide support to schools, libraries, and rural health care providers, (continued...)

universal service will, of necessity, change as the market, technology and consumers needs and priorities change.

66. Universal service has historically been based on the assumption that consumers use the network for traditional voice-related services and that those voice services are provided over circuit-switched networks. As traditional services migrate to broadband platforms, we need to assess the implications for funding universal service and ask commenters to discuss how to sustain universal service in an evolving communications market. Any analysis must take into account the Commission's overarching objectives of preserving and advancing universal service, as directed by Congress. At the same time, however, we seek to avoid policies that may skew the marketplace or overburden new service providers, so that they can continue to innovate and have incentives to deploy broadband infrastructure. We seek to further these objectives by exploring the following fundamental question: in an evolving telecommunications marketplace, should facilities-based broadband Internet access providers be required to contribute to support universal service and, if so, on what legal basis? This Notice explores this question by seeking comment on what universal service contribution obligations such providers of broadband Internet access should have as the telecommunications market evolves, and how any such obligations can be administered in an equitable and non-discriminatory manner.

67. This fundamental question is intertwined with issues raised in our separate *Universal Service Contribution Methodology* proceeding, which explores possible ways to reform our current methodology for assessing universal service contributions, and in particular whether to modify our present requirement that carriers be assessed based on end-user telecommunications revenues.¹¹⁶ Among other possible reforms, the Commission is considering assessing contributions based upon connections to a public network.¹¹⁷ Although we seek comment in this proceeding on the ways in which reform of the current contribution methodology might alter our analysis of the fundamental question described above, we leave questions of whether to make such a reform to the separate *Contribution Methodology* proceeding.

68. As discussed in greater detail below, this Notice builds on the foundation established in the *Report to Congress* and seeks comment on how we can continue to meet the goals of universal service in a changing marketplace where competing providers are deploying

(Continued from previous page) _____
respectively, for telecommunications services and Internet access. All of these mechanisms are referred to collectively as "universal service."

¹¹⁶ *Federal-State Joint Board on Universal Service*, CC Docket Nos. 96-45, 98-171, 90-571, 92-237, 99-200, 95-116, Notice of Proposed Rulemaking, FCC 01-145 (rel. May 8, 2001) (*Universal Service Contribution Methodology*).

¹¹⁷ *FCC Takes Next Step To Reform Universal Service Fund Contribution System*, CC Dockets Nos. 96-45, 98-171, 90-571, 92-237, 99-200, 95-116, News Release, FCC 02-43 (rel. Feb. 14, 2002) (*Contribution Methodology Further Notice*).

broadband Internet access.¹¹⁸ We specifically encourage state members of the Federal-State Joint Board on Universal Service to submit comments on the issues addressed below.

A. Commission's Existing Rules

69. Section 254 of the Act codified the Commission's historic commitment to advancing universal service by ensuring the affordability and availability of telecommunications services for all Americans. Specifically, section 254 of the Act directed the Commission to reform its universal service systems by making them explicit and workable in an increasingly competitive market. Section 254 also instructed the Commission to collect contributions for the explicit universal service support mechanisms from telecommunications carriers that provide interstate telecommunications services and, if in the public interest, other providers of interstate telecommunications. Based on this statutory language, the Commission determined that universal service would be funded through contributions based on the interstate end-user telecommunications revenues of telecommunications carriers and certain other providers of telecommunications.¹¹⁹

70. Section 254(d) of the Act states "[e]very telecommunications carrier that provides interstate telecommunications services *shall* contribute" to universal service.¹²⁰ As noted above, section 3 of the Act defines a telecommunications carrier as "any provider of telecommunications services....," and "telecommunications service" as the "offering of telecommunications for a fee directly to the public, or to such classes of users as to be effectively available directly to the public, regardless of the facilities used."¹²¹ In contrast, section 3 of the Act defines mere "telecommunications" as "transmission, between or among points specified by the user, of information of the user's choosing without change in the form or content of the information as sent and received."¹²² In the *First Report and Order*, the Commission interpreted this statutory language as imposing a mandatory contribution requirement on all telecommunications carriers that provide interstate telecommunications services.¹²³

71. Although section 254 falls within Title II of the Act, which generally applies to telecommunications carriers, the Commission has interpreted its reach to extend beyond telecommunications carriers. Specifically, section 254(d) of the Act provides the Commission the permissive authority to require "[a]ny other provider of interstate telecommunications" to

¹¹⁸ As noted above, the regulatory classification of different broadband services will be resolved through this and other proceedings. For example, this proceeding deals with wireline broadband Internet access while the *Cable Modem Notice* proceeding deals with broadband Internet access provided over cable facilities.

¹¹⁹ *Federal-State Joint Board on Universal Service*, CC Docket No. 96-45, Report and Order, 12 FCC Rcd 8776, 8797, para. 39-40 (1997) (*First Report and Order*) (subsequent history omitted).

¹²⁰ 47 U.S.C. § 254(d) (emphasis added).

¹²¹ 47 U.S.C. §§ 153(44), (46).

¹²² 47 U.S.C. § 153(43).

¹²³ *First Report and Order*, 12 FCC Rcd at 9173, para. 777; see also 47 C.F.R. § 54.706.

contribute to universal service if required by the public interest.¹²⁴ In the *First Report and Order*, the Commission exercised its permissive authority over certain other providers of interstate telecommunications under section 254(d). The Commission required entities that provide interstate telecommunications to end-users for a fee and payphone aggregators to contribute to universal service. This category of providers would include entities that lease excess telecommunications capacity to end-users on a private contractual basis.¹²⁵ The Commission concluded that these providers, like telecommunications carriers, “have built their businesses or part of their businesses on access to the [public switched telephone network], provide telecommunications in competition with common carriers, and their non-common carrier status results solely from the manner in which they have chosen to structure their operations.”¹²⁶ The Commission declined at that time to exercise its permissive authority over entities that provide telecommunications solely to meet their internal needs, because telecommunications “do not comprise the core of [a self-provider’s] business.”¹²⁷ The Commission noted that private network operators that serve only their internal needs do not lease excess capacity to end-users and do not charge end-users for use of their network.¹²⁸

72. Under our existing rules and policies, telecommunications carriers providing telecommunications services, including broadband transmission services, are subject to contribution requirements. In particular, with respect to wireline telecommunications carriers, such carriers must contribute to the extent they provide broadband transmission services or other telecommunications services on a stand-alone basis to affiliated or unaffiliated Internet service providers (ISPs) or to end-users. Accordingly, those carriers must contribute based on the revenues associated with the telecommunications services. The Commission also has concluded that if a wireline telecommunications carrier offers wireline broadband Internet access to end-users for a single price, it must also contribute to universal service. In the *CPE/Enhanced Service Bundling Order*, the Commission addressed the question of “how to allocate revenues when telecommunications services and CPE/enhanced services are offered as a bundled package, for purposes of calculating a carrier’s universal service contribution.”¹²⁹ The Commission concluded that, for universal service contribution purposes, the carrier may elect to report revenues from the bundle based on the unbundled telecommunications service or, if it cannot distinguish telecommunications service revenue from non-telecommunications service revenue, all revenues from the bundled offering.¹³⁰ We seek comment on whether these requirements and

¹²⁴ 47 U.S.C. §254(d).

¹²⁵ *First Report and Order*, 12 FCC Rcd 9183-9184, para. 794-797; see also 47 C.F.R. §54.706.

¹²⁶ *First Report and Order*, 12 FCC Rcd 9183-9184, para. 796.

¹²⁷ *Id.* at para. 799.

¹²⁸ *Id.*

¹²⁹ See *CPE/Enhanced Services Bundling Order*, 16 FCC Rcd at 7446-7447, para. 48. In the order, the Commission acknowledged that carriers may bundle xDSL services “with CPE and enhanced services.” *Id.* at 7427, para. 17.

¹³⁰ *Id.* at 7446-48, paras. 48-51. As such, the Commission implicitly assumed that the carrier would be subject to the Commission’s mandatory contribution authority by virtue of the existence of a telecommunications service.

their basis in our rules and precedents are appropriate and consistent with our tentative conclusions regarding the statutory classification of wireline broadband Internet access.

73. We emphasize that this proceeding does not change the mandatory obligations of telecommunications carriers that are currently required to contribute to universal service based on their provision of broadband services to affiliated or unaffiliated ISPs or end-users. To avoid any disruption to universal service funding during the pendency of this proceeding, we continue to require all such carriers to make universal service contributions in the same manner required today, pending the effective date of a final Commission decision regarding the status of wireline broadband Internet access. We find that the public interest is served by maintaining the status quo and ensuring that universal service contributions continue to be assessed and collected under current law without disruption.

74. ISPs that own no telecommunications facilities and lease transmission, such as T1 lines, from telecommunications carriers to transmit their information services, do not contribute directly to universal service, but they make indirect contributions through charges paid to the underlying telecommunications carrier providing the leased telecommunications services.¹³¹ As discussed above, the Commission concluded in the *Report to Congress* that facilities-based ISPs that provide no stand-alone telecommunications services could be required to contribute to universal service under its permissive authority, but the Commission declined to exercise its permissive authority at that time. Given the anticipated growth of broadband Internet access, and the growth of broadband Internet access provided by ISPs, we believe it is now the appropriate occasion to investigate, among other things, the questions that remain unanswered by the *Report to Congress*. Specifically, we ask whether broadband Internet access providers that supply last-mile connectivity over their own facilities should be required to contribute to universal service based upon their self-provisioning of telecommunications.¹³²

B. Wireline Broadband Platform

75. In this Notice, we tentatively conclude that wireline broadband Internet access should be classified as an “information service” and that the transmission aspect of that service is “telecommunications” when the same entity provides the telecommunications input.¹³³ Accordingly, we must examine how the regulatory status of wireline broadband Internet access might impact the current system of assessments and contributions to universal service. We invite commenters to discuss how this tentative conclusion will impact contributions to universal service under our current revenues-based system. We also seek comment on whether the Commission’s current treatment of such services as bundled offerings of telecommunications services and information services for universal service contribution purposes continues to be

¹³¹ See *Report to Congress*, 13 FCC Rcd at 11541, para. 81.

¹³² We note that the *Report to Congress* did not distinguish between broadband and narrowband facilities-based ISPs. We clarify that this Notice seeks answers to questions raised in the *Report to Congress* regarding broadband facilities-based ISPs.

¹³³ See discussion, *supra*, paras. 24-25.

appropriate or should be modified in some fashion. We also seek comment on the impact on universal service implementation if we conclude instead that the transmission input is a telecommunications service, separate services (information service and telecommunications service), or a new hybrid communications service that is neither an information or telecommunications service.

76. In addition, we ask commenters whether and under what circumstances the public interest would require us to exercise our permissive authority over wireline broadband Internet access providers that utilize their own transmission facilities to provide a broadband Internet access service if such a service were an information service with a telecommunications input. Commenters should identify the factors that we should consider when deciding whether the public interest requires exercise of our permissive authority under section 254(d) over wireline broadband Internet access providers.

77. Assuming the public interest supports exercise of our permissive authority, our contribution policies must also be equitable and nondiscriminatory. Therefore, we request that commenters describe the competitive impact of our contribution requirements in an evolving communications marketplace. We ask commenters generally to discuss whether either outcome, assessing or not assessing facilities-based wireline broadband Internet access providers, would be consistent with the requirement of section 254 that contributions be assessed on an equitable and nondiscriminatory basis. For example, should all facilities-based wireline broadband Internet access providers -- both wireline telecommunications carriers and ISPs -- be subject to the same contribution requirements?¹³⁴ If wireline broadband Internet access providers that self-provision telecommunications inputs are required to contribute, would that be consistent with our goal suggested in our companion *Universal Service Contribution Methodology* proceeding of ensuring that relevant services are assessed only once for universal service purposes? Whenever possible, commenters should explain how we may minimize the incentives/distortions created solely by our contribution requirements.

78. If we choose to revisit our conclusion that wireline broadband Internet access should be viewed, for universal service contribution purposes, as a bundled offering of a telecommunications service and an information service, should we decline to exercise our permissive authority over facilities-based providers of wireline broadband Internet access or simply modify the basis on which such providers contribute to universal service? For example, should facilities-based wireline broadband Internet access providers contribute based on all of their wireline broadband Internet access revenues, some fraction of those revenues, or some other amount? Commenters advocating that such providers of wireline broadband Internet access should contribute to universal service should discuss how to allocate revenues separately associated with the telecommunications or telecommunications service input from revenues associated with Internet access. As noted above, in a separate proceeding, we are seeking comment on a proposal to assess universal service contributions based on connections, rather

¹³⁴ As discussed above, ISPs leasing broadband capabilities currently indirectly pay universal service contributions through charges passed onto them by underlying telecommunications carriers, while ISPs that self-provide the telecommunications do not contribute to universal service.

than revenue. If we were to adopt such a reform, how should it be implemented with respect to wireline broadband Internet access providers? In addition, how would we implement such a reform if the Commission were to adopt a connection-based assessment methodology?

C. Other Broadband Platforms

79. Broadband Internet access services may also be provided over other platforms, *e.g.*, wireless, cable, and satellite. Those other platforms may be utilized to provide broadband Internet access services in direct competition with wireline broadband Internet access services. Thus, while this proceeding largely seeks comment on the classification and regulatory implications of wireline broadband Internet access, we also undertake a comprehensive review of the effects of the growth of broadband Internet access on universal service, regardless of platform. We therefore ask whether other facilities-based providers of broadband Internet access services may, as a legal matter, or should, as a policy matter, be required to contribute. For example, if other broadband Internet access services are determined in other proceedings to be information services with a telecommunications input, would the public interest require exercise of our permissive authority? We request that commenters identify factors that should be considered when deciding whether the public interest would be served by requiring other facilities-based providers of broadband Internet access to contribute. Commenters should discuss whether these factors differ from or are the same as those relevant for wireline broadband Internet access providers. We also seek comment on what contribution obligations, if any, should apply if other broadband Internet access services are classified as something other than information services with a telecommunications input. Finally, we seek comment on the implications for each commenter's analysis of a change in the assessment system from a revenue-based system to some other basis for assessment, such as a per-connection charge.

80. As the Commission stated in the *First Report and Order*, contribution policies should "reduce[] the possibility that carriers with universal service obligations will compete directly with carriers without such obligations."¹³⁵ Accordingly, commenters should address the competitive impact across broadband platforms, if any, created by our contribution requirements.

Based on our understanding of today's communications market, wireline broadband Internet access providers may compete directly with cable, wireless and satellite operators that provide broadband Internet access services for end-user customers. Therefore, we seek comment on whether all facilities-based broadband Internet access providers should be subject to the same contribution obligations. What are the advantages and disadvantages of such an approach? In particular, to what extent is such broad assessment of universal service contributions on facilities-based broadband Internet access providers necessary to ensure that universal service mechanisms will satisfy the objectives of section 254? In addition, if the Commission were to adopt a connection-based assessment methodology, commenters should address how such a reform would be implemented.

¹³⁵ *First Report and Order*, 12 FCC Rcd at 9183-9184, para. 795.

D. Growth of Broadband and Migration

81. Because section 254 of the Act requires us to preserve and advance universal service to the extent possible, we must strive to understand changes in technology and the marketplace and anticipate their implications for universal service.¹³⁶ We ask commenters to describe how the growth of broadband Internet access services will impact our current universal service system and our ability to support universal service. For example, if broadband Internet access service providers increasingly provide broadband Internet access services over their own facilities, will that result in lost contribution revenues, and if so, how much? We also seek comment on the implications of such developments if we were to move to a per-connection-based assessment. Commenters should discuss the impact, if any, on the expected growth of broadband Internet access services if contributions were assessed on a per-connection or some other non-revenue-based system.

82. Additionally, commenters should discuss whether they expect voice traffic to migrate to broadband Internet platforms.¹³⁷ If so, commenters should address the potential impact of such migration on our ability to support universal service. Specifically, if voice traffic over broadband Internet platforms increases and traditional circuit-switched voice traffic decreases, how, if at all, will that impact our ability to support universal service in an equitable and non-discriminatory manner? Will migration lower or raise the cost of providing service? What, if any, will be the impact on the level of high-cost universal service support needed as voice traffic migrates from traditional circuit switched networks to broadband Internet platforms? For example, will costs of providing supported services in high-cost areas increase or decrease as migration occurs?

E. Section 254(k)

83. Section 254(k) of the Act prohibits telecommunications carriers from using services that are not competitive to subsidize services that are subject to competition. We seek comment on how this provision should be implemented for wireline broadband Internet access. Section 254(k) also requires that services supported by universal service bear no more than a reasonable share of joint and common costs of the facilities used to provide these services. Because information services do not currently fall within the definition of services supported by universal service, deeming wireline broadband Internet access to be an information service would mean that the Commission would have to ensure that the costs of the network are properly allocated between regulated Title II services and Title I information services to comply with this statutory mandate. We seek comment on how we may ensure that services supported by universal service bear no more than a reasonable portion of the costs associated with facilities

¹³⁶ 47 U.S.C. § 254(b).

¹³⁷ We note that the Joint Board is currently seeking comment on whether telecommunications services should be added or removed from the list of core universal service services. We do not address in this proceeding whether voice services provided over broadband IP platforms are eligible for support. See *Federal-State Joint Board on Universal Service Seeks Comment on Review of the Definition of Universal Service*, CC Docket 96-45, Public Notice (rel. Aug. 21, 2001)

used to provide both supported services and unsupported Internet access. Specifically, we invite commenters to address the general sufficiency of our existing allocation rules and policies in a broadband environment and whether those rules should be modified in order to meet the requirements of section 254(k).

V. PROCEDURAL MATTERS

A. Ex Parte Presentations

84. These matters shall be treated as a “permit-but-disclose” proceeding in accordance with the Commission’s *ex parte* rules.¹³⁸ Persons making oral *ex parte* presentations are reminded that memoranda summarizing the presentations must contain summaries of the substance of the presentations and not merely a listing of the subjects discussed. More than a one or two sentence description of the views and arguments presented is generally required.¹³⁹ Other requirements pertaining to oral and written presentations are set forth in section 1.1206(b) of the Commission’s rules.

B. Comment Filing Procedures

85. Pursuant to sections 1.415 and 1.419 of the Commission’s rules,¹⁴⁰ interested parties may file comments within 60 days after publication of this NPRM in the Federal Register and may file reply comments within 105 days after publication of this NPRM in the Federal Register. All filings should refer to CC Docket No. 01-338. Comments may be filed using the Commission’s Electronic Comment Filing System (ECFS) or by filing paper copies.¹⁴¹ Comments filed through ECFS can be sent as an electronic file via the Internet to <http://www.fcc.gov/e-file/ecfs.html>. Generally, only one copy of an electronic submission must be filed. In completing the transmittal screen, commenters should include their full name, postal service mailing address, and the applicable docket numbers, which in this instance are CC Docket No. 01-338, CC Docket No. 96-98, and CC Docket No. 98-147. Parties may also submit an electronic comment by Internet e-mail. To get filing instructions for e-mail comments, commenters should send an e-mail to ecfs@fcc.gov, and should include the following words in the body of the message: “get form<your e-mail address>.” A sample form and directions will be sent in reply.

86. Parties that choose to file by paper must file an original and four copies of each, and are hereby notified that effective December 18, 2001, the Commission’s contractor, Vistronix, Inc., will receive hand-delivered or messenger-delivered paper filings for the Commission’s Secretary at a new location in downtown Washington, DC. The address is 236 Massachusetts Avenue, NE, Suite 110, Washington, DC 20002. The filing hours at this location

¹³⁸ 47 C.F.R. §§ 1.1200-1.1216.

¹³⁹ See 47 C.F.R. § 1.1206(b)(2).

¹⁴⁰ 47 C.F.R. §§ 1.415, 1.419.

¹⁴¹ See Electronic Filing of Documents in Rulemaking Proceedings, 63 Fed. Reg. 24121 (1998).

will be 8:00 a.m. to 7:00 p.m. All hand deliveries must be held together with rubber bands or fasteners. Any envelopes must be disposed of before entering the building.

87. This facility is the only location where hand-delivered or messenger-delivered paper filings for the Commission's Secretary will be accepted. Accordingly, the Commission will no longer accept these filings at 9300 East Hampton Drive, Capitol Heights, MD 20743. In addition, this is a reminder that, effective October 18, 2001, the Commission discontinued receiving hand-delivered or messenger-delivered filings for the Secretary at its headquarters location at 445 12th Street, SW, Washington, DC 20554.

88. Other messenger-delivered documents, including documents sent by overnight mail (other than United States Postal Service (USPS) Express Mail and Priority Mail), must be addressed to 9300 East Hampton Drive, Capitol Heights, MD 20743. This location will be open 8:00 a.m. to 5:30 p.m. The USPS first-class mail, Express Mail, and Priority Mail should continue to be addressed to the Commission's headquarters at 445 12th Street, SW, Washington, DC 20554. The USPS mail addressed to the Commission's headquarters actually goes to our Capitol Heights facility for screening prior to delivery at the Commission.

If you are sending this type of document or using this delivery method . . .	It should be addressed for delivery to . . .
Hand-delivered or messenger-delivered paper filings for the Commission's Secretary	236 Massachusetts Avenue, NE, Suite 110, Washington, DC 20002 (8:00 to 7:00 p.m.)
Other messenger-delivered documents, including documents sent by overnight mail (other than United States Postal Service Express Mail and Priority Mail)	9300 East Hampton Drive, Capitol Heights, MD 20743 (8:00 a.m. to 5:30 p.m.)
United States Postal Service first-class mail, Express Mail, and Priority Mail	445 12 th Street, SW Washington, DC 20554

Parties who choose to file by paper should also submit their comments on diskette. These diskettes should be submitted to Janice Myles, Policy & Program Planning Division, Common Carrier Bureau, Federal Communications Commission, at the filing window at 236 Massachusetts Avenue, NE, Suite 110, Washington, DC 20002. Such a submission should be on a 3.5 inch diskette formatted in an IBM compatible format using Microsoft Word or compatible software. The diskette should be accompanied by a cover letter and should be submitted in "read only" mode. The diskette should be clearly labeled with the commenter's name, proceeding (including the docket numbers, in this case, CC Docket No. 01-338, CC Docket No. 96-98, and CC Docket No. 98-147), type of pleading (comment or reply comment), date of submission, and the name of the electronic file on the diskette. The label should also include the following phrase: "Disk Copy -- Not an Original." Each diskette should contain only one party's pleading, preferably in a single electronic file. In addition, commenters must send diskette copies to the Commission's copy contractor, Qualex International, Portals II, 445 12th Street S.W., CY-B402, Washington, D.C. 20554.

89. Regardless of whether parties choose to file electronically or by paper, parties

should also file one copy of any documents filed in this docket with the Commission's copy contractor, Qualex International, Portals II, 445 12th Street S.W., CY-B402, Washington, D.C. 20554 (telephone 202-863-2893; facsimile 202-863-2898) or via e-mail at qualexint@aol.com.

90. Comments and reply comments must include a short and concise summary of the substantive arguments raised in the pleading. Comments and reply comments must also comply with section 1.48 and all other applicable sections of the Commission's rules.¹⁴² We direct all interested parties to include the name of the filing party and the date of the filing on each page of their comments and reply comments. All parties are encouraged to utilize a table of contents, regardless of the length of their submission. We also strongly encourage that parties track the organization set forth in the NPRM in order to facilitate our internal review process.

C. Initial Regulatory Flexibility Analysis

91. As required by the Regulatory Flexibility Act of 1980, as amended (RFA),¹⁴³ the Commission has prepared the present Initial Regulatory Flexibility Analysis (IRFA) of the possible significant economic impact on a substantial number of small entities by the policies and rules proposed in this Notice. Written public comments are requested on this IRFA. Comments must be identified as responses to the IRFA and must be filed by the deadlines for comments on the Notice provided above in Section V.B. The Commission will send a copy of the Notice, including this IRFA, to the Chief Counsel for Advocacy of the Small Business Administration.¹⁴⁴ In addition, the Notice and IRFA (or summaries thereof) will be published in the Federal Register.¹⁴⁵

1. Need for, and Objectives of, the Proposed Rules

92. In this proceeding, we seek comment on the appropriate classification and regulatory framework for wireline broadband Internet access services. We tentatively conclude that wireline broadband Internet access services – whether provided over a third party's facilities or self-provisioned facilities – are information services subject to regulation under Title I of the Act, and we ask for comment on this tentative conclusion. As noted above, we have already sought comment on the regulatory classification for cable modem service, and this issue will be resolved in a separate proceeding. We also address the appropriate regulatory framework for wireline broadband Internet access services. We seek comment on what regulations should apply in the future if these broadband offerings are found to be information services subject to Title I of the Act. Specifically, we examine implications of Title I classification for wireline broadband offerings for non-discriminatory access and other core communications policy objectives. In light of these objectives, we seek comment on whether to modify or eliminate existing access

¹⁴² See 47 C.F.R. § 1.48.

¹⁴³ See 5 U.S.C. § 603. The RFA, *see* 5 U.S.C. § 601 *et. seq.*, has been amended by the Small Business Regulatory Enforcement Fairness Act of 1996 (SBREFA), Pub. L. No. 104-121, 110 Stat. 857 (1996).

¹⁴⁴ See 5 U.S.C. § 603(a).

¹⁴⁵ See *id.*

obligations on providers of self-provisioned wireline broadband Internet access services. We seek comment on how this regulatory classification may impact other obligations, such as those associated with public safety and welfare. In addition, we seek comment generally on the role of the states with respect to regulating wireline broadband Internet access services. Finally, we seek comment broadly on whether facilities-based providers of broadband Internet access services provided over wireline and other platforms, including cable, wireless and satellite, should be required to contribute to universal service. For purposes of this Notice, we use the term “facilities-based” to refer to providers of broadband Internet access services that furnish their own last-mile connection, irrespective of the transmission medium, to the customer.

2. Legal Basis

93. The legal basis for any action that may be taken pursuant to the Notice is contained in sections 4, 10, 201-202, 251, 252, 254, 271, 303 and 403 of the Communications Act of 1934, as amended, 47 U.S.C. §§ 154, 201-202, 251, 252, 254, 271, 303, and 403, section 706 of the Telecommunications Act of 1996, and sections 1.1, 1.48, 1.411, 1.412, 1.415, 1.419, and 1.1200-1.1216, of the Commission’s rules, 47 C.F.R. §§ 1.1, 1.48, 1.411, 1.412, 1.415, 1.419, and 1.1200-1.1216.

3. Description and Estimate of the Number of Small Entities to Which the Proposed Rules will Apply

94. The RFA directs agencies to provide a description of and, where feasible, an estimate of the number of small entities that will be affected by the proposed rules.¹⁴⁶ The RFA generally defines the term “small entity” as having the same meaning as the terms “small business,” “small organization,” and “small governmental jurisdiction.”¹⁴⁷ In addition, the term “small business” has the same meaning as the term “small business concern” under the Small Business Act.¹⁴⁸ A small business concern is one which: (1) is independently owned and operated; (2) is not dominant in its field of operation; and (3) satisfies any additional criteria established by the Small Business Administration (SBA).¹⁴⁹ Consistent with SBA’s Office of Advocacy’s view, we have included small incumbent LECs in this present RFA analysis. We emphasize, however, that this RFA action has no effect on FCC analyses and determinations in other, non-RFA contexts.

95. *Total Number of Telephone Companies Affected.* The United States Bureau of the Census (“the Census Bureau”) reports that, at the end of 1992, there were 3,497 firms engaged in

¹⁴⁶ 5 U.S.C. §§ 603(b)(3), 604(a)(3).

¹⁴⁷ 5 U.S.C. § 601(6).

¹⁴⁸ 5 U.S.C. § 601(3) (incorporating by reference the definition of “small business concern” in the Small Business Act, 15 U.S.C. § 632). Pursuant to 5 U.S.C. § 601(3), the statutory definition of a small business applies “unless an agency, after consultation with the Office of Advocacy of the Small Business Administration and after opportunity for public comment, establishes one or more definitions of such terms which are appropriate to the activities of the agency and publishes such definition(s) in the Federal Register.”

¹⁴⁹ 5 U.S.C. § 632.

providing telephone services, as defined therein, for at least one year.¹⁵⁰ This number contains a variety of different categories of carriers, including local exchange carriers, interexchange carriers, competitive access providers, cellular carriers, mobile service carriers, operator service providers, pay telephone operators, PCS providers, covered SMR providers, and resellers. It seems certain that some of those 3,497 telephone service firms may not qualify as small entities or small incumbent LECs because they are not “independently owned and operated.”¹⁵¹ For example, a PCS provider that is affiliated with an interexchange carrier having more than 1,500 employees would not meet the definition of a small business. It seems reasonable to conclude, therefore, that fewer than 3,497 telephone service firms are small entity telephone service firms or small incumbent LECs that may be affected by the decisions and rules adopted in this Order.

96. *Local Exchange Carriers, Interexchange Carriers, Competitive Access Providers, Operator Service Providers, Payphone Providers, and Resellers.* Neither the Commission nor SBA has developed a definition particular to small local exchange carriers (LECs), interexchange carriers (IXCs), competitive access providers (CAPs), operator service providers (OSPs), payphone providers or resellers. The closest applicable definition for these carrier-types under SBA rules is for telephone communications companies other than radiotelephone (wireless) companies.¹⁵² The most reliable source of information regarding the number of these carriers nationwide of which we are aware appears to be the data that we collect annually on the Form 499-A. According to our most recent data, there are 1,335 incumbent LECs, 349 CAPs, 204 IXCs, 21 OSPs, 758 payphone providers and 541 resellers.¹⁵³ Although it seems certain that some of these carriers are not independently owned and operated, or have more than 1,500 employees, we are unable at this time to estimate with greater precision the number of these carriers that would qualify as small business concerns under SBA's definition. Consequently, we estimate that there are fewer than 1,335 incumbent LECs, 349 CAPs, 204 IXCs, 21 OSPs, 758 payphone providers, and 541 resellers that may be affected by the decisions and rules adopted in this Order.

97. *Small Local Exchange Carriers:* We have included small incumbent local exchange carriers¹⁵⁴ in this present RFA analysis. A “small business” under the RFA is one that, *inter alia*, meets the pertinent small business size standard (*e.g.*, a telephone communications business having 1,500 or fewer employees¹⁵⁵), and “is not dominant in its field of operation.”¹⁵⁶ The

¹⁵⁰ United States Department of Commerce, Bureau of the Census, 1992 Census of Transportation, Communications, and Utilities: Establishment and Firm Size, at Firm Size 1-123 (1995) (“1992 Census”).

¹⁵¹ 15 U.S.C. § 632(a)(1).

¹⁵² 13 C.F.R. § 121.210, North American Industry Classification System (NAICS) Codes 513310, 513330, 513340.

¹⁵³ See FCC, Common Carrier Bureau, Industry Analysis Division, *Trends in Telephone Service*, Table 16.3 (Dec. 2000) (*Telephone Trends Report*). The total for resellers includes both toll resellers and local resellers. The category for CAPs also includes competitive local exchange carriers (CLECs) (total of 129 for both).

¹⁵⁴ See 47 U.S.C. § 251(h) (defining “incumbent local exchange carrier”).

¹⁵⁵ See 13 CFR § 121.201, NAICS code 513310.

¹⁵⁶ 15 U.S.C. § 632.

SBA's Office of Advocacy contends that, for RFA purposes, small incumbent local exchange carriers are not dominant in their field of operation because any such dominance is not "national" in scope.¹⁵⁷ We have therefore included small incumbent local exchange carriers in this RFA analysis, although we emphasize that this RFA action has no effect on Commission analyses and determinations in other, non-RFA contexts.

98. *Internet Service Providers*: Under the new NAICS codes, SBA has developed a small business size standard for "On-line Information Services," NAICS Code 514191.¹⁵⁸ According to SBA regulations, a small business under this category is one having annual receipts of \$18 million or less.¹⁵⁹ According to SBA's most recent data, there are a total of 2,829 firms with annual receipts of \$9,999,999 or less, and an additional 111 firms with annual receipts of \$10,000,000 or more.¹⁶⁰ Thus, the number of On-line Information Services firms that are small under the SBA's \$18 million size standard is between 2,829 and 2,940. Further, some of these Internet Service Providers (ISPs) might not be independently owned and operated. Consequently, we estimate that there are fewer than 2,940 small entity ISPs that may be affected by the decisions and rules of the present action.

99. *Satellite Service Carriers*. The SBA has developed a definition for small businesses within the category of Satellite Telecommunications. Under that SBA definition, such a business is small if it has 1,500 or fewer employees.¹⁶¹ According to the Commission's most recent Telephone Trends Report data, 21 carriers reported that they were engaged in the provision of satellite services.¹⁶² Of these 21 carriers, 16 reported that they have 1,500 or fewer employees and five reported that, alone or in combination with affiliates, they have more than 1,500 employees.¹⁶³ The Commission does not have data specifying the number of these carriers that are not independently owned and operated, and thus is unable at this time to estimate with greater precision the number of satellite service carriers that would qualify as small business concerns under the SBA's definition. Consequently, the Commission estimates that there are 21 or fewer satellite service carriers that may be affected by the rules.

¹⁵⁷ Letter from Jere W. Glover, Chief Counsel for Advocacy, SBA, to William E. Kennard, Chairman, FCC (May 27, 1999). The Small Business Act contains a definition of "small business concern," which the RFA incorporates into its own definition of "small business." See 15 U.S.C. § 632(a) (Small Business Act); 5 U.S.C. § 601(3) (RFA). SBA regulations interpret "small business concern" to include the concept of dominance on a national basis. 13 C.F.R. § 121.102(b).

¹⁵⁸ 13 C.F.R. § 121.201, NAICS Code 514191.

¹⁵⁹ *Id.*

¹⁶⁰ 1997 Census Report, Establishment and Firm Size, U.S. Census Bureau, U.S. Department of Commerce, Economics and Statistics Administration, Document EC97S51S-SZ, <http://www.govprod/ec97/97s51-sz.pdf>, at 24.

¹⁶¹ 13 C.F.R. § 121.201, NAICS Code 513340.

¹⁶² *Telephone Trends Report*, Table 5.3.

¹⁶³ *Id.*

100. *Wireless Service Providers.* The SBA has developed a definition for small businesses within the two separate categories of Cellular and Other Wireless Telecommunications or Paging. Under that SBA definition, such a business is small if it has 1,500 or fewer employees.¹⁶⁴ According to the Commission's most recent Telephone Trends Report data, 1,495 companies reported that they were engaged in the provision of wireless service.¹⁶⁵ Of these 1,495 companies, 989 reported that they have 1,500 or fewer employees and 506 reported that, alone or in combination with affiliates, they have more than 1,500 employees. We do not have data specifying the number of these carriers that are not independently owned and operated, and thus are unable at this time to estimate with greater precision the number of wireless service providers that would qualify as small business concerns under the SBA's definition. Consequently, we estimate that there are 989 or fewer small wireless service providers that may be affected by the rules.

101. *Cable Systems:* The Commission has developed, with SBA's approval, its own definition of small cable system operators. Under the Commission's rules, a "small cable company" is one serving fewer than 400,000 subscribers nationwide.¹⁶⁶ Based on our most recent information, we estimate that there were 1,439 cable operators that qualified as small cable companies at the end of 1995.¹⁶⁷ Since then, some of those companies may have grown to serve over 400,000 subscribers, and others may have been involved in transactions that caused them to be combined with other cable operators. Consequently, we estimate that there are fewer than 1,439 small entity cable system operators that may be affected by the proposals.

102. The Communications Act also contains a definition of a small cable system operator, which is "a cable operator that, directly or through an affiliate, serves in the aggregate fewer than 1% of all subscribers in the United States and is not affiliated with any entity or entities whose gross annual revenue in the aggregate exceeds \$250,000,000."¹⁶⁸ The Commission has determined that there are 67,700,000 subscribers in the United States.¹⁶⁹ Therefore, we found that an operator serving fewer than 677,000 subscribers shall be deemed a small operator, if its annual revenues, when combined with the total annual revenues of all of its affiliates, do not exceed \$250 million in the aggregate.¹⁷⁰ Based on available data, we find that the number of

¹⁶⁴ 13 C.F.R. § 121.201, NAICS Code 513322.

¹⁶⁵ *Telephone Trends Report*, Table 5.3.

¹⁶⁶ 47 C.F.R. § 67.901(3). The Commission developed this definition based on its determination that a small cable system operator is one with annual revenues of \$100 million or less. *Implementation of Sections of the 1992 Cable Act: Rate Regulation*, Sixth Report and Order and Eleventh Order on Reconsideration, 10 FCC Rcd 6393 (1995).

¹⁶⁷ Paul Kagan Associates, Inc., Cable TV Investor, Feb. 29, 1996 (based on figures for Dec. 30, 1995).

¹⁶⁸ 47 U.S.C. § 543(m)(2).

¹⁶⁹ FCC Announces New Subscriber Count for the Definition of Small Cable Operator, Public Notice, DA 01-158 (January 24, 2001).

¹⁷⁰ 47 C.F.R. § 76.901(f).

cable operators serving 677,000 subscribers or less totals approximately 1,450.¹⁷¹ Although it seems certain that some of these cable system operators are affiliated with entities whose gross annual revenues exceed \$250,000,000, we are unable at this time to estimate with greater precision the number of cable system operators that would qualify as small cable operators under the definition in the Communications Act.

4. Description of Projected Reporting, Recordkeeping and Other Compliance Requirements

103. Should the Commission decide that broadband Internet access services are information services with a telecommunications component and should the Commission decide to exercise its permissive contribution authority over certain facilities-based providers of such services, the associated rule changes potentially could modify the reporting and recordkeeping requirements of certain providers of interstate telecommunications regulated under the Communications Act. We could potentially impose contribution requirements on certain facilities-based providers of interstate telecommunications that are not currently required to contribute. Accordingly, such entities would be required to comply with the relevant universal service reporting requirements. Any such reporting requirements potentially could require the use of professional skills, including legal and accounting expertise. Without more data, we cannot accurately estimate the cost of compliance by small providers of interstate telecommunications. In this *Notice*, we do not seek comment on the actual reporting requirements of entities required to contribute to universal service. Rather, we seek comment on whether specific entities should be required to contribute. In the related *Contribution Methodology Further Notice*, however, we seek comment on the frequency with which carriers should submit reports to the Universal Service Administrative Company (USAC), the types of burdens carriers will face in periodically submitting reports to USAC, and whether the costs of such reporting are outweighed by the potential benefits of the possible reforms. Entities, especially small businesses, are encouraged to quantify the costs and benefits of the reporting requirement proposals in that proceeding.

5. Steps Taken to Minimize Significant Economic Impact on Small Entities, and Significant Alternatives Considered

104. The RFA requires an agency to describe any significant, specifically small business, alternatives that it has considered in reaching its proposed approach, which may include the following four alternatives (among others): (1) the establishment of differing compliance or reporting requirements or timetables that take into account the resources available to small entities; (2) the clarification, consolidation, or simplification of compliance or reporting requirements under the rule for small entities; (3) the use of performance, rather than design, standards; and (4) an exemption from coverage of the rule, or any part thereof, for small entities.¹⁷²

¹⁷¹ Paul Kagan Associates, Inc., Cable TV Investor, Feb. 29, 1996 (based on figures for Dec. 30, 1995).

¹⁷² 5 U.S.C. § 603(c).

105. The overall objective of this proceeding is to establish an appropriate classification and regulatory framework for wireline broadband Internet access service. We tentatively conclude that wireline broadband Internet access services are information services under the Act. If we classify and regulate this service as an information service, providers of this service, including those providers that own transmission facilities, could be subject to minimal and/or reduced regulatory requirements. We believe that this would have a positive economic impact on small entities to the extent that it avoids placing restrictions on their operations. We also tentatively conclude that the transmission aspect of wireline broadband Internet access service is “telecommunications” under the Act as opposed to “telecommunications service.” As part of the regulatory framework we are examining, we seek comment on what regulatory requirements, if any, should attach to this telecommunications input. We ask whether we should modify or eliminate the requirements in the *Computer Inquiry* framework for access to the telecommunications input. We also explore the implications for other regulatory requirements, including public safety and welfare, if we were to modify the access obligations.

106. We note that the *Computer Inquiry* requirements are only applicable to the BOCs, which are not small entities, but that ISPs, including small ISP entities, may obtain access to the BOCs’ network to provide broadband Internet access service pursuant to these requirements. Indeed, we note in the *Notice* that ISPs currently purchase transmission services under tariff to provide their own information services. The *Notice* asks parties to comment on alternative ways in which ISPs could acquire transmission necessary to provide their information service offerings if we modify or eliminate the current access requirements. Specifically, we ask whether they can rely on negotiated contractual arrangements and how such arrangements could be priced. For purposes of this IRFA, we specifically seek comment from small entities on these issues, in particular, on the extent to which the use of alternative access arrangements could impact them economically. Similarly, we also specifically seek comment from all affected small entities regarding the incumbent LECs’ obligations to provide access to network elements under sections 251 and 252 of the Act if we determine that the provision of wireline broadband Internet access service over a provider’s own facilities is an information service and that the transmission input is telecommunications and not a telecommunications service, including the extent to which these determinations would economically impact them. In addition, we generally ask small entities to comment on these and any other issues that could have an economic impact on them.

107. As discussed previously, this *Notice* does not seek comment on the reporting requirements or assessment methodology for contributors to universal service. However, the *Contribution Methodology Further Notice* seeks comment on how to streamline and reform both the manner in which the Commission assesses carrier contributions to the universal service fund and the manner in which carriers may recover those costs from their customers. Wherever possible, the *Contribution Methodology Further Notice* seeks comment on how to reduce the administrative burden and cost of compliance for small telecommunications service providers. If certain facilities-based providers of interstate telecommunications are required to contribute to universal service and are not currently contributing, such requirements will result in a financial impact. The impact to small entities, however, is mitigated by the Commission’s *de minimis* contribution exemption.

6. Federal Rules that May Duplicate, Overlap, or Conflict with the

Proposed Rules

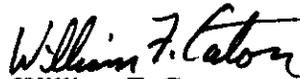
108. None.

VI. ORDERING CLAUSES

109. Accordingly, IT IS ORDERED that, pursuant to the authority contained in sections 2, 4(i)-4(j), 201, and 303(r) of the Communications Act of 1934, as amended, 47 U.S.C. §§ 152, 154(i)-4(j), 201, 303(r), this Notice IS ADOPTED.

110. IT IS FURTHER ORDERED that the Commission's Consumer Information Bureau, Reference Information Center, SHALL SEND a copy of this Notice, including the Initial Regulatory Flexibility Analysis, to the Chief Counsel for Advocacy of the Small Business Administration.

FEDERAL COMMUNICATIONS COMMISSION


William F. Caton
Acting Secretary

**SEPARATE STATEMENT OF
CHAIRMAN MICHAEL K. POWELL**

*Re: Appropriate Framework for Broadband Access to the Internet Over Wireline Facilities;
Universal Service Obligations of Broadband Providers*

I write separately to underscore the broad bases upon which I vigorously support adoption of this *Notice*.

Broadband Deployment is the Central Communications Policy Objective

As we policymakers are all quick to acknowledge, broadband deployment is the central communications policy objective in America. There is a clear consensus forming around this view as evidenced by recent statements of TechNet, the outstanding report by the National Academy of Science, the Computer Systems Policy Project, and others.¹⁷³ Many of these commenters have been calling, in particular, for the Commission to provide regulatory certainty and clarity in the provision of broadband Internet access services by limiting unnecessary or unduly burdensome regulatory costs on service providers.

It is now time for fewer words and more action. With today's decision, among several others, we have stopped just talking about promoting broadband and started acting.

The Greatest Challenge in Promoting Broadband is Deciding How To Stimulate The Enormous Investment Required To Turn The Promise of Broadband Into Reality

As we policymakers transform our words into action, we are faced with the grim reality that the government likely will not, and probably cannot, cover much of the hefty price tag associated with building out one or more broadband networks that can eventually serve all Americans. Thus, our greatest challenge in promoting broadband is deciding how best to stimulate enormous private sector investment. In order to overcome this challenge, we must:

- Limit the Risk and Uncertainty of Regulation
 - The FCC has stood back long enough, up until now making pronouncements in this area in piecemeal fashion. These decisions often lacked analysis of either the relevant statutory language or of the ways in which the 1996 Act requires or suggests that we diverge from requirements adopted before 1996.

¹⁷³ See, e.g., Computer Science and Telecommunications Board, National Research Council, *Broadband: Bringing Home the Bits* at 24-25, 167-177; Computer Systems Policy Project, *Building the Foundation of the Networked World*; TechNet, *A National Imperative: Universal Availability of Broadband by 2010*; Letter from Matthew J. Flanigan, President, Telecommunications Industry Association, to the Honorable George W. Bush, President of the United States of America, Oct. 4, 2001.

We must now clarify the regulatory classification and treatment of these new services, so companies—incumbents and competitors alike—know what to expect and can make prudent decisions to build and enter these new markets.

- Lower the Cost of Infrastructure Investment
 - Because the capital for infrastructure investment will have to come primarily from the private sector, the FCC must try to minimize the cost of bringing broadband services to the public by minimizing regulatory costs. These regulatory costs can be just as significant a barrier to deployment as the challenge of raising capital in the dark of a recession.
 - Nearly every responsible group that has commented on broadband deployment has cited the need to remove regulatory barriers to deployment. More importantly, Congress squarely anticipated the need to do so, as revealed by section 706 of the Act. Section 706 implores the Commission to encourage and accelerate deployment by “removing barriers to infrastructure investment. . .”

For A National Commitment To Broadband Deployment To Bear Fruit, Many Others Will Have To Take Action, As Well

As is often the case under the legal and policy framework governing regulation of communications and related industries, the FCC does not hold all the tools necessary to promote broadband deployment in its toolkit. There needs to be a clear and productive regulatory environment at the state and federal level. For example, companies providing wireline broadband Internet access will need fair access to rights of way. I commend NARUC for pushing for a dialogue on this with local municipalities. Broadband deployment will also require the nation’s governors to see this effort as a vital means of economic development. And it will require content and application developers to deliver on the technological promise that broadband capability makes possible.

For Its Part, The FCC Will Act

We have put on the tracks the vehicles that will now allow us to answer the heretofore unanswered questions. We will clarify and simplify the regulatory framework for these promising services. In so doing, we will do our part to contribute to the nation’s collective effort to promote broadband deployment. Yes, our decisions will have far-reaching implications, but, as we are often reminded, so, too, will broadband have far-reaching implication.

This is *not* the time for timidity. The Commission for too long has cracked open the door, but frightened by the dark, slammed it shut again. The market is crying out for a new regulatory passageway, and consumers are frustrated as they continue their long wait for policymakers’ rhetoric and hoopla to shift into tangible actions that bring into being this promising new chapter in the history of communications and information.

The time now is for action. That is what this item represents, and what we will do.

**SEPARATE STATEMENT OF
COMMISSIONER KATHLEEN Q. ABERNATHY**

Re: Appropriate Framework for Broadband Access to the Internet Over Wireline Facilities; Universal Service Obligations of Broadband Providers

The foregoing Notice tentatively concludes that wireline broadband Internet access services — whether provided over a third party's facilities or self-provisioned facilities — are information services subject to regulation under Title I of the Act. I believe that the analysis set forth in the Notice represents the most straightforward and sensible interpretation of the relevant statutory provisions, as I previously explained in the Section 271 proceeding that gave rise to this Notice.¹⁷⁴ I also believe that classifying incumbent LECs' Internet-access services as information services will serve important public policy goals by promoting a more flexible regulatory framework for these offerings and enabling the Commission to develop a more consistent regulatory approach across technological platforms.

As the Notice recognizes, classifying incumbent LECs' Internet-access services as information services would raise important questions regarding the applicability of existing retail and wholesale regulations. On the retail side, since many Title II obligations are premised on the provision of a telecommunications service, concluding that Internet-access services include only a "telecommunications" component — rather than a distinct "telecommunications service" — might lead us to determine that such Title II duties do not apply or apply only in part. While some might reflexively worry that the removal of Title II regulation would harm consumers, it is important to recognize that the vast majority of Internet access services purchased today *already* are unregulated.¹⁷⁵ All

¹⁷⁴ See Separate Statement of Commissioner Kathleen Q. Abernathy, *Joint Application by SBC Communications, Inc., Southwestern Bell Telephone Company and Southwestern Bell Communications Services, Inc. d/b/a Southwestern Bell Long Distance Pursuant to Section 271 of the Telecommunications Act of 1996 To Provide In-Region, InterLATA Services in Arkansas and Missouri*, CC Docket No. 01-194, FCC 01-338 (rel. Nov. 16, 2001) ("*SBC MO/AR Order*").

¹⁷⁵ In addition, even absent an ultimate finding in this docket that incumbent LECs' Internet access services are information services, it is by no means clear that such services would be subject to retail regulation under Title II. In some contexts, the Commission has appeared to conclude that incumbent LECs' Internet access services include a distinct telecommunications service. See, e.g., *Policy and Rules Concerning the Interstate, Interexchange Marketplace; Implementation of Section 254(g) of the Communications Act of 1934, as Amended; 1998 Biennial Regulatory Review — Review of Customer Premises Equipment and Enhanced Services Unbundling Rules in the Interexchange, Exchange Access, and Local Exchange Markets*, Report and Order, 16 FCC Rcd 7418 (2001) ("*CPE Unbundling Order*") (assuming that the provision of bundled services includes a separate telecommunications service and therefore requires contribution to federal universal service mechanisms). In other contexts, however, the Commission has appeared to take the contrary view that the identification of an information service signifies that the provider *uses* — but does not separately *provide* to end users — telecommunications. See *Federal-State Joint Board on Universal Service*, CC Docket No. 96-45, Report to Congress, 13 FCC Rcd 11501 (1998); see also *SBC MO/AR Order*, ¶¶ 81-82 (concluding that Commission precedent has not squarely resolved the appropriate statutory classification of ILECs' Internet access services).

non-LEC broadband providers (such as cable modem and satellite broadband providers) and non-LEC narrowband ISPs (such as market leader America Online and the thousands of other ISPs) provide service unconstrained by Title II. Moreover, it appears that the robustly competitive market for ISP services gives providers ample incentive to engage in consumer-friendly practices and punishes providers that fail to do so. For example, major ISPs have developed detailed policies for protecting customer privacy, irrespective of government mandates. In any event, the Notice appropriately seeks comment on the implications of an information-service designation on Title II regulation, and I am confident that, if market failures are identified, the Commission can and will intervene to the extent necessary to protect consumers.

On the wholesale side, classifying incumbent LECs' Internet-access services as information services should not have any automatic consequences. Under our *Computer Inquiry* precedents, incumbent LECs are required to make available to unaffiliated ISPs a broadband telecommunications functionality on an unbundled and nondiscriminatory basis. While the Notice seeks comment on whether those requirements should be altered, or even eliminated, there should be no confusion as to their current applicability. Moreover, my willingness to consider changes to this regime — which has existed largely without alteration notwithstanding very significant competitive and technological developments in recent years — does not reflect any predisposition toward any particular outcome.

I support inquiring about changes to our regime for several reasons, not the least of which is that Congress directed the Commission to undertake such inquiries biennially to ensure that our regulations remain necessary.¹⁷⁶ Even absent a statutory mandate, I would want to examine the justifications for our current rules, because it is worth exploring the possibility of developing a more streamlined, market-based approach to wholesale regulation. But I am equally mindful of the fact that our *Computer II/III* rules played a key role in fostering a robustly competitive ISP market in which consumers can choose from a wide range of providers. Thus, while I intend to examine the record with an eye toward streamlining wholesale regulations where possible, I am committed to preserving regulations to the extent necessary to safeguard competition and consumer choice. Moreover, because the Commission cannot adequately assess the need for regulatory intervention without taking account of our analysis of market dominance in the recently released *Incumbent LEC Broadband Services* proceeding¹⁷⁷ — particularly if we

¹⁷⁶ See 47 U.S.C. § 161 (mandating biennial review of Commission regulations); see also *id.* § 160 (directing the Commission to forbear from enforcing unnecessary regulations or statutory provisions). The Commission examined and modified the *Computer II/III* obligations in its 1998 Biennial Review. See *Computer III Further Remand Proceedings: Bell Operating Company Provision of Enhanced Services; 1998 Biennial Review — Review of Computer III and ONA Safeguards and Requirements*, CC Docket Nos. 95-20, 98-10, Report and Order, 14 FCC Rcd 4289 (1999), *recon.*, 14 FCC Rcd 21628 (1999); see also *Further Comment Requested To Update and Refresh Record on Computer III Requirements*, Public Notice, CC Docket Nos. 95-20, 98-10 (rel. Mar. 7, 2001).

¹⁷⁷ *Review of Regulatory Requirements for Incumbent LEC Broadband Services; SBC Petition for Expedited Ruling That It Is Non-Dominant in Its Provision of Advanced Services and for Forbearance from* (continued....)

identify a distinct wholesale market in that rulemaking — I will closely review the record in both proceedings before reaching any conclusions about the appropriate scope of wholesale regulation of the broadband telecommunications functionality.

(Continued from previous page) _____

Dominant Carrier Regulation of These Services, CC Docket No. 01-337, Notice of Proposed Rulemaking, FCC 01-360 (rel. Dec. 20, 2001).

**SEPARATE STATEMENT OF
COMMISSIONER MICHAEL J. COPPS,
DISSENTING IN PART, CONCURRING IN PART**

Re: Appropriate Framework for Broadband Access to the Internet over Wireline Facilities; Universal Service Obligations of Broadband Providers.

I have generally not opposed asking questions as the Commission has initiated several broad Notices of Proposed Rulemaking over the past few months. But when the Commission proposes conclusions that strike me as at odds with current statutory and regulatory requirements, and doesn't analyze the full implications of its decision, I must dissent.

Of course we need to ask questions to make intelligent decisions. I would therefore have been open to a balanced notice that recognized the current statutory and regulatory structure and that sought to examine our rules in light of technology evolution and the increasing convergence of services, technologies, and markets. Our interpretations of telecommunications, telecommunications services and information services need to be looked at in the context of the times and the pace of technological convergence. But before we commit ourselves, even "tentatively," to specific and potentially drastic changes to our precedent that carry with them enormous impacts in the market, we should better understand the implications of our conclusions. We have not done so here, and I fear we are out-driving the range of our headlights.

The majority frames this Notice as an exploration of the statutory classification of telecommunications, telecommunications services, and information services. But what we are really deciding is whether the transmission component for broadband services, including for Internet access, should be offered outside of the statutory framework that applies to telecommunications carriers. This is an enormously far-reaching decision and I, for one, am nowhere near ready to go there, even tentatively.

Our responsibility is to implement the statute as Congress intended. Yet, in reaching its tentative conclusions, the majority fails to analyze our previous determinations that reached a contrary result.¹⁷⁸ By doing so, some may assume the Commission has made up its mind and proceed to basing their conduct on these tentative conclusions.

Moreover, taken to its logical end, the majority's reading of the statute appears to

¹⁷⁸ See, e.g., *Policy and Rules Concerning the Interstate, Interexchange Market*, 16 FCC Rcd 7418 (2001); *Deployment of Wireline Services Offering Advanced Telecommunications Capability*, 13 FCC Rcd 24012 (1998); *Amendment of Section 64.702 of the Commission's Rules and Regulations (Computer III)*, 104 FCC 2d 958 (1986); *Amendment of Section 64.702 of the Commission's Rules and Regulations (Computer II)*, 77 FCC2d 384 (1980); see also *Independent Data Communications Manufacturers Association, Inc.*, 10 FCC Rcd 13717 (1995).

lead to the strange conclusion that Congress intended to remove these services from the numerous competition, universal service, and consumer protection provisions that Congress imposed on common carriers providing telecommunications services. I'm not ready to tell Congress that either – not tentatively nor even conjecturally. For example, the majority notes that incumbents must provide unbundled elements to competitors for the purpose of providing a telecommunications service. Does this mean that under the majority's proposal competitors would not be able to obtain network elements to provide broadband Internet access? Would the majority's conclusion undermine access for the millions of Americans with disabilities, as Congress required in section 255? Would carriers be excused from Congress' privacy rules, thereby allowing carriers to sell and use customer information with impunity? The list goes on and on. Would slamming protections under section 258 be lost for these services? Would the rate averaging and rate integration requirements that are so important to rural consumers be threatened? These and numerous other protections in the Act hinge on the provision of a telecommunications service. Do we really need to go so far down the road with this notice as the majority proposes? U-turns are almost always dangerous, and tentative U-turns can sometimes be the most collision-inducing.

I don't pretend to have all of the answers to the troubling questions raised by the Notice. Nor do I pretend to have all of the questions that need to be asked. But I have enough of them to suggest that we're not ready to go so far as this notice takes us.

I will concur in one section of this Notice, simply to ensure that the universal service questions have sufficient support to be raised. The Notice does seek comment on the impact of its decision on a critical component of the public interest -- how to preserve and advance universal service as Congress directed. While I disagree with the context in which the questions are raised, I would not want to see this Notice go forward without raising questions that would not otherwise be raised about the impact of the Commission's proposal and how we can continue to meet the statutory goals of universal service. As the Commission moves forward with all of the proceedings initiated in the past months, we must be careful that our commitment to universal service never wavers.

Moreover, as we address these questions, we need to work closely with our state colleagues and the Joint Board in particular. It is time we recognize fully that the states are partners in our efforts to advance universal service.

Setting competition policy is the jurisdiction of Congress. I hope that as we move forward, we will be focused on the Congressional directive to promote competition. I fear that the Commission's tentative conclusions today may be read by some as leading down a different road.

For the foregoing reasons, I dissent in part and concur in part.

**SEPARATE STATEMENT OF
COMMISSIONER KEVIN J. MARTIN,
APPROVING IN PART AND DISSENTING IN PART**

Re: Appropriate Framework for Broadband Access to the Internet over Wireline Facilities;
Universal Service Obligations of Broadband Providers

I dissent from this item's discussion of universal service obligations of providers of broadband Internet access. In particular, I object to its determination that we will consider imposing what is essentially an Internet access tax, extending universal service contribution obligations to non-wireline broadband Internet access providers, such as wireless, cable, and satellite providers.

Unlike wireline providers, these providers have not been required to make universal service contributions on the basis of their broadband services. This item finds that, because wireline broadband Internet access providers may compete with these other kinds of providers, the principle of competitive neutrality suggests that we should consider extending the same universal service contribution obligations to them. The item asks, among other things, whether non-wireline facilities-based providers of broadband Internet services may, as a legal matter, or should, as a policy matter, be required to contribute; whether all facilities-based broadband Internet access providers should be subject to the same contribution obligations; and whether the public interest requires exercise of our permissive authority to extend universal service obligations to non-wireline providers. In my view, we should not undertake such an inquiry at this time.

Broadband deployment is vitally important to our nation, as new, advanced services hold the promise of unprecedented business, educational, and healthcare opportunities for all Americans. The Commission thus recently affirmed that "the further deployment of advanced services is one of the Commission's highest priorities." *Inquiry Concerning the Deployment of Advanced Telecommunications Capability to All Americans in a Reasonable and Timely Fashion*, Third Report, FCC 02-33, 6 (Feb. 6, 2002) ("*706 Report*"). The Commission further made clear that it is "actively engaged in removing barriers and encouraging investment in advanced telecommunications." *Id.*

Placing additional financial burdens on broadband providers only creates barriers to deployment. Such burdens raise costs and decrease demand for broadband, constraining the flow of capital investment and chilling innovation. Thus, I have repeatedly advocated that all levels government should exercise self-restraint in placing financial burdens on broadband. *See, e.g., 706 Report*, Separate Statement of Commissioner Kevin J. Martin; Kevin J. Martin, *Framework for Broadband Deployment: Remarks at the National Summit on Broadband Deployment* (Oct. 26, 2001).

Currently, at every level, government too often sees broadband deployment as a potential revenue stream. Telecommunications services are subject to federal and state excise taxes – the kind of taxes traditionally reserved for decreasing demand for products such as alcohol and tobacco. New entrants to the broadband market face federal, state, and local rights-of-way

management fees and franchise fees, which are sometimes intended to generate revenue rather than recover legitimate costs. All of these financial burdens discourage deployment and should be minimized.

The Commission itself has recognized the potential harms from using broadband as a revenue stream, devoting several pages of its recent 706 Report to considering the impact of local rights-of-way fees on broadband deployment. *See id.* 166-168. And keeping the Internet free of taxation has been a national policy for several years. Indeed, Congress recently extended the moratorium on Internet taxation through November 1, 2003.

In this time of protecting the Internet from taxation – of “removing barriers and encouraging investment” – it is troubling to announce that we will consider placing new taxes on broadband providers. While announcing our consideration of the issue is not the same thing as enacting the obligations themselves, the uncertainty created by the announcement – particularly for wireless, cable, and satellite providers – will make deployment only more difficult. Moreover, why even consider the issue if we are ultimately not going to put such obligations into effect? Only compelling reasons should justify such an inquiry. And I do not believe there are compelling reasons at this time.

For example, there has been no finding that the current contribution mechanism is insufficient to meet the needs of the universal service fund. Even so, today we adopt, with my support, a further notice to consider changing the universal service contribution mechanism in other ways to ensure its continued viability. I also would have been open to an inquiry on extending universal service obligations to Internet telephony. It is thus unclear to me why the Commission feels it necessary to bring broadband Internet access into the funding question at this time.

In my view, the principle of competitive neutrality invoked here is not a compelling reason either. While the call to “level the playing field” has some appeal, we are limited by the Communications Act, which imposes different regulatory regimes on different types of providers. In addition, we must remember that we can level the field by working in either direction. The Telecommunications Act of 1996’s explicit goal is to foster a deregulatory environment. The better way to address disparities, then, is not to extend government imposed costs or regulations to new providers, but to reduce and remove such costs and regulations from their competitors.

Moreover, in this context, leveling the playing field is not a simple matter of equalizing universal service contribution obligations. Different kinds of providers have different advantages and burdens. For example, cable providers have been required by some local franchising authorities to pay franchise fees equal to five percent of their gross revenues on their cable modem service, to adhere to franchise obligations, and to obtain specific authorization to initiate cable modem service. While wireline broadband Internet access providers are also subject to fees and regulations – some similar and some different – this item does not propose to avoid all such regulatory inequities.

For these reasons, I am troubled by this item’s suggestion that broadband providers previously not subject to universal service obligations may now be required to contribute to

universal service. The danger here is that, as new technological innovations bring new competitors to the market, we will continue to expand the pool of contributors, whether or not we need additional contributors to keep the fund sufficient. Even worse, by continuously expanding the pool of contributors to encompass new entrants, we may discourage such entry.

I want to make clear that I am committed to ensuring that we maintain a sufficient base of funds to support universal service. Indeed, I strongly support the other item we adopt today concerning reforming the universal service contribution methodology. I simply believe that, without some indication that fund requirements necessitate an extension of contribution obligations to additional broadband providers, we ought to hesitate to cast a cloud of uncertainty over them. Thus, I would have preferred to wait to initiate this inquiry, focusing at present on promoting broadband deployment and making other changes to the universal service contribution mechanism.

Finally, I wish to note an additional consequence of extending universal service contribution obligations to wireless, cable, and satellite Internet access providers. In my view, if we require these providers to pay into the universal service fund, the public interest may weigh in favor of allowing them to be recipients of the fund as well. Whatever contribution obligations we impose on these providers may impact our consideration of whether and how to change the definition of the services supported by universal service.

