

THE FCC’S NAME GAME: HOW SHIFTING REGULATORY CLASSIFICATIONS AFFECT COMPETITION

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INTRODUCTION

In numerous tough telecommunication decisions in the United States, the Federal Communications Commission (“FCC” or “Commission”) ap-

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plies and interprets statutory definitions of services that trigger different degrees of regulatory oversight. Before the onset of the Internet, the FCC easily categorized services into mutually exclusive regulatory classifications. Converging technologies and markets now make it nearly impossible to issue decisions that treat all stakeholders fairly. Increasingly the Internet provides a centralized medium for the delivery of many different kinds of services that ventures previously offered using separate media. Likewise, ventures that focused on one medium and one type of service view the Internet as providing great opportunities to diversify.

Currently both the FCC and reviewing courts have struggled with applying legislatively crafted definitions for telecommunications,¹ telecommunications service,² cable service,³ and information service,⁴ while simultaneously limiting regulatory asymmetries (or, inconsistent regulatory treatment of competing services).⁵ The Commission currently deems telephone company provided broadband access, commonly referred to as Digital Subscriber Lines,⁶ a regulated telecommunications service, but the

1. Telecommunications is defined in the Communications Act of 1934, as amended, 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.” 47 U.S.C. § 153(43) (2000).

2. Telecommunications service is defined 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.” *Id.* § 153(46).

3. Cable service is defined as: “(A) the one-way transmission to subscribers of (i) video programming, or (ii) other programming service, and (B) subscriber interaction, if any, which is required for the selection or use of such video programming or other programming service.” *Id.* § 522(6).

4. Information service is defined as:

the offering of a capability for generating, acquiring, storing, transforming, processing, retrieving, utilizing, or making available information via telecommunications, and includes electronic publishing, but does not include any use of any such capability for the management, control, or operation of a telecommunications system or the management of a telecommunications service.

Id. § 153(20).

5. See, e.g., Rob Frieden, *Regulatory Arbitrage Strategies and Tactics in Telecommunications*, 5 N.C. J.L. & TECH. 227, 275 (2004), available at http://www.jolt.unc.edu/Vol5_I2/pdf/Frieden%20v5i2.pdf.

6. Bell Atlantic, now known as Verizon Communications, describes its digital subscriber line service as:

an interstate data special access service that provides a high speed access connection between an end user subscriber and an Internet Service Provider (ISP) by utilizing a combination of the subscriber’s existing local exchange physical plant (i.e. copper facility), a specialized DSL-equipped wire center, and transport to the

Commission also aims to convert the classification of this offering into the information services category.⁷ Such a flip in regulatory classification would free telephone companies of traditional common carrier regulation while exempting customers from having to contribute to universal service funding.⁸ A regulatory regime based on fixed definitions has become unworkable when a competing technology, cable modem access, already qualifies for the FCC's unregulated information service classification.⁹

This Article considers the consequences resulting from the creation of legislative definitions which cannot keep pace with quickly changing and converging technologies in the information, communications and entertainment ("ICE") industries. The FCC's inflexible, top-down application is a key problem in using service classifications. Anything that fits within a service definition qualifies for the "legacy" regulatory regime attached to that definition without regard to changed competitive conditions and whether the applicable package of regulatory rights and responsibilities should remain in force. Similarly the existing definition-driven regulatory system forces the FCC and reviewing courts to classify services into mutually exclusive regulatory silos, based only on whether a service fits

Asynchronous Transfer Mode Cell Relay Service where the ISP will connect to Bell Atlantic's network.

In re Bell Atl. Tel. Co., 13 F.C.C.R. 18,911 (1998).

7. Appropriate Framework for Broadband Access to the Internet Over Wireline Facilities, Notice of Proposed Rulemaking, Fed. Communications Comm'n, 17 F.C.C.R. 3019, 3027 (2002) [hereinafter Wireline Broadband Declaratory Ruling and NPRM].

8. Currently cable modem users do not pay fees supporting universal service while DSL users do.

Verizon Communications Inc. will begin charging digital subscriber line Internet customers in Massachusetts and New England \$2 to \$3 more starting next month to recoup the cost of a federal tax for subsidized rural telephone service. Verizon has been absorbing the so-called Universal Service Fund fee, which applies to all phone lines, since launching DSL in the late 1990s but said now that it has over 2.5 million broadband Net subscribers nationally, it no longer wants to absorb the roughly \$75 million annual cost. Currently at \$35 a month, or \$30 bundled with long distance and local phone service, Verizon said DSL will continue to cost several dollars a month less than cable modem service from Comcast Corp. and other cable companies, which are not required to make universal service payments.

Peter J. Howe, *Verizon to Surcharge DSL Customers*, BOSTON GLOBE, Apr. 14, 2004, at D2.

9. Inquiry Concerning High-Speed Access to the Internet Over Cable and Other Facilities, Internet Over Cable Declaratory Ruling, 17 F.C.C.R. 4798 (2002) [hereinafter Cable Modem Declaratory Ruling and NPRM], *aff'd in part and vacated in part sub nom.* Brand X Internet Servs. v. FCC, 345 F.3d 1120 (9th Cir. 2003).

within a particular loose definition and regardless of whether the service functionally provides a competitive alternative to other services similarly defined, or other services fitting into a different definition.

Using definitions as the foundation for applying a particular regulatory regime has become increasingly unsustainable. Technological innovations and converging markets make it increasingly troublesome for regulators and courts to compartmentalize services using classifications that trigger different types and natures of regulation. In an increasingly converging, Internet-centric environment, users may employ a single access platform to provide many different services. The digital environment makes it possible to send, receive, and process bits that translate into many different types of services consumers historically received via different media. Previously telephones handled voice communications exclusively, but now the telephone network provides a medium for both voice and data. Similarly the cable television medium now provides a conduit for a variety of ICE applications, only some of which the cable television venture previously offered. New services fall outside the conventional cable television service package, and the definition of cable service, but judges and regulators cannot easily apply an existing alternative service classification, without the new classification triggering new regulatory rights and responsibilities that are both incompatible with what the legacy cable service definition required and inconsistent with case precedent.

In response, Congress and the FCC have crafted telecommunications definitions to determine the proper scope of government oversight. The process worked adequately when operators did not widely diversify their services. However, such either/or thinking does not work in a convergent environment where telephone companies deliver video programs and cable television companies provide telephone service. Likewise, having to make absolute classifications prevents accommodation in light of changed circumstances. For example, a single Internet transmission link, regardless of who provides it, offers a medium readily equipped with software applications to use the medium simultaneously for telephony, video program delivery, and a variety of enhanced data and information services.

This Article *endorses* a change in regulation, especially to regulation with greater use of a marketplace-driven assessment of ICE subdivided into separate horizontal layers of functionality. Some regulators, commercial stakeholders, and academics have endorsed this approach.¹⁰ Yet, the potential application of different and more comprehensive regulation on some lightly regulated or mostly unregulated stakeholders has prevented

10. See *infra* notes 55-57 and accompanying text.

such an initiative from generating much interest among decision makers. This Article suggests how regulators can implement such a new regulatory construct.

• **SILO-BASED REGULATORY MODELS TRIGGER
CONFUSION AND INCONSISTENCY**

Together, converging technologies and markets reduce the mutual exclusivity between one's conceptualizations of radio, television, telephony and advanced information services. The Internet can provide a medium for real-time delivery of packets that can look and sound similar to a radio or television broadcast, a telephone conversation, or a high-speed data service. Such versatility means that Internet users can easily and seamlessly switch between various types of services merely by using different types of software and other applications that ride on the telecommunications link that transports the bits. The silo-based regulatory regime does not contemplate this multiplicity of services readily accessed by a single communications connection.

Likewise, the same fixed definitions do not apply with exclusivity to all of the diverse and creative innovations now available. For example, video game software offers real time, interactive "radio" links between physically separate players. Another type of software provides "click to connect" telephone calling capabilities for prospective e-commerce customers to chat with a customer service representative. Other types of software provide telephone calling via personal computer or even conventional handsets. Different interpretations and applications of silo-based definitions have resulted. While few would want to see the FCC regulate videogame or e-commerce telephone links, others might consider it essential for regulatory parity and a so-called level competitive playing field where the FCC treat providers of Voice Over the Internet Protocol (VOIP) services as regulated telephone companies in light of the functional equivalency between VOIP and conventional dial-up telephony.

• **Courts Have to Apply Legislative Classifications, But They
Reach Different Conclusions**

Selecting which regulatory classification applies to convergent ICE services grows more muddy because different courts have deviated from the FCC's preferred classification and have applied one or more of the other categories. In a convergent environment, telephone companies need not always provide common carrier telecommunications services, nor do cable television companies always provide cable services. Technological innovations make it possible for telephone companies to upgrade their nar-

rowband, analog dial-up, local loop telephone lines to become a broadband medium suitable for both narrowband voice and broadband data services. Such a broadband platform qualifies for classification under more than one service definition—that is, telecommunication service versus information service. Likewise, retrofitted (for example, hybrid fiber-optic/coaxial cable) and future (for example, broadband fiber optic) cable television company platforms can also span several different service categories.

Even now, reviewing courts have reached different conclusions as to what regulatory classification applies to Internet access via cable television networks. Because different regulatory regimes apply based on specific service definitions, the inconsistent interpretations result in vastly different regulatory burdens borne by competitors. Several courts have confronted the issue of whether cable television operators must provide access to multiple Internet Service Providers (ISPs) instead of exclusive access to a single-owned or affiliated ISP. In addressing the issue of whether a state or municipal government can impose such a common carrier or mandatory multiple ISP access requirement, courts have struggled to determine which service definition applies to cable television company delivered Internet access and in turn which regulatory model applies.

Three cases discussed below evidence significant confusion in determining the length and breadth of what constitutes a telecommunications service, particularly when coupled with either a cable service or an information service. In some instances the differences in what a venture offers does not matter. For example, the Supreme Court recently opted not to differentiate cable services from other services available via a single conduit for purposes of qualifying the cable television operator for access to telephone pole space from an unaffiliated telecommunications service provider.¹¹ As a result, the cable television operator was able to install the facilities necessary to deliver any service to consumers.¹² But in many other instances the application of a service definition, such as common carrier telecommunications services or private carrier information services, directly impacts the range of regulation, the applicability of a tax or subsidy obligation, and the scope of jurisdiction by federal, state and municipal agencies.

11. Nat'l Cable & Telecomms. Ass'n v. Gulf Power Co., 534 U.S. 327 (2002)

12. *Id.* (holding that cable television operators have a lawful right to attach their facilities to poles installed and maintained by unaffiliated public utilities regardless of whether the attachments are used solely to provide cable television services or high-speed Internet access).

Recently, the FCC decided that noncommercial, computer-to-computer VOIP does not constitute a telecommunications service¹³ and accordingly providers of such information services do not have to contribute to universal service funding mechanisms.¹⁴ In contrast, the FCC rejected AT&T's proposal that VOIP services providers, which deliver calls via conventional, circuit switched telephone company lines, commonly known as the Public Switched Telephone Network (PSTN), qualify for the same exemptions.¹⁵

Various courts have reached different conclusions, a confusing yet predictable outcome when courts examine convergent technologies but have to apply mutually exclusive service definitions. In the span of a few months, three courts reached three different conclusions regarding the scope of Internet access responsibilities that a county or municipal government lawfully can impose on a cable television operator. A federal district court in Oregon determined that cable broadband Internet access fits within the "cable service" definition contained in the Communications Act of 1934, as amended, and that the municipal franchising authority properly addressed the issue of whether and how franchisees must open their net-

13. Petition for Declaratory Ruling that Pulver.com's Free World Dialup is Neither Telecommunications Nor a Telecommunications Service, 19 F.C.C.R. 3307 (2004) [hereinafter Pulver Declaratory Ruling].

14. "The Universal Service Fund now encompasses four programs that support telecommunications services nationwide. These include: Low-Income, High-Cost, Schools and Libraries, and Rural Health Care. Link-Up America (Link-Up) and the Lifeline Assistance Program (Lifeline) are part of the Fund's Low-Income Program." Fed. Communications Comm'n, Get Connected: Afford-A-Phone, Background, at <http://www.fcc.gov/cgb/getconnected/background.html>. The FCC states that:

Consumers qualifying for Link-Up America support are eligible to save up to 50% on initial installation fees, not to exceed \$30 per household. In other words, up to \$30 of the first \$60 of their initial hook-up bill. Participants may also work with their telephone company to establish a deferred payment schedule for remaining costs of up to \$200. Consumers living on American Indian or Alaskan Native tribal lands may also qualify for an additional \$70 to defray initial connection charges.

...

The Lifeline Assistance Program enables eligible low-income consumers to save from at least \$6.75 to \$9.50 on their basic monthly telephone service fee depending on the state where the consumer lives. Residents of tribal lands may be eligible for an additional \$25 in savings on their basic monthly phone bill.

Id.

15. Petition For Declaratory Ruling That AT&T's Phone-To-Phone IP Telephony Services Are Exempt From Access Charges, 19 F.C.C.R. 7457 (2004).

works for broadband Internet access.¹⁶ The district court appears to have emphasized the fact that the same coaxial cable, which previously provided only video services, now also can provide a broader array of services. Faced with the real or perceived duty to apply only one service classification, this court concentrated on the traditional core cable services still offered.

The Ninth Circuit Court of Appeals rejected the district court's decision to identify a telecommunications service component in cable television-delivered Internet access.¹⁷ Instead, the Ninth Circuit held that the Communications Act of 1934 forecloses municipalities from having the jurisdiction to require cable operators to provide telecommunication services.¹⁸ The court determined that the content delivery function, integral to the provision of broadband Internet access, constituted a telecommunications service because the characteristics of Internet access cannot fit the video and content predominant characteristics specified in the cable services definition.¹⁹ The court recognized the potential for its holding to trigger the imposition of complete or streamlined telecommunications common carrier regulation. However the court also held that the FCC had exclusive jurisdiction to determine whether and how to regulate such telecommunications services,²⁰ perhaps inferring and endorsing the Commission's comparatively greater reluctance to extend telecommunications "legacy regulation"²¹ to operators using telecommunications capabilities for the delivery of information services.²²

16. *AT&T Corp. v. City of Portland*, 43 F. Supp. 2d 1146, 1155 (D. Or. 1999), *rev'd*, 216 F.3d 871 (9th Cir. 2000).

17. *AT&T Corp. v. City of Portland*, 216 F.3d 871 (9th Cir. 2000).

18. *Id.* at 879.

19. *Id.* at 876-77.

20. *Id.* ("Thus far, the FCC has not subjected cable broadband to any regulation, including common carrier telecommunications regulation. We note that the FCC has broad authority to forbear from enforcing the telecommunications provisions if it determines that such action is unnecessary to prevent discrimination and protect consumers, and is consistent with the public interest.").

21. *See* Access Charge Reform, Seventh Report and Order and Further Notice of Proposed Rulemaking, 6 F.C.C.R. 9923, 9939 (2001) ("Given our attempts to reduce the regulatory burden on ILECs, we are especially reluctant to impose similar legacy regulation on new competitive carriers."); Separate Statement of Commissioner Susan Ness, Authorization and Use of Software Defined Radios, 15 F.C.C.R. 24,442, 24,466 (2000) ("But as we have found elsewhere with our regulatory framework, our legacy regulations for equipment approval may impede rather than facilitate innovation."); JASON OXMAN, THE FCC AND THE UNREGULATION OF THE INTERNET 24-25 (Federal Communications Comm'n, Office of Plans and Policy, OPP Working Paper No. 31, 1999) ("New technologies, while perhaps similar in appearance or in functionality,

The District Court for the Eastern District of Virginia came up with yet a different determination of which definition and regulatory model should apply. In *MediaOne Group, Inc. v. County of Henrico*, the court invalidated a compulsory access ordinance as violating Section 541(b)(3)(D) of the Communications Act of 1934, as amended, which prohibited franchising authorities from requiring a cable operator to provide any telecommunications service or facilities, other than institutional networks.²³ The court reasoned that a cable television operator could provide a cable service that blends both telecommunications and information services.²⁴ However, the court further held that should a state government agency attempt to require cable operators to provide just the telecommunications capability for accessing unaffiliated ISPs, the state agency would impermissibly impose common carrier telecommunications service responsibilities.²⁵

The District Court emphasized substantive rather than jurisdictional grounds for prohibiting state government regulation. Regardless of whether a cable operator could unbundle or decouple the telecommunications transmission functions from a cable or information service, the court reasoned that a state government agency could not lawfully compel a cable television operator to provide a telecommunications service, or a particular transmission technology, two burdens properly borne solely by common carriers.²⁶ Accordingly, the court considered broadband access delivered by a cable television operator delivered to be a cable service, even while acknowledging that components or layers of the composite service constituted a telecommunications service.²⁷ While the lower federal court in *Portland* emphasized the power of local governments to im-

should not be stuffed into what may be ill-fitting regulatory categories in the name of regulation. Rather, the Commission should continue the approach of studying new technologies and only stepping in where the purpose for which the Commission was created, protecting the public interest, demands it.”), *available at* <http://www.fcc.gov/opp/workingp.html>

22. “Furthermore, FCC regulation of ILECs and their DSL broadband transport services does not affect cable broadband transport services because the FCC has refused to suggest that the common carrier regulations that apply to telephone companies would apply to cable broadband Internet access.” Aaron M. Wigod, *The AOL-Time Warner Merger: An Analysis of the Broadband Internet Access Market*, 6 J. SMALL & EMERGING BUS. L. 349, 362 (2002); *see* Cable Modem Declaratory Ruling and NPRM, *supra* note 9.

23. 97 F. Supp. 2d 712 (E.D. Va. 2000).

24. *Id.* at 714.

25. *Id.* at 715-16.

26. *Id.* at 714-16.

27. *Id.* at 714 (“The County is therefore requiring MediaOne to provide a telecommunications facility as a condition for the approval of the transfer of control, and accordingly, the Ordinance is in violation of Section 541((b))(3)(D).”).

pose obligations as part of the franchising process, the *Henrico* court pointed to several limitations on what requirements a franchising authority could impose.

In response to *AT&T v. City of Portland* and other inconsistent judicial determinations of Internet access via cable television networks, the FCC issued a Declaratory Ruling concluding that cable modem service constitutes an interstate, information service exclusively, with no vestige of either cable service or telecommunications service components.²⁸ The Commission's ruling triggered numerous appeals²⁹ and a judicial determination inconsistent with the FCC's conclusion. The Ninth Circuit Court of Appeals, which previously concluded that cable Internet access incorporated elements of both cable service and telecommunications service, again reached that conclusion in *Brand X Internet Services, v. FCC*.³⁰ The court stated:

Because we found that the transmission element of cable broadband service constitutes telecommunications service under the terms of the Communications Act—and because the Act provides that “[a] franchising authority may not impose any requirement under this title that has the purpose or effect of prohibiting, limiting, restricting, or conditioning the provision of a telecommunications service by a cable operator,” 47 U.S.C. § 541(b)(3)(B)—we concluded that Portland and Multnomah county were barred from conditioning the franchise transfer upon AT&T's provision of open access to its broadband network. [*AT&T v. City of Portland*, 216 F.3d 871, 878-79 (9th Cir. 2000)].³¹

The decision rejected the FCC's either/or classification by finding that cable television-delivered Internet access incorporates elements of two services, each subject to differential regulatory treatment. In so doing the decision frustrates the FCC's goal of treating Internet access secured via either a cable television operator or telephone company as an information service. The court simply would not agree to subordinate as insignificant or to ignore the telecommunications service on which information services ride.

28. Cable Modem Declaratory Ruling and NPRM, *supra* note 9.

29. On April 1, 2002, the Judicial Panel on Multidistrict Litigation transferred the related petitions for review to the 9th Circuit for consolidation. *See Brand X Internet Servs. v. FCC*, 345 F.3d 1120, 1127 (9th Cir. 2003).

30. 345 F.3d 1120 (9th Cir. 2003), *cert. granted*, 2004 U.S. Lexis 7980 (U.S. Dec. 3, 2004).

31. *Id.* at 1129.

A. The FCC Tries to Become Technology Agnostic by Differentiating Telecommunications Capabilities from Services

For its part, the FCC refused to subject the telecommunications service function to regulation, regardless of who provides this function, when it becomes integrated with and delivers broadband services. In two separate proceedings the FCC has attempted to diminish the importance of the telecommunications services component, as a separate and regulated element of a convergent information service regardless of whether a historically regulated common carrier telephone company provides the telecommunications capability,³² or whether a cable television firm does.³³ The Commission's unstated rationale for this outcome is consistent with its goal of reducing regulatory asymmetry between broadband services provided by ventures heretofore regulated as telecommunications service providers (such as common carriers) and ventures heretofore unregulated or subject to less burdensome regulations (such as providers of cable or information services). The FCC seeks to eliminate the application of longstanding common carrier regulatory burdens on telephone companies when they bundle or blend broadband telecommunications services with information services. As a result, the Commission sees no merit in maintaining regulatory asymmetry between Internet access services provided by telephone companies and cable television companies.³⁴

The FCC proposes to establish regulatory parity between cable television and telephone companies when they provide Internet access. In the Commission's view, broadband Internet access service carried via either cable television systems³⁵ or local exchange carriers constitutes a largely

32. Wireline Broadband Declaratory Ruling & NPRM, *supra* note 7.

33. Cable Modem Declaratory Ruling and NPRM, *supra* note 9.

34. The existing regulatory framework was built around the concept that different services were provided by different providers, without overlap. Thus, telephone companies providing telephone service are regulated as common carriers under Title II of the Communications Act of 1934 But, to the extent that [other] wireline networks can deliver the same services to the consumer at the same quality, it is difficult to understand why different technologies should trigger different regulatory treatment for the same services.

Antonia M. Apps & Thomas M. Dailey, *Non-Regulation of Advanced Internet Services*, 8 GEO. MASON L. REV. 681, 682-83 (2000); see also Robert M. Frieden, *Adjusting the Horizontal and Vertical in Telecommunications Regulation: A Comparison of the Traditional and a New Layered Approach*, 55 FED. COMM. L.J. 207, 207-50 (2003).

35. Cable Modem Declaratory Ruling and NPRM, *supra* note 9, at 4802 ("We conclude that cable modem service, as it is currently offered, is properly classified as an interstate information service, not as a cable service, and that there is no separate offering of telecommunications service.").

unregulated information service under Section I of the Communications Act of 1934, as amended.³⁶ The FCC believes the identical designation for services transmitted via different technological architectures represents a functional approach that supports ubiquitous deployment of advanced services, harmonized regulation of multiple technical platforms, minimum necessary regulation, and a consistent analytical framework.³⁷ The FCC claims to have adopted a “functional approach that focuses on the nature of the service provided to consumers, rather than on the technical attributes of the underlying architecture.”³⁸ But in the next sentence, it acknowledges that attributing the same service classification to different technologies “may not lead to identical regulatory models across platforms [in view of] . . . legal, market, or technological distinctions [that] may require different regulatory requirements between platforms, or between certain types of providers of one particular platform.”³⁹ The Commission has not established a single regulatory model for information services, but instead has developed at least two parallel vertical tracks: information services mediated via cable television systems and information services mediated via local exchange carriers, with both tracks using integrated telecommunications bit transport, which standing alone would have triggered a different regulatory classification.

II. SUBORDINATING AND DIFFERENTIATING TELECOMMUNICATIONS CAPABILITIES AND SERVICES

The FCC justifies its information services designation of cable and telephone companies that provide Internet access first by noting that it has to make an either/or decision. The Commission did this in a 1998 Report to Congress which responded to queries about the status of services, such as Internet-mediated long-distance telephone calls that have qualified for information services regulatory exemptions, but which increasingly pro-

36. Wireline Broadband Declaratory Ruling and NPRM, *supra* note 7, at 3027 (“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.”).

37. *Id.* at 3021-23.

38. *Id.* at 3023.

39. *Id.*

vide a competitive alternative to regulated telecommunications services.⁴⁰ While acknowledging that “hybrid” services may exist, the Commission nevertheless insisted that “the categories of ‘telecommunications service’ and ‘information service’ [as defined] in the 1996 [Telecommunications] Act are mutually exclusive.”⁴¹ Having decided to apply the information services classification, the Commission then had to rationalize how the telecommunications function necessary to deliver information services to various users did not cause the service to become a telecommunication service or to have a separate and identifiable telecommunications service component. To maintain mutual exclusivity between telecommunications services and information services, the Commission needed to differentiate between telecommunications as an integral part in providing a telecommunications service and telecommunications as a capability or building block. The Commission, thus, has “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.’”⁴²

From the FCC’s results-oriented perspective, when a local exchange telephone company provides Internet access via existing plants otherwise available to provide retail telecommunications services, the carrier no longer operates as a telecommunications service provider, but instead provides to consumers the opportunity to “use” telecommunications as the building block for information services. That is, “[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

The FCC currently proposes to subdivide what was once identified as a telecommunications service into two telecommunications subsets: 1) telecommunications subordinate to, and the building block for, the deliv-

40. See Federal-State Joint Board on Universal Service, 13 F.C.C.R. 11,501 (1998) [hereinafter Report to Congress]; see also *In re* Implementation of the Non-Accounting Safeguards of Sections 271 and 272 of the Communications Act of 1934, as amended, 11 F.C.C.R. 21,905 (1996); Robert M. Frieden, *Dialing for Dollars: Should the FCC Regulate Internet Telephony?*, 23 RUTGERS COMPUTER & TECH. L.J. 47, 47-79 (1997); Robert M. Frieden, *Universal Service: When Technologies Converge and Regulatory Models Diverge*, 13 HARV. J.L. & TECH. 395, 395-433 (2000) [hereinafter Frieden, *Universal Service*].

41. Report to Congress, *supra* note 40, at 11,520.

42. Wireline Broadband Declaratory Ruling and NPRM, *supra* note 7, at 3029.

43. Report to Congress, *supra* note 40, at 11,521 (quoting 47 U.S.C. § 153(20) (2000)).

ery of an information service; and 2) telecommunications integral to the delivery of a retail telecommunications service to end users. The transition from the first category to the second results when the telecommunications functionality fetches a fee directly from the public.⁴⁴

III. EQUATING INTERNET ACCESS VIA CABLE TELEVISION AND LOCAL EXCHANGE FACILITIES

Should the Commission persist in creating this new deregulatory regime, it could consider telephone company broadband services, such as Digital Subscriber Lines, as equally entitled to the largely unregulated status available to cable modem broadband services. The FCC's deregulatory initiative appears compelling as it reduces asymmetrical regulation and places two deep-pocketed ventures on a level competitive playing field. Some have asserted that cable television operators have enjoyed an unfair competitive advantage in having qualified for the information services largely unregulated "safe harbor," a status that prevents federal, state, or municipal regulators from imposing open access and other possibly costly common carrier obligations.⁴⁵ But the FCC has executed a strat-

44. [W]e 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 . . . 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.

Wireline Broadband Declaratory Ruling and NPRM, *supra* note 7, at 3033.

45. The merger [of America Online with Time Warner] unites the second largest cable broadband transport service with the largest narrowband ISP in the world. In the AOL-Time Warner cable divisions, AOL-Time Warner will attempt to migrate AOL's twenty-three million narrowband subscribers to cable broadband offered by AOL-Time Warner. Similarly, Time Warner will migrate its cable television subscribers from narrowband to the cable broadband AOL-Time Warner is offering. Additionally, AOL-Time Warner will migrate nonaffiliated ISPs' subscribers from narrowband to cable broadband in the AOL-Time Warner cable divisions. [Having the right to deny] access or discriminating against nonaffiliated ISPs who seek to offer competitive cable broadband Internet access to consumers furthers these objectives and ensures the success of AOL-Time Warner in the broadband Internet access market.

egy that combines previously different regulatory models based on new functional similarity. Suddenly a telecommunications service can lose its common carrier regulatory triggers if and when the FCC chooses to emphasize the content or enhancements carried via the telecommunications conduit.

The FCC appropriately has expressed reservations about extending preexisting, legacy regulations to Internet access and Internet-mediated services. To do so would broaden the range of common carrier telecommunications service regulation at a time when the Commission wants simultaneously to incubate new technologies, by refraining from imposing stifling regulatory burdens, and to liberate incumbents of similar burdens. However, this well-intentioned reticence to extend regulation forces the FCC to come up with clever but unsustainable equivocations, such as ad hoc, hybrid categories,⁴⁶ to avoid having to apply a legacy regulatory regime.

Wigod, *supra* note 22, at 364; *see also* Mark Cooper, *Open Access to the Broadband Internet: Technical and Economic Discrimination in Closed, Proprietary Networks*, 71 U. COLO. L. REV. 1011 (2000); Harold Feld, *Whose Line is it Anyway? The First Amendment and Cable Open Access*, 8 COMM. LAW CONSPECTUS 23 (2000). Other authors consider mandated access unnecessary. *See* Mark A. Lemley & Lawrence Lessig, *The End of End-to-End: Preserving the Architecture of the Internet in the Broadband Era*, 48 UCLA L. REV. 925 (2001); James B. Speta, *Handicapping the Race for the Last Mile?: A Critique of Open Access Rules for Broadband Platforms*, 17 YALE J. ON REG. 39 (2000).

46. For example, in a report to Congress, the Commission acknowledged the difficulty in completely segregating telecommunications services from information services, especially when providers of the latter offer functional equivalents to the former. Report to Congress, *supra* note 40. The Commission expressly identified types of Internet-mediated telephone service as possibly fitting into either the telecommunication services and information services categories:

Specifically, when an IP telephony service provider deploys a gateway within the network to enable phone-to-phone service, it creates a virtual transmission path between points on the public switched telephone network over a packet-switched IP network. These providers typically purchase dial-up or dedicated circuits from carriers and use those circuits to originate or terminate Internet-based calls. From a functional standpoint, users of these services obtain only voice transmission, rather than information services such as access to stored files. The provider does not offer a capability for generating, acquiring, storing, transforming, processing, retrieving, utilizing, or making available information. Thus, the record currently before us suggests that this type of IP telephony lacks the characteristics that would render them "information services" within the meaning of the statute, and instead bear the characteristics of "telecommunications services."

Id. at 11,544.

Much of the need to finesse how service definitions apply stems from the vertical regulatory models the Commission has erected and seeks to maintain. While new technologies do force regulatory agencies to determine into which categories innovative new services fit, the predominant trigger for trouble lies in the FCC's perceived need to make all or nothing assignments—that is, mutually exclusive, self-contained classifications of telecommunications versus information services. The Commission appears unwilling or unable to consider subjecting a single venture to two different levels of regulatory burdens as a function of what variety of services the venture offers and whether the venture has market power in any sector.

A. Service Classifications and Pole Attachments

The terms and conditions imposed on cable television operators by public utilities for use of pole space provides an instructive case study. In this context, at least one court has refused to endorse classifying the Internet into a single preexisting regulatory classification such as information service. In *Gulf Power v. FCC*, a divided Eleventh Circuit Court of Appeals held that the FCC lacked authority to prescribe a formula for calculating the rates cable television companies should pay public utilities for use of pole or conduit space when providing broadband Internet access in addition to cable services.⁴⁷ The court held that the FCC had authority to regulate the rate for cable and telecommunications services, but not for Internet service that the court considered as not fitting into either category.⁴⁸

However, the Supreme Court reversed and remanded the case based on a reading of the Section 224(b) of the Pole Attachment Act that broadly defines pole attachments as including “any attachment by a cable television system” regardless of what services the attachment supports.⁴⁹ The Supreme Court's reading of the Pole Attachment Act appears to provide an endorsement of the FCC's telecommunications/information service dichotomy, rather than support for the lower court's refusal to maintain it. The Court affirmed the FCC's decision to permit rate regulated Internet

47. 208 F.3d 1263 (11th Cir. 2000), *rev'd and remanded sub nom.* Nat'l Cable & Telecomms. Ass'n v. Gulf Power Co., 534 U.S. 327 (2002).

48. *Id.* at 1276. The Pole Attachment Act of 1996, Ch. 5, 92 Stat. 36 (codified as amended at 47 U.S.C. § 224 (2000)), requires the FCC to regulate the rates, terms, and conditions for pole attachments and specifically mentions two types of attachments: 1) those used by a cable television system to provide cable service and 2) those used by a cable television system to provide a telecommunications service. The Eleventh Circuit held that Internet service “is neither.”

49. *Gulf Power*, 534 U.S. at 332 (“The addition of . . . [a new] service does not change the character of the attaching entity—the entity the attachment is ‘by.’”).

access pole attachments⁵⁰ and noted that the Commission “decided that Internet services [provided by cable television systems] are not telecommunications services.”⁵¹ Currently some courts appear to struggle with the need to apply a single definition and the exclusive regulatory regime it triggers.⁵²

The Telecommunications Act of 1996 created two rate classifications for purposes of calculating pole attachment fees due from a telecommunications service provider versus a cable television service provider, with cable service operators qualifying for a lower rate.⁵³ In *Georgia Power*

50. *Id.* at 336 (“Again, no rate challenge is before us, but we note that the FCC proceeded in a sensible fashion.”).

51. *Id.* (citing Implementation of Sec. 703(e) of the Telecommunications Act of 1996: Amendment of the Commission’s Rules and Policies Governing Pole Attachments, 13 F.C.C.R. 6777, 6794-95 (1998)). Additionally the Court did not find fault with the Commission’s failure to specify whether Internet access provided by a cable system constitutes a cable service, even though the Commission determined that commingled cable television and Internet access pole attachments qualified for the cable service rate under Section 224(d)(3) of the Pole Attachments Act as opposed to a higher rate for pole attachments provided to providers of telecommunications service under Section 224(e)(1). However, the Court did note stakeholder frustration in the FCC’s refusal to categorize Internet services and by the Commission’s decision to authorize the cable service pole attachment rate for commingled services without having decided they constitute cable services: “[D]ecisionmakers sometimes dodge hard questions when easier ones are dispositive; and we cannot fault the FCC for taking this approach.” *Id.* Justice Thomas, in a partial dissenting opinion joined by Justice Souter, would have vacated the Court of Appeals’ judgment and remanded the case to the FCC with a requirement that the Commission “decide at long last whether high-speed Internet access provided through cable wires constitutes cable service or telecommunications service or falls into neither category.” *Id.* at 346 (Thomas, J., concurring-in-part and dissenting-in-part).

52. *See, e.g.,* *Brand X Internet Servs., v. FCC*, 345 F.3d 1120 (9th Cir. 2003), *cert. granted* 2004 U.S. Lexis 7980 (U.S. Dec. 3, 2004); *MediaOne Group, Inc. v. County of Henrico*, 97 F. Supp. 2d 712 (E.D. Va. 2000); *AT&T Corp. v. City of Portland*, 43 F. Supp. 2d 1146 (D. Or. 1999), *rev’d*, 216 F.3d 871 (9th Cir. 2000).

53. The Commission developed a formula, known as the Cable Formula, to be used in resolving complaints by cable systems concerning pole attachment rates. The Telecommunications Act of 1996 (“1996 Act”) directed the Commission to prescribe similar regulations for attachments by telecommunications carriers. Pending the implementation of those regulations, the Commission was directed to apply the Cable Formula to rates for pole attachments made by telecommunications carriers. The Commission adopted a Telecommunications Formula (“Telecom Formula”) that became effective February 8, 2001, with any increases in rates as compared to the Cable Formula to be phased in over five years. The two formulas differ in only one respect, namely their methodologies for determining

Co. v. FCC, the Eleventh Circuit Court of Appeals affirmed the FCC's rate calculation for a telecommunications service provider and rejected a claim of insufficient compensation by noting that the higher rate due from this type of operator exceeded what the utility would have received from a cable service provider.⁵⁴

B. The Layered Approach: A Better Option That Failed to Gain Traction

Over the last few years a number of scholars and industry observers,⁵⁵ the European Union⁵⁶ and most recently a major stakeholder, MCI,⁵⁷

the proportion of unusable space on a pole that is attributable to the attachment. Our Cable Formula attributes unusable space to an attachment based on the portion of usable space occupied by the attachment, while our Telecom Formula attributes unusable space to a telecommunications attachment based on the total number of attaching entities. The total space occupied by an attacher, both usable and unusable, is referred to as the Space Factor in our formulas.

Teleport Comms. Atlanta, Inc. v. Ga. Power Co., 17 F.C.C.R. 19,859, 19,861 (2002) (citations omitted).

54. 346 F.3d 1033 (11th Cir. 2003). The Eleventh Circuit stated:

In fact, Georgia Power has even less to complain about than did its sister, Alabama Power. Recall that the 1996 Telecommunications Act mandates two different formulas for calculating pole attachment rates: the cable rate for cable company attachments and the new telecom rate for telecommunications attachments. *Alabama Power* was a challenge to the cable rate, while the rate set by FCC in this case was predicated on the same number of attachers as is presumptively set by the telecom rate. As *Alabama Power* recognized, however, the telecom rate yields a higher pole attachment rate for telecommunications attachments than the cable rate yields for cable attachments. If the cable rate provided more than just compensation in *Alabama Power*, then the higher rate set by FCC in this case provides just compensation to Georgia Power. It follows that Georgia Power's claim that FCC has failed to provide just compensation must be rejected in light of this Circuit's precedent.

Id. at 1047 (citation omitted).

55. See J. SCOTT MARCUS, THE POTENTIAL RELEVANCE TO THE UNITED STATES OF THE EUROPEAN UNION'S NEWLY ADOPTED REGULATORY FRAMEWORK FOR TELECOMMUNICATIONS (Fed. Communications Comm'n, Office of Plans and Policy Working Paper Series No. 36, 2002), at <http://www.fcc.gov/osp/workingp.html>; Yochai Benkler, *From Consumers to Users: Shifting the Deeper Structures of Regulation Toward Sustainable Commons and User Access*, 52 FED. COMM. L.J. 561 (2000); Robert Cannon, *The Legacy of the Federal Communications Commission's Computer Inquiries*, 55 FED. COMM. L.J. 167 (2003); Frieden, *supra* note 34, at 207; John T. Nakahata, *Regulating Information Platforms: The Challenge of Rewriting Regulation From the Bottom Up*, 1 J. TELECOMM. & HIGH TECH. L. 95 (2002); Phillip J. Weiser, *Law and Information Platforms*, 1 J. TELECOMM. & HIGH TECH. L. 1 (2002); Kevin Werbach, *A Layers Model for Internet Policy*, 1 J. TELECOMM. & HIGH TECH. L. 37 (2002); Richard S. Whitt, A

have endorsed a horizontal, layered approach to ICE regulation. These disparate groups think differently about the nature and scope of regulation based not on definitions, but on a model that conceptualizes telecommunications and information networks into a layered hierarchy of functions.⁵⁸

Splitting services into layers of functionality has some degree of artificiality because users care only about the composite and service providers readily integrate different layers into single services (that is, telecommunications bit transport plus software enhancements). However, legislators and regulators can better calibrate the scope of government oversight by considering the competitiveness of each layer and determining whether regulation is needed on a layer-by-layer basis. The new regulatory threshold could be measured by the degree of competition within each layer and whether any particular venture has market power in that specific layer. Under this regulatory regime, ventures previously subject to regulation based on a legacy definition of the composite service they offered might secure relaxed or eliminated regulation based on current market conditions. More importantly a venture enjoying little or no regulation, but having market power, might trigger greater government oversight despite a legacy status qualifying the venture for less regulation.

At the bottom on the layered model are physical links, such as cables and radio spectrum along with the transmission technologies on which ICE services ride. In the middle are several layers that identify and manage the delivery of ICE traffic, such as the Internet Protocol, which pro-

Horizontal Leap Forward: Formulating A New Communications Public Policy Framework Based on the Network Layers Model, 56 FED. COMM. L.J. 587 (2004); Craig McTaggart, *A Layered Approach to Internet Legal Analysis* (2002) (unpublished paper), at <http://www.innovationlaw.org/cm/ilg2002/reading/layered1.pdf>; Douglas Sicker, *Further Defining a Layered Model for Telecommunications Policy* (2002) (unpublished paper), at <http://intel.si.umich.edu/tprc/papers/2002/95/LayeredTelecomPolicy.pdf>.

56. See, e.g., Commission of the European Communities, *Proposal for a Directive of the European Parliament and of the Council on a Common Regulatory Framework for Electronic Communications Networks and Services*, COM(2000)393 final, <http://europa.eu.int/ISPO/infosoc/telecompolicy/review99/Welcome.html>; see also, Information Society, http://europa.eu.int/information_society/topics/telecoms/regulatory/new_rf/index_en.htm.

57. Richard S. Whitt, *A Horizontal Leap Forward: Formulating a New Public Policy Framework Based on the Network Layers Model*, MCI Public Policy Paper (Mar. 2004), at <http://global.mci.com/about/publicpolicy/presentations/horizontallayerswhitepaper.pdf>.

58. See LAWRENCE B. SOLUM & MINN CHUNG, *THE LAYERS PRINCIPLE: INTERNET ARCHITECTURE AND THE LAW* (Univ. of San Diego School of Law, Public Law and Legal Theory, Research Paper No. 55, 2003), at <http://www.ssrn.com/abstract=416263>.

vides an addressing system for identifying traffic senders and recipients, and the Transmission Control Protocol, which manages the complete link of sender and recipient via different networks. On top are software applications that provide the intelligence needed to shape the link so that it may provide electronic mail, telephony, and a user-friendly multi-media interface for access to a variety of ICE content.

Layer-based regulation would make it possible for the FCC to calibrate the scope of government oversight and operator burdens based on the degree of competition existing specifically in the layer functions performed by each operator. For layers where competition thrives and the marketplace operates freely, the FCC could deregulate or maintain deregulated status. The top layers, where content travels and software applications configure the Internet, qualify for unregulated or newly deregulated status. For layers where competition has not yet evolved, where market concentration exists, or where a single operator possess market power, the Commission should apply conventional regulatory oversight, subject to the use of already available regulatory streamlining and forbearance options for operators lacking market power.⁵⁹

C. Problems with the Layered Approach

Regulation by layer changes the mix of regulation and the scope of government oversight. Because some ventures, currently free of regulation might incur greater oversight, the layered approach may appear to expand the scope of regulation even if newly regulated ventures could quickly secure forbearance of their regulated status. Also many ventures now seek to serve as many markets as possible and to provide services that seamlessly integrate layers vertically. Heretofore, the Commission has shown no interest in subjecting the same venture to different regulatory treatment by service. The Commission previously favored formation of unregulated subsidiaries to isolate disparate regulatory treatment. Later it rejected this strategy to prevent a single venture from exploiting technological and operational synergies. The layered approach also would have difficulty in mandating nondiscrimination and interconnection responsibilities for ventures operating in layers the FCC has deregulated. Vertically integrated operators have incentives to favor affiliated ventures and to discriminate against or disadvantage competitors. Market-based solutions to inferior or

59. *See, e.g.*, 2000 Biennial Regulatory Review, Policy and Rules Concerning the International, Interexchange Marketplace, 16 F.C.C.R. 10,647 (2001) (finding that the Communications Act requires the FCC to forbear from applying Section 203 of the Act and adopting a policy of complete detariffing for international interexchange services provided by nondominant carriers, with limited exceptions for permissive detariffing).

discriminatory service may exist. However, consumers might incur significant search costs in exploring and shifting to service alternatives. For instance, rural residents might not have access to the competitive options available to urban residents.

D. Reclassification into a More Heavily Regulated Status

Despite the possibility of only a temporary reclassification, which would trigger greater regulatory burdens, stakeholders benefiting from the status quo surely will vigorously object to any reclassification that changes their regulatory status even for a portion of their expanded set of offered services. The crux of the objection lies in the dubious view that once having qualified for unregulated status, based on lawful definitions, an unregulated venture cannot do anything that triggers a change in status unless and until it affirmatively elects such a change. In other words a non-common carrier, deemed not to be offering telecommunications services, should have the option of maintaining that status even when offering new services that the operator claims still fit within the cable or information services category and even if the service constitutes a competitive alternative to a telecommunications service.

This assertion becomes illogical if we consider the flipside of the argument: that common carriers providing telecommunications service are “condemned” to that status in perpetuity unless they take affirmative steps either to become something else or to distinguish a new non-common carrier venture through voluntary physical separation from the perpetual telecommunications service provider. If once a common carrier does not always signify a common carrier, then once an unregulated information service provider does not always signify an unregulated venture. Neither Congress nor the FCC has foreclosed any ICE venture from entering markets that trigger a different regulatory status, using current definitions. If a Regional Bell Operating Company (“RBOC”) can become a video program creator or a distributor of Direct Broadcast Satellite services,⁶⁰ then so too can an unregulated venture decide to provide a service traditionally subject to regulation. Having elected to enter a different regulatory environment, unregulated operators should not be able to leverage their prior status to qualify for unconditional exemption from a new regulatory regime. Still, such leveraging has become a mainstay and the basis for claims that a preexisting legacy status persists regardless of the new markets the venture seeks to serve.

60. Matt Richtel, *It's Not Enough to Be Just a Phone Company*, N.Y. TIMES, Feb. 19, 2004, at C1.

E. Convergence and Market Access Initiatives Promote Vertical Integration

The layered regulation model also has difficulty accommodating firms which vertically integrate and offer an array of services that incorporate two or more layers. Technological innovations, regulatory initiatives, lost market share in core services, and entrepreneurship encourage ICE ventures to move up and down the layers or “food chain” and to combine to provide a service or package of services. For example, voice telecommunications, which would lie at a lower level when provided by an incumbent telephone company, could also become a software application located at a top layer when offered by either incumbents or newcomers. With telephone companies providing video services and cable television operators offering Internet access and telephone services, one can see the integration of functions and markets. Given such blurring of layers and functions, regulators have a difficult task in separating functions to determine which regulatory regime applies. Even under a layer-based model such decoupling would present a challenge.

A regulatory solution to this problem lies in mandating a “bright line” separation of activities, as the FCC used to require through mandatory separation of an incumbent carrier’s regulated telecommunication activities and its new unregulated undertakings. The FCC has abandoned such structural separation on grounds that carriers should not have to incur operating inefficiencies, lost synergies, and higher costs when entering new markets.⁶¹ However, in allowing the blurring of functions both vertical silos and horizontal layers can become indistinguishable. Consequently,

61. 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. The non-structural safeguards included Comparably Efficient Interconnection (CEI) and Open Network Architecture (ONA), as well as quality, installation and maintenance reporting requirements. 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.

Appropriate Framework For Broadband Access to the Internet Over Wireline Facilities, Universal Service Obligations of Broadband Providers, 17 F.C.C.R. 3019, 3039-40 (2002) (citations omitted).

the FCC must resort to an administrative mechanism for separating the functions, and it has two options available.

F. Separate Subsidiaries Remedy Preferential Self-Dealing but are Rarely Mandated

The most straightforward way to calibrate regulation within a specific layer is to require operators to separate one layer's activity from others and conduct business in single, discrete layers. Convergence frustrates such bright line distinctions and some synergies might not fully accrue if a company unbundled integrated service packages. However, it is not impossible for ventures to create separate subsidiaries based either on the different vertical silos or the horizontal layers. In the vertical context, local exchange telephone companies have formed separate subsidiaries to pursue unregulated yellow page publishing, lightly regulated mobile radio-telephone service and unregulated Internet access markets.

Similarly telecommunications carriers have formed separate subsidiaries in compliance with court orders. For example, RBOCs initially could only provide in-region long distance telephone services through a separate subsidiary.⁶² However, this separate subsidiary requirement sunsets three years after the RBOC receives authorization⁶³ and the FCC has expressed

62. Section 272 of the Telecommunications Act of 1996 requires the RBOCs to form separate subsidiaries when providing:

(A) Manufacturing activities (as defined in section 273(h) of this title).

(B) Origination of interLATA telecommunications services, other than—(i) incidental interLATA services described in paragraphs (1), (2), (3), (5), and (6) of section 271(g) of this title; (ii) out-of-region services described in section 271(b)(2) of this title; or (iii) previously authorized activities described in section 271(f) of this title.

(C) InterLATA information services, other than electronic publishing (as defined in section 274(h) of this title) and alarm monitoring services (as defined in section 275(e) of this title).

47 U.S.C. § 272(A)-(C) (2000).

63. Section 272(f)(1) Sunset of the BOC Separate Affiliate and Related Requirements, 17 F.C.C.R. 26,870 (2002) (“We interpret section 272(f)(1) of the Act as providing for a state-by-state sunset of the separate affiliate and certain other requirements that apply to BOC provision of in-region, interLATA telecommunications services.”). By operation of law, on December 23, 2002, the section 272 separate affiliated and related requirements sunset for Verizon for the state of New York. See Public Notice, Section 272 Sunsets for Verizon in New York State by Operation of Law on December 23, 2002 Pursuant to Section 272(f)(1), 17 F.C.C.R. 26,864 (2002), *petition for review pending sub nom. AT&T Corp. v. FCC*, No. 03-1035 (D.C. Cir. filed Feb. 21, 2003).

no interest in maintaining the requirement.⁶⁴ The FCC also has granted waivers of a separate subsidiary requirement for RBOC directory assistance services involving international call queries,⁶⁵ and ones that cross Local Access and Transport Area ("LATA")⁶⁶ borders.⁶⁷

Separate subsidiaries make it more difficult for a vertically integrated enterprise to favor affiliates and to disadvantage competitors. The separate subsidiary requirement places affiliates and competitors on equal footing vis-a-vis a third party that leases a facility or service from the parent telephone company needed by both. For example, a Bell Operating Company long-distance carrier subsidiary would access local exchange facilities of its parent on the same terms and conditions as other unaffiliated long-distance carriers. The elimination of the separate subsidiary requirement enhances the possibility of preferential treatment, but detection could remain likely in view of nonstructural safeguards the FCC could employ. Accounting and auditing procedures can provide some degree of segmentation between various layered services while also providing some after-the-fact detection of discriminatory and anticompetitive conduct. Layered regulation works best when ventures form subsidiaries to operate discretely in single layers. However, ventures may operate more efficiently and effectively when they can integrate two or more horizontal layers into a composite service.

64. Section 272(f)(1) Sunset of the BOC Separate Affiliate and Related Requirements, 8 F.C.C.R. 10,918 (2003).

65. *See, e.g.*, Petition of SBC Communications Inc. for Forbearance From Structural Separation Requirements of Section 272 of the Communications Act of 1934, as Amended, and Request for Relief to Provide International Directory Assistance Services, Memorandum Opinion and Order, 19 F.C.C.R. 5211 (2004) (forbearing from applying the separate affiliate requirements of Section 272 to international directory assistance services that the petitioners provide under Section 271(g)(4) of the 1996 Act).

66. Local Access and Transport Area refers to a geographical region created when AT&T spun-off its Bell Operating Companies to settle an antitrust suit filed by the United States Department of Justice. *See* United States v. AT&T, 552 F. Supp. 131 (D.D.C. 1982), *aff'd sub nom.* Maryland v. United States, 460 U.S. 1001 (1983). As part of the divestiture, the RBOCs had several business restrictions, including long distance telephone services limited to calls within and not between LATAs. *See* 47 U.S.C. § 153(25)(A)-(B) (defining LATA).

67. *See, e.g.*, Petition of SBC Communications Inc. for Forbearance of Structural Separation Requirements and Request for Immediate Interim Relief in Relation to the Provision of Nonlocal Directory Assistance Services, 18 F.C.C.R. 8134 (2003); Petition of the Verizon Telephone Companies for Waiver of Comparably Efficient Interconnection Requirements to Provide Reverse Directory Assistance, 17 F.C.C.R. 13,881 (2002).

G. A Solution: Selective Streamlined Regulation or Forbearance Based on a Layer Specific Marketplace Assessment

Even if the FCC opted against structural separation or the use of accounting safeguards to foster virtual separation of different layered activities, the Commission has one more strategy available. Even as the 1996 Act has created uncertainty as to which service classification applies in a given situation, it provides the FCC the means to eliminate regulatory burdens that could apply. Section 10 of the Telecommunications Act provides the FCC with authority to reduce or eliminate regulatory requirements if “enforcement of such regulation or provision is not necessary to ensure that the charges, practices, classifications, or regulations . . . are just and reasonable and are not unjustly or unreasonably discriminatory, enforcement . . . is not necessary to protect consumers; and forbearance . . . is consistent with the public interest.”⁶⁸

Thus, the FCC has stated its intent to deregulate the telecommunications service component of cable modem Internet access, despite the Commission’s conclusion that no such telecommunications service exists:

To the extent that cable modem service may be subject to telecommunications service classification, we seek comment on whether we should forbear from applying each provision of Title II or common carrier regulation. We invite comment on whether enforcement of such provisions is not necessary to ensure that the charges, practices, classification or regulations in connection with cable modem service are just and reasonable and not unjustly or unreasonably discriminatory. Is enforcement not necessary for the protection of consumers? Would forbearance be consistent with the public interest? We tentatively conclude that such forbearance would be justified.⁶⁹

The FCC would prefer to ignore the existence of a telecommunications service aspect coupled with cable modem access to the Internet. However, if forced by a court to acknowledge the presence of a telecommunications service, the Commission can refrain from applying traditional Title II regulations to that service, whether provisioned individually or integrated with upper level services. The FCC would operate more transparently and effectively if it were to recognize the existence of a telecommunications service component and then remove the regulatory burdens ordinarily applied in light of the public interest and competitive benefits accruing from forbearance.

68. Communications Act of 1934, 47 U.S.C. §160(a) (1934).

69. Cable Modem Declaratory Ruling and NPRM, *supra* note 9.

H. The Challenge of Internet-Mediated Telephony

The increasing popularity of VOIP services may force Congress and the FCC to consider alternatives to vertical regulatory silos. Using the Internet as a medium for the instantaneous, “real time” processing and delivery of packets corresponding to voice conversations⁷⁰ provides services that sound and operate as functional equivalents to conventional voice telephone services. However, when incumbents make the conversion from dial-up, circuit switched telephony⁷¹ to packet switched, Internet-mediated⁷² service and when market entrants offer consumers cost saving VOIP services, both types of operators expect their services to qualify for a “safe harbor” exemption from the regulatory burdens applied to conventional dial-up telephony. Using the silo-based model, VOIP traffic may fit within the unregulated information service definition and not the regulated telecommunications service category, notwithstanding the fact that consumers increasingly use VOIP as a direct substitute for dial-up local and long distance telephone service.

The FCC recently stated that noncommercial, computer-to-computer VOIP qualifies for the information service designation.⁷³ Using the Internet as a medium for real time delivery of voice packets between computers fits within the unregulated information service classification because the FCC can readily identify the software enhancements and differentiate this type of service from commercial local and long-distance telephone calls.

Consumers initially could only use the Internet for making local and long-distance calls from and to computers equipped with special software, a sound card, microphone, and speakers. Subsequent technological improvements have made it possible for consumers to access VOIP services directly from conventional telephone handsets, connected to broadband data lines, or to services accessed by dialing a local or toll-free telephone number. Subscribers of residential DSL or cable modem service can make

70. For more extensive background on this topic, Frieden, *supra* note 40, at 47-79.

71. Conventional dial-up local and long distance telephone service use dedicated links and line switching between caller and call recipient. The network architecture optimizes quality and reliability for voice communications. For background on telephony basics, see Marshal Brain, *How Telephones Work*, How StuffWorks, at <http://electronics.howstuffworks.com/telephone6.htm> (last visited Dec. 6, 2004).

72. The Internet uses a network architecture that splits traffic into some units known as packets. Packets are switched and routed via any available network, which provides a shared medium available to multiple senders and receivers of data traffic. For background on Internet architecture basics, see Jeff Tyson, *How Internet Infrastructure Works*, How StuffWorks, at <http://computer.howstuffworks.com/internet-infrastructure.htm> (last visited Dec. 6, 2004).

73. Pulver Declaratory Ruling, *supra* note 13.

long-distance telephone calls at a fraction of the cost they would incur using conventional dial-up services. The cost savings accrue as a result of operating efficiencies through the conversion of voice traffic into data packets, and because the regulatory classification of the service reduces or eliminates charges for accessing the conventional, dial-up PSTN.⁷⁴

Conventional long distance telephone service obligates carriers, known as Interexchange Carriers (“IXCs”), to pay access charges to Local Exchange Carriers (“LECs”) for using their wireline networks to originate and terminate traffic. That is, the IXCs use the LECs’ local loop facilities from call originator to the Point of Presence (“POP”) where the IXC receives calls for the long haul carriage and for LEC delivery of calls received at the POP then delivered to the call recipient. Instead of paying per minute access charges, VOIP providers need only acquire inbound business telephone lines that their customers can use to access their services. Alternatively consumers of VOIP can access ISP facilities without ever using LEC facilities, such as via cable modem links or via LEC-provided DSLs.

Allowing VOIP operators to provide telephone services offers consumers cost savings and supports the commitment to refrain from regulating Internet services. However, the FCC’s goal of not regulating Internet services directly conflicts with other public policy goals such as using long distance telephone service carriers’ minutes of use as the basis for securing payments into a fund used to underwrite universal service programs at a rate of approximately \$5 billion annually.⁷⁵ Should the FCC apply the information services classification to all types of Internet-mediated voice telephony services, the Commission will likely cause the drastic reduction of available funding for universal service, should alternatives to dial-up telephone achieve significant market penetration. Similarly, the FCC appears to have created another quandary over whether and how to make the information service designation stick in light of the decision by some courts in refusing to ignore the telecommunications compo-

74. In the Matter of Developing a Unified Inter Carrier Compensation Regime, 16 F.C.C.R. 9610, 9659 (2001) [hereinafter Bill and Keep Carrier Compensation Proposal].

75. “[T]he various universal service support mechanisms . . . amounted to over \$5 billion in 2002. In 2002, disbursements among the four categories of universal service mechanisms were: 57.1% for high-cost support; 29.7% for schools and libraries support; 12.9% for low-income support; and 0.3% for rural health care support.” News Release, Federal Communications Commission, Federal-State Joint Board Staff Releases Monitoring Report (Dec. 22, 2003), 2003 WL 22990088. The Monitoring Report can be found at http://www.fcc.gov/Bureaus/Common_Carrier/Reports/FCC-State_Link/Monitor/mr03-0.pdf.

ment in a service that combines information or cable services with telecommunications.

How the FCC treats VOIP services has profound consequences on the way the Commission derives funds for universal access to basic and advanced telecommunications services.⁷⁶ More broadly, VOIP challenges the role of the states in telecommunications policymaking, because using the Internet may reduce or eliminate intrastate jurisdiction over bits that readily travel across state and national borders. The prospect of VOIP regulation also generates questions whether the FCC can persist in considering the Internet off limits to regulation particularly in light of national security,⁷⁷ personal security, and access by persons with disabilities.

I. The FCC Initially Considered VOIP as a Telecommunications Service

Despite functional similarities to regulated dial-up telephone services, the FCC has exhibited some ambivalence in its determination that some forms of VOIP should fit within the unregulated information service classification. In a Report to Congress on Universal Service,⁷⁸ the FCC tentatively concluded that phone-to-phone VOIP appears to constitute a “telecommunications service” under the 1996 Act. Furthermore, the FCC acknowledged that such a classification would trigger regulatory responsibilities, including the duty to pay access charges for interconnecting with the PSTN and universal service funding obligations.⁷⁹ However, the Commission refrained from using a Congressional report to issue a definitive ruling.

The FCC has developed a dichotomy between basic telecommunications and enhanced information services with an eye toward limiting regulation to the first category and stimulating innovation and investment in the second category.⁸⁰ However, this laudable regulatory restraint creates arbitrage opportunities when unregulated, enhanced service providers offer something functionally equivalent to what regulated telecommunications service providers offer. The FCC acknowledges that now widespread offering of VOIP by unregulated ISPs and other ventures “threatens to

76. See Frieden, *Universal Service*, *supra* note 40, at 395-433.

77. See Communications Assistance For Law Enforcement Act and Broadband Access and Services, 19 F.C.C.R. 15,676 (2004) (examining the appropriate legal and policy framework of the Communications Assistance for Law Enforcement Act).

78. Report to Congress, *supra* note 40, at 11,541.

79. *Id.*

80. For background on the Computer Inquiries, see Robert Cannon, *supra* note 55.

erode access revenues for LECs because it is exempt from the access charges that traditional long-distance carriers must pay.”⁸¹

One can properly infer that if VOIP migrates revenues from LECs, then consumers consider this service an alternative to conventional dial-up telephone service provided by telecommunications service providers including LECs. Migration of LEC revenues from VOIP⁸² occurs at the same time as wireless mobile telephone services make similar inroads.⁸³ Declining wireline revenues coupled with the 1996 Act required interconnection obligations on favorable rates have significantly impacted LEC profitability and stock market attractiveness. To the extent that LECs serve as carriers of last resort in many localities, the financial vulnerability of LECs has important public policy implications. Similarly the migration of revenues off LEC networks means that subsidy mechanisms, such as the Universal Service Fund, will need substantial reworking, including possibly extending the funding obligation to a larger set of operators, including information service providers.⁸⁴

The FCC has previously acknowledged the potential for VOIP to compete with dial-up services, but so far has decided not to remove the favorable unregulated classification.⁸⁵ The Commission may have to rethink its decision in view of the growing traffic migration and recent actions by several states to treat VOIP as a regulated service. For example, the Minnesota Public Utilities Commission recently issued a ruling classifying VOIP as telecommunications and subject to its regulatory oversight, which would include common carrier rate regulation.⁸⁶ A VOIP equipment

81. Bill and Keep Carrier Compensation Proposal, *supra* note 74, at 9657.

82. Currently VOIP accounts for less than 3% of global voice phone calls, according to an AT&T estimate. But a number of trends are working in its favor, say industry executives: the boom in demand; the evolution of the technology, which permits companies to offer services beyond the reach of conventional phones; and the spread of broadband connections, which make VOIP much easier to use.

Peter Grant & Almar Latour, *Circuit Breaker: Battered Telecoms Face New Challenge: Internet Calling*, WALL ST. J., Oct. 9, 2003, at 1.

83. “Notably, 3 to 5 percent of wireless customers use their wireless phone as their only phone. Some carriers attribute, at least in part, the recent drop in wireline switched access lines to this replacement of wireline phones by wireless phones.” Review of the Section 251 Bundling Obligations of Incumbent Local Exchange Carriers, 18 F.C.C.R. 16,978, 17,017 (2003), *judgment vacated in part and dismissed in part sub nom.* U.S. Telecomm. Ass’n v. FCC, 359 F.3d 554 (D.C. Cir. 2004).

84. See Frieden, *Universal Service*, *supra* note 40, at 395-433 & n.3.

85. See, e.g., Report to Congress, *supra* note 35.

86. Complaint of the Minnesota Department of Commerce Against Vonage Holding Corp. Regarding Lack of Authority to Operate in Minnesota, No. P-6214/C-03-108,

manufacturer and service provider, Vonage, has petitioned the FCC for a Declaratory Ruling that would preempt state regulation.⁸⁷

State public utility commissions have a substantial stake in the regulatory treatment of VOIP, both in terms of their jurisdictional reach and the financial viability of their regulated telephone companies. Federal preemption would partially usurp state regulation of intrastate telephone calls, a category of service traditionally regulated by state public utility commissions. Additionally, both access charges and universal service funding policies have provided sizeable monetary contributions to small, independent telephone companies in rural locales. State public utility commissions assume the responsibility for safeguarding the continuing financial viability of these companies.

State public utility commission jurisdiction over VOIP sets the stage for yet another battle: whether the FCC should preempt the states from making inconsistent, "balkanizing" policies or whether states have a lawful right to establish telecommunications policies appropriate for circumstances particular to an individual state. The borderless nature of the Internet makes this jurisdictional question more troublesome. One could consider Internet access as involving the use of local exchange lines, regardless of whether interconnection with interstate lines takes place, to reach points outside the state where traffic originated. Under this interpretation, Internet access via a LEC would trigger legitimate state regulation. Alternatively, the local origination could be considered in the context of the complete link into the World Wide Web, almost always involving an interstate or international routing.

In 1999, the FCC declared that ISP-bound traffic is "jurisdictionally mixed and appears to be largely interstate."⁸⁸ In a declaratory ruling, the FCC concluded that dial-up Internet traffic is interstate and not local in

Order Finding Jurisdiction and Requiring Compliance (Minn. PUC Sept. 11, 2003), available at <http://www.puc.state.mn.us/docs/orders/03-0108.pdf>, *reversed and permanent injunction granted sub nom.* Vonage Holdings Corp. v. Minn. Public Utils. Comm'n, 290 F. Supp. 993 (D. Minn. 2003).

87. Vonage Holdings Corp. Petition for Declaratory Ruling Concerning an Order of the Minnesota Public Utilities Commission, No. 03-211 (filed Sept. 22, 2003) [hereinafter Vonage Holdings Corp. Petition for Declaratory Ruling], available at http://gullfoss2.fcc.gov/prod/ecfs/retrieve.cgi?native_or_pdf=pdf&id_document=6515182876.

88. Implementation of the Local Competition Provisions in the Telecommunications Act of 1996, Inter-Carrier Compensation for ISP-Bound Traffic, 14 F.C.C.R. 3689, 3690 (1999), *vacated sub. nom.* Bell Atl. Tel. Co. v. FCC, 206 F.3d 1 (D.C. Cir. 2000) (ordering FCC to explain why LEC delivery traffic to ISPs falls outside the intrastate classification).

nature, an interpretation that would foreclose application of a reciprocal compensation requirement between LECs and other carriers including LEC-affiliates of an ISP.⁸⁹ However, the Commission stated its intent to defer to state regulatory agency decisions addressing the issue, including whether to continue enforcing existing intercarrier interconnection agreements, pending the issuance of federal rules.⁹⁰ In most instances, state regulatory agencies have considered Internet access to constitute a local service based on the view that customers typically access ISPs by dialing a local, toll-free seven-digit telephone number. The state regulatory agencies consider the onward interconnection with the Internet to occur via a separate interconnection, despite the fact that both links occur jointly and seamlessly—the consumer accesses the Internet via one telephone call. An analysis that considers Internet access in terms of two linked calls qualifies the first leg as local and therefore subject to the reciprocal compensation arrangement and state jurisdiction. An analysis that considers Internet access in terms of just one call more easily exempts such links from the reciprocal compensation arrangement because Internet links may take place anywhere and many occur outside the state where the call first originated.

The FCC's declaratory ruling was appealed to the D.C. Circuit Court of Appeals, which remanded the ruling back to the Commission for having failed to explain why LECs that terminate calls to ISPs are not properly seen as terminating local telecommunications traffic instead of interstate traffic.⁹¹ The court also required the FCC to explain why the LEC service of routing Internet traffic constitutes "exchange access,"⁹² rather than "telephone exchange service."⁹³ LECs provide the former when originat-

89. Implementation of the Local Competition Provisions in the Telecommunications Act of 1996, Inter-Carrier Compensation for ISP-Bound Traffic, 14 F.C.C.R. 3689 (1999).

90. *Id.* at 3707-08.

91. *Bell Atl. Tel. Co. v. FCC*, 206 F.3d 1 (D.C. Cir. 2000).

92. The Communications Act of 1934, as amended, defines exchange access as "the offering of access to telephone exchange services or facilities for the purpose of the origination or termination of telephone toll services." 47 U.S.C. § 153(16) (2000). Exchange access refers to the use of a LEC's network to make or complete long-distance telephone calls.

93. The Communications Act of 1934, as amended, defines telephone exchange service as:

(A) service within a telephone exchange, or within a connected system of telephone exchanges within the same exchange area operated to furnish to subscribers intercommunicating service of the character ordinarily furnished by a single exchange, and which is covered by the exchange service charge, or (B) comparable service provided through a

ing and terminating long distance telephone traffic, while the latter involves conventional local service subject to the reciprocal compensation requirement.

On remand, the FCC reaffirmed its conclusion that traffic delivered to an ISP is interstate, and the Commission ordered a transition to “bill and keep” cost recovery whereby both LECs and ISPs recover costs from their own customers without the carriers compensating each other. On a second appeal the D.C. Circuit, the court remanded but did not reverse the FCC on the narrow grounds that the Commission could not have relied on Section 251(g) of the 1996 Act to carve out a “bill-and-keep,” a zero compensation arrangement for calls to ISPs.⁹⁴ Rather, the court stated that that section did not provide the basis for a substantive change in policy, because it only authorized the FCC to maintain LEC regulatory duties that predated enactment of the 1996 Act in the transition to the new requirements established by the 1996 Act.⁹⁵

The FCC had to confront the question of whether local and intrastate service customers should bear any of the costs incurred by LECs to handle traffic received from or destined to ISPs. In *ACS of Anchorage Inc. v. FCC*, which involved an FCC finding that an LEC exceeded its permissible rate of return, the carrier claimed that the FCC could not lawfully require it to allocate to its intrastate services the traffic-sensitive costs associated with calls routed to and from ISPs.⁹⁶ The D.C. Circuit acknowledged that cost allocation decisions parallel jurisdictional ones such that, having deemed Internet access interstate, the Commission should not have objected to a LEC’s allocation of costs to interstate rate-payers.⁹⁷ However, the court noted that “deviation from the jurisdictional norm [exists] where the Commission was implementing (a) an interim ratemaking solution (b) justified by a substantial policy objective.”⁹⁸ The court affirmed the FCC’s decision to prohibit allocating Internet access costs to interstate services as consistent with the Commission’s previous policy initiative to exempt enhanced and information service providers from having to pay

system of switches, transmission equipment, or other facilities (or combination thereof) by which a subscriber can originate and terminate a telecommunications service.

Id. § 153(47).

94. *WorldCom, Inc. v. FCC*, 288 F.3d 429, 431-32 (D.C. Cir. 2002).

95. *Id.* at 433-34.

96. 290 F.3d 403, 408 (D.C. Cir. 2002).

97. *Id.* at 409-410.

98. *Id.* at 408.

interstate access charges.⁹⁹ The court also noted that the interim nature of the FCC's policy supported deference.¹⁰⁰

J. Three Petitions Force the FCC to Specify a VOIP Policy

In light of such substantial financial and jurisdictional stakes, several interested parties have sought clarification about the regulatory status of VOIP. Depending on which service classification applies, VOIP services can evade both federal and state regulation, interconnection payment responsibilities, and universal service funding obligations. The Commission first granted a petition for declaratory ruling that noncommercial, computer-to-computer telephony routed via the Internet qualifies for the substantially unregulated status of information service and does not constitute telecommunications, or a telecommunications service.¹⁰¹ Under the statute, the heart of "telecommunications" is transmission. As a result, pulver.com's ("Pulver") Free World Dialup ("FWD"), which allows users of broadband Internet access to join the FWD community and to communicate with one another, was an unregulated service.¹⁰² However, Pulver neither offers nor provides transmission to its members. Rather, FWD members "bring their own broadband" transmission to interact with the FWD server.¹⁰³

Computer-to-computer VOIP when available without charge does not constitute a telecommunications service, because "in order to be a telecommunications service, the service provider must assess a fee for its service."¹⁰⁴ The FCC deemed it an information service, because users exploit

the capability of generating, acquiring, storing, transforming, processing, retrieving, utilizing or making available information in a way contemplated by the Act to qualify as an information service. We also acknowledge that after performing these specific functions, Pulver no longer plays a role in the exchange of information between its members . . . it merely facilitates peer-to-peer communication. The fact that the information service Pulver is offering happens to facilitate a direct disintermediated voice communication, among other types of communications, in a peer-to-peer exchange cannot and does not remove it from the

99. *Id.* at 409-10.

100. *Id.* at 410.

101. Pulver Declaratory Ruling, *supra* note 13; *see also* Petition for Declaratory Ruling That Pulver.com's Free World Dialup Service is Neither Telecommunications nor a Telecommunication Service, WC Docket No. 04-45 (filed Feb. 5, 2003).

102. Pulver Declaratory Ruling, *supra* note 13, at 3307-08.

103. *Id.* at 3312.

104. *Id.* at 3312-13.

statutory definition of information service and place it within, for example, the definition of telecommunications service.¹⁰⁵

The FCC also alerted state regulatory agencies that they should not attempt to subvert the Commission's decision to refrain from regulating the service.¹⁰⁶ The FCC launched a Notice of Proposed Rulemaking that addressed the broader issue of Internet enabled services, including commercial VOIP telephone services that link callers using conventional telephones, but route calls via the Internet.¹⁰⁷

The FCC also had to decide whether VOIP service providers must pay access charges when they hand off traffic to LECs for delivery of calls via the PSTN. In 2002, AT&T filed a Petition for Declaratory Rulemaking seeking FCC confirmation that local exchange carriers must deliver voice telephone calls routed by AT&T over the Internet, but that AT&T had no additional financial obligation to compensate the LECs beyond what existing reciprocal compensation agreements required between incumbent and competitive LECs.¹⁰⁸ Some LECs had claimed that AT&T's Internet-carried long-distance telephone traffic should trigger an access charge payment from AT&T in its capacity as an interexchange carrier. AT&T sought a ruling from the FCC that VOIP services qualify for treatment as local services that do not trigger interstate access charge payment responsibilities. The FCC determined that VOIP service providers must pay access charges when their traffic traverses the PSTN.¹⁰⁹

105. *Id.* at 3314.

106. *Id.* at 3317 (“We determine, consistent with our precedent regarding information services, that FWD is an unregulated information service and any state regulations that seek to treat FWD as a telecommunications service or otherwise subject it to public-utility type regulation would almost certainly pose a conflict with our policy of nonregulation”).

107. *In re IP-Enabled Services*, Notice of Proposed Rulemaking, 19 F.C.C.R. 4863 (2004) [hereafter *IP-Enabled Services NPRM*].

108. *See* Petition For Declaratory Ruling That AT&T's Phone-To-Phone IP Telephony Services Are Exempt From Access Charges, *supra* note 15.

109. We clarify that, under the current rules, the service that AT&T describes is a telecommunications service upon which interstate access charges may be assessed. We emphasize that our decision is limited to the type of service described by AT&T in this proceeding, i.e., an interexchange service that: (1) uses ordinary customer premises equipment (CPE) with no enhanced functionality; (2) originates and terminates on the public switched telephone network (PSTN); and (3) undergoes no net protocol conversion and provides no enhanced functionality to end users due to the provider's use of IP technology. Our analysis in this order applies to services that meet these three criteria regardless of whether only one interexchange carrier uses IP

The FCC also has begun to confront the question of whether it should preempt state regulation of VOIP. In 2003, Vonage Holding Corp. filed a petition with the FCC seeking preemption of a Minnesota Public Utility Commission order requiring Vonage to comply with state laws governing telephone service providers.¹¹⁰ Vonage sought regulatory relief from state regulation, including requirements that its VOIP service facilitates emergency 911 access.¹¹¹ However, even before the FCC could act, a federal district court in Minnesota deemed state regulatory action preempted by the 1934 Communications Act, as amended.¹¹² Additionally, the FCC has considered whether homeland security laws, such as the Communications Assistance for Law Enforcement Act (“CALEA”) apply to VOIP services.¹¹³

K. A Comprehensive Examination of IP-Enabled Services

In light of these three major petitions and the need to provide regulatory certainty, the FCC decided to confront VOIP issues in the broader context of whether and how use of the Internet should change regulatory classifications. The FCC released a comprehensive Notice of Proposed Rulemaking that will address “issues relating to services and applications

transport or instead multiple service providers are involved in providing IP transport.

Id. at 7457.

110. See Vonage Holdings Corp. Petition for Declaratory Ruling, *supra* note 86.

111. See, e.g., Minn. Dep’t of Commerce v. Vonage Holding Corp., No. P-6214/C-03-108, 2003 WL 22336092 (Minn. Pub. Utils. Comm’n Sept. 11, 2003), *rev’d sub nom.* Vonage Holdings Corp. v. Minn. Pub. Utils. Comm’n, 290 F. Supp. 2d 993 (D. Minn. 2003) (jurisdiction preempted by federal regulation).

112. Vonage Holdings Corp. v. Minn. Pub. Utils. Comm’n, 290 F. Supp. 2d 993 (D. Minn. 2003). Many federal courts have remanded cases to the FCC on the basis of primary jurisdiction. “The principal reasons for the doctrine of primary jurisdiction are to obtain the benefit of the expertise and experience of the administrative agencies and the desirable uniformity which occurs when a specialized agency decides certain administrative questions.” *In re Long Distance Telecomms. Litig.*, 831 F.2d 627, 630 (6th Cir. 1987) (quoting *United States v. W. Pac.*, 352 U.S. 59, 64 (1956) (Harlan, J.)). “A court must apply the doctrine of primary jurisdiction on a case-by-case basis, deferring to an administrative agency only when the reasons for the existence of the doctrine are present.” *Id.* “The doctrine of primary jurisdiction allows a federal court to refer a matter extending beyond the ‘conventional experiences of judges’ or ‘falling within the realm of administrative discretion’ to an administrative agency with more specialized experience, expertise, and insight.” *Natn’l Communications Ass’n v. AT&T*, 46 F.3d 220, 222-23 (2d Cir. 1995).

113. See Communications Assistance For Law Enforcement Act and Broadband Access and Services, ET Docket No. 04-295, Notice of Proposed Rulemaking and Declaratory Ruling, FCC 04-187, 2004 WL 1768194 (Fed. Communications Comm’n Aug. 9, 2004).

making use of Internet Protocol including but not limited to VOIP services (collectively, 'IP-enabled services')."¹¹⁴ While posing numerous questions more appropriate to a Notice of Inquiry, the Commission implied its predisposition to maintain a policy favoring minimum regulation of the Internet and Internet-mediated services.

However, this regulatory forbearance objective poses three major challenges. First, the FCC must consider whether existing service classifications can work effectively and fairly when the consumers use broadband Internet access links. Telecommunications, telecommunications service, information service, and cable service categories appear to blend seamlessly in an Internet-centric environment. Second, the FCC must consider how to apply preexisting regulations that require telecommunications service providers to promote universal service, service access by disabled people, emergency 911 access, and homeland security and law enforcement access for authorized wiretapping, consumer protection, and privacy. Third, the FCC needs to confront how it can exempt software applications that mimic aspects of regulated services. The vast variety of functions and services the Internet can enable run the gamut from functional equivalents to existing services, such as domestic and international telephone service, to new communications features attached to never regulated activities, such as voice communications options in computer gaming and icon-activated, real-time talk communications with customer service representatives while shopping via the Internet.

The FCC recognized that "the changes wrought by the rise of IP-enabled communications promise to be revolutionary."¹¹⁵ However, the Commission also recognized that the innovations available from Internet-enabled services and a predisposition to not apply legacy economic regulation cannot render ineffective "regulations designed to promote public safety and consumer protection (such as E911) or other important public policy concerns."¹¹⁶

L. Services that Access the Public Switched Telephone Network

The FCC recognized that some Internet-enabled services have a functional equivalent to conventional dial-up telephone service because users access such services via a regular telephone handset and calls traverse the PSTN. If the Commission applied the information service classification, as it did for computer-to-computer Internet telephony, providers of VOIP services would avoid: traditional Title II common carrier regulation; the

114. IP-Enabled Services NPRM, *supra* note 107.

115. *Id.* at 4867.

116. *Id.* at 4868.

obligation to pay access charges to local exchange carriers when traffic traverses the PSTN; and the duty to make or pass through from customers' contributions to universal service funding. If VOIP constitutes a functional equivalent to regular dial-up telephone services, then VOIP service providers would accrue a financial gain merely by avoiding payments competitors have to make. VOIP operators could leverage their largely unregulated information service classification to achieve a competitive advantage over conventional telecommunications service providers.

The FCC previously acknowledged that phone-to-phone IP telephony appeared to "bear the characteristics of [the Title II regulated classification known as] 'telecommunications services.'"¹¹⁷ For services that traverse the PSTN, the Commission stated the belief that the preexisting compensation payment obligations should apply:

As a policy matter, we believe that any service provider that sends traffic to the PSTN should be subject to similar compensation obligations, irrespective of whether the traffic originates on the PSTN, on an IP network, or on a cable network. We maintain that the cost of the PSTN should be borne equitably among those that use it in similar ways.¹¹⁸

M. Proposed Criteria for Classifying IP-Enabled Services

The FCC recognized that the existing regulatory dichotomies established by the definitions it created in the *Computer Inquiries*, and that Congress established in the 1996 Act, will need elaboration before the Commission can make necessary distinctions among IP-enabled services. Toward that end, the FCC proposed to use "functional and economic factors that might be used to divide these services into categories calling for distinct treatment."¹¹⁹ These factors include: the functional equivalence to traditional telephony; substitutability between services; interconnection with the PSTN and use of the North American Numbering Plan; peer-to-peer communications versus network services; and consideration of whether the service uses a transmission facility layer versus a protocol layer or a higher application layer.¹²⁰

117. Report to Congress, *supra* note 40, at 11,544.

118. IP-Enabled Services NPRM, *supra* note 107, at 4885.

119. *Id.* at 4866.

120. *See Id.* at 4887-89.

N. The Layered Regulation Approach to VOIP Would Avoid a Regulatory Quagmire

Broad service dichotomies, such as telecommunications service and information service, and even narrower ones, such as exchange access and telephone exchange service, no longer provide bright line distinctions suitable for the application of different regulatory requirements. Convergence of technologies and markets merge previously discrete categories of service. The traditional silo approach to ICE regulation already presents the FCC with several quandaries. For example, if the Commission applies the information service classification to VOIP, the Commission will avoid extending legacy telecommunications service regulation, but at the cost of potentially jeopardizing universal service funding and expanding the information service classification to include services which the Commission previously had deemed telecommunications and which courts continue to deem telecommunications. The potential exists for the FCC to have so expanded the information services classification as to create an opportunity for any provider of basic telephony services, including incumbent LECs, to also characterize such services as information services.

If VOIP becomes the functional equivalent to basic telephony services, but qualifies for unregulated status, then regulated voice telephony carriers surely will seek to recast their previously classified telecommunications services now as software-defined information services. In time, telecommunications service providers can migrate nearly every service they offer into the unregulated information service “safe harbor,” and the FCC will have no legal basis to continue enforcing regulatory safeguards even though essential public policies and competition policies necessitate its ongoing involvement.¹²¹

Expanding the information service classification to include VOIP removes any credible assumption that this category only addresses fully competitive markets for which the FCC has no need to regulate. Despite an aggressively deregulatory approach, the FCC acknowledges that some degree of government oversight of access to basic, local-exchange tele-

121. [I]n its chosen deregulatory quest, the FCC has engaged in a flawed and disingenuous strategy to combine previously different regulatory models based on new functional similarity. Suddenly a telecommunications service can become stripped of its common carrier regulatory triggers if and when the FCC chooses to emphasize the content or enhancements carried via the telecommunications conduit.

Frieden, *supra* note 34, at 233.

communications services remains necessary to ensure fair access by competitors, fair pricing, and consumer protection.¹²²

In a layered regulatory model basic telecommunications, conduits can remain regulated if necessary, despite the fact that software applications, including VOIP, ride on top. The FCC would conduct a layer specific marketplace assessment and probably would now conclude that some regulatory oversight is needed over the provisioning of basic telecommunications conduits. Such regulation should apply to carriers operating as retailers of telecommunications services to endusers and as wholesalers to others who combine the conduit with software enhancements. This regulation would not apply to ventures retailing software-enhanced services such as VOIP, nor would regulatory burdens have to apply with equal force to every conduit operator.

Despite stating its intent to use a functional, non-legacy approach to the question of whether to regulate VOIP, the Commission's desired end result—an unregulated Internet—forces it to make ad hoc changes in which both existing and new services fit into the existing definition of service. To insulate VOIP from the basic voice telephony service classification and the traditional common carrier regulatory silo, the Commission has needed to reclassify a basic service, such as DSL, into an information service. The current regulatory silo approach shifts all DSL layers into the information service category and not just the software enhancements applied to the basic telecommunications conduit. Already several courts have not endorsed the either/or classification, because the basic transmission function does not fully evaporate or become subsumed as an insignificant element of an information service.

IV. CONCLUSION

Key stakeholders appear to benefit more from the regulatory status quo than from the layered regulatory model. The beneficiaries of the current model include ventures that are able to exploit asymmetry in regulatory treatment and qualify for less burdensome government oversight even as they compete with ventures incurring greater burdens. These operators see no benefit in losing their preferred unregulated status even if they probably would reacquire it soon after the layered model came into force.

122. Review of the Section 251 Unbundling Obligations of Incumbent Local Exchange Carriers, *supra* note 83, at 16,985. (“Legal challenges, a depressed telecommunications sector, and technical and operational obstacles have been features of the competitive landscape to a far greater extent than could have been reasonably predicted in 1996.”).

Courts and the FCC alike have not evidenced great nimbleness in recognizing variability in regulatory treatment of one company that offers many different services, some of which are commingled (for example, Internet access via a LEC or cable television company). Greater comfort and absolutism lie in making a one-time either/or determination and leaving it at that. Considering new-layered classifications generate risk and uncertainty, which are two factors both regulators and stakeholders avoid. One can appreciate that the FCC would not want to create a new layered regulatory structure only to find that creative and aggressive lawyering supports the argument that most, if not all, of what an incumbent regulated telecommunication service provider offers qualifies for unregulated status.

But such a strategy may arrive even if the FCC attempts to maintain the status quo. If the FCC persists in reclassifying as information service whatever offerings a LEC can extract from DSL lines, then it becomes quite plausible that the carrier could argue that voice services qualify for inclusion as well. If the FCC treats the conduit as an information service, then it cannot treat the software defined applications, such as VOIP, as something different and regulated. If DSL market penetration improves, then arguably the FCC loses the ability to regulate even basic telecommunications services whenever they are provided over a DSL, or newly installed media such as fiberoptic cables. Should a critical mass of voice telephony traffic ride on top of a DSL, cable, or fiberoptic conduit, the FCC will have little leverage in attempting to satisfy Congressional mandates, such as funding the annual \$5 billion universal service mission, primarily from long-distance telephone service revenues. The FCC eventually will have to reform its definition driven regulatory system, with or without legislative help.