Why The FCC’s Proposed Openness Principles Cannot and Should Not Apply to Internet Application and Content Providers

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Executive Summary

The Federal Communications Commission (“FCC”) has issued a Notice of Proposed Rulemaking (“NPRM”) that would codify rules aiming to preserve a free and open Internet for consumers.¹ The NPRM appropriately concentrates on preventing broadband Internet access providers (“IAPs”) from acting as “gatekeeper[s]”² between end-users and online content and application providers. As the FCC recognizes, it is “not writing on a blank slate.”³ In fact, the NPRM confronts a familiar problem in telecommunications policy: facilities-based, last-mile providers’ ability to leverage their control over physical network infrastructure in ways that interfere with competition and innovation in other areas, including the third-party content and applications that reach end-users via these networks.

At the same time, the NPRM solicits comments on AT&T’s proposal that openness principles be applied to Internet content and application providers.⁴ As I discuss herein, conflating IAPs with content and applications providers is inappropriate as a matter of law and public policy. The FCC’s appropriate concern about end user access to the Internet via IAPs does not justify an

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² “By providing a user’s broadband connection to the Internet, a broadband Internet access service provider serves as a gatekeeper to the content, applications, and services offered on the Internet. Broadband Internet access service providers have an incentive to use this gatekeeper role to make it more difficult or expensive for end users to access services competing with those offered by the network operator or its affiliates.” Id. at ¶72.

³ Id. at ¶46.

extension of regulatory oversight to include those entities providing content and applications. Regulating the vibrant application and content markets would constitute a departure from current policy and would threaten the open Internet.

The FCC has no authority to regulate Internet content and application providers. To apply openness principles to IAPs, the Commission relies on its ancillary jurisdiction, coupled with the view that other portions of the Communications Act provide a statutory basis for action. The provisions on which the FCC relies are inapplicable to Internet content and applications, and the FCC lacks any other jurisdictional basis to regulate Internet content and applications providers. Congress has crafted anti-trust and other laws that can remedy anti-competitive conduct in the applications and content markets, but this issue is simply not within the purview of the FCC.

The FCC has long recognized the competitive and operational distinctions between facilities-based, last-mile network providers and those services that depend on such networks to reach end-users. In fact, the commercial Internet developed because the FCC drew a clear regulatory distinction between regulated carriers that provide the physical “on-ramps” to the Internet – at that time, the incumbent telephone companies – and the unregulated ventures that provided services via that infrastructure.

The factors motivating regulation of IAPs do not apply to content and application providers. First, IAPs have a unique technical ability to limit what users can and cannot access online, because IAPs control the physical and logical “layers” of the network. IAPs have increasingly sophisticated tools at their disposal, including deep packet inspection, to control the traffic that flows across their networks, and they have incentives to use these tools to favor their own vertically-integrated services. For instance, an IAP might favor video content

that it owns over video content provided by its competitors, preventing them from reaching the IAP’s customers on an equal footing.

In contrast, Internet applications and content providers lack any comparable ability to limit users’ access to online content or services. Provided that IAPs do not interfere, users have complete sovereignty about what applications and content they choose to access. An online video provider can choose not to offer its users certain content, but it would have no ability to prevent those users from accessing a competing provider.

Second, the IAP market is highly concentrated, with substantial barriers to entry and high switching costs for users. In contrast, the Internet application and content markets are robustly competitive, with low barriers to entry and competition often just a click away. The lack of competition in the Internet access market makes IAPs’ abilities and incentives to discriminate particularly dangerous. Because users generally lack the ability to easily “vote with their dollars” by easily switching providers, market forces alone cannot restrain harmful behavior.
I. The FCC Lacks Jurisdiction to Regulate Providers of Content and Software Applications.

In the absence of a new statutory mandate to impose network neutrality rules, the FCC must find a jurisdictional basis from existing law. The Commission primarily has applied its ancillary jurisdiction based on Title I of the Communications Act, as amended, coupled with the view that other portions of the Communications Act provide the statutory basis for regulatory efforts to promote access to the Internet. A reasonable reading of these statutory references would limit their applicability to ventures that operate wire or radio conduits to the Internet and use them to provide access to Internet-mediated content, software, and services.

The Commission, however, lacks ancillary jurisdiction to regulate Internet content or applications unaffiliated with Title II (telecommunications), Title III (wireless) or Title VI (cable) providers. It is well-established that the Commission’s ancillary jurisdiction is limited only to those circumstances in which two conditions are met: (i) the “subject of the regulation [is] covered by the Commission’s general grant of jurisdiction under Title I of the Communications Act, which . . . encompasses all interstate and foreign communication by wire or radio;” and (ii) the “subject of the regulation [is] ‘reasonably ancillary to the effective performance of the Commission’s various responsibilities.’” Notably, the Commission in Computer II expressly rejected the notion that all information services fell within its jurisdiction, noting that not “any service or activity in which communications is a component is within the subject matter jurisdiction of Section 2(a) of the Communications Act.” Thus, some information services may fall within the Commission’s jurisdiction; but other services, computer capabilities or applications do not. Regulation of an Internet content/application service would fall outside the Commission’s jurisdiction because an

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Internet content or application provider offers access to stored data and does not offer or provide a \textit{transmission component} necessary to constitute “communications by wire or radio.”\footnote{The statutory definitions of both “communications by wire” and “communications by radio” require a “transmission” of information. 47 U.S.C. § 153(52) & (33).} Title I simply does not provide the Commission with jurisdiction to regulate stored data or the content of the stored information.\footnote{GTE Serv. Corp. v. FCC, 474 F.2d 724, 730 (2d Cir. 1973) (holding that statutory silence did not preclude regulation of the interaction between common carriers and data processors, but it did preclude regulation of data processors themselves, noting: [The FCC’s] concern here therefore is not for the communications market which Congress has entrusted to its care, but for data processing which is beyond its charge and which the Commission itself has announced it declines to regulate. We find the intrusion to be without authority either in the Communications Act or in the cases construing it. See also, MPAA v. FCC, 309 F.3d 796, 803 (D.C. Cir. 2002) (rejecting FCC’s Title I jurisdiction to require video programmers to provide video description services because “[v]ideo description is not a regulation of television transmission that only incidentally and minimally affects program content; it is a direct and significant regulation of program content.”); Am. Library Ass’n, 406 F.3d at 703 (rejecting FCC’s ancillary jurisdiction over broadcast flag equipment because such regulations “do not regulate the actual transmission of the DTV broadcast” and are not incidental to the transmission).}

Further, the nature of Internet content and applications precludes any “effective performance” of meaningful regulation. As the Commission has recognized, “[t]he number of suppliers of online video and audio is almost limitless, the supply chain is fragmented, and the content can come from sources outside the jurisdiction of the United States.”\footnote{Implementation of the Child Safe Viewing Act, \textit{Report}, 24 F.C.C.R. 11413, ¶ 126 (2009).} Unlike the regulation of “gatekeepers” that own and operate last-mile transmission facilities, the regulation of Internet content would serve none of the statutory purposes of the Communications Act.\footnote{Section 230 of the Communications Act prohibits Commission regulation of the “Internet and other interactive computer services” generally. 47 U.S.C. § 230(b)(2).}

If the FCC extends binding regulatory obligations to content, application, and service providers, the Commission surely will engage in an unlawful mission creep, based on “an
implausible reading of the statute, . . . [thereby] exceed[ing] the authority given it by Congress.” 

Supreme Court Justice Scalia presciently warned that the FCC as an “experienced agency can (with some assistance from credulous courts) turn statutory constraints into bureaucratic discretions,” reserving, for example, the option of regulating Internet content based on statutes offering absolutely no basis for anything beyond promoting Internet access. Nowhere in its previous involvement with the Internet, or in its regulatory classification of telecommunications services and information services, has the Commission ever sought to expand its regulatory mission and the scope of its oversight to include content, software, and applications that traverse networks operated by IAPs.

A. The Commission’s Authority Is Limited.

The holding in *American Library Ass’n v. FCC* provides solid precedent for the premise that the FCC’s authority is not boundless and that it cannot leverage its ample statutory authority over facilities-based network operators to extend to the content and applications that these carriers deliver. In that case, the United States Court of Appeals for the District of Columbia Circuit held that the FCC exceeded its authority when it sought to regulate devices on consumer premises that receive transmitted television content. The Commission had attempted to require consumer devices to recognize “broadcast flags” in television content that would limit the copying, reformatting, and redistribution options available to consumers. Characterizing the FCC’s action as the most


12 *Id.* 545 U.S. at 1013.

13 406 F.3d 689 (D.C. Cir. 2005) [hereinafter cited as ALA v. FCC]. “In this case, all relevant materials concerning the FCC’s jurisdiction—including the words of the Communications Act of 1934, its legislative history, subsequent legislation, relevant case law, and Commission practice—confirm that the FCC has no authority to regulate consumer electronic devices that can be used for receipt of wire or radio communication when those devices are not engaged in the process of radio or wire transmission.” *Id.* 406 F.3d at 798.
sweeping assertion of authority in the Commission’s seven decades of existence, the court rejected the use of ancillary jurisdiction pursuant to Title I in lieu of explicit congressional authorization:

The Commission recognized that it may exercise ancillary jurisdiction only when two conditions are satisfied: (1) the Commission’s general jurisdictional grant under Title I covers the regulated subject and (2) the regulations are reasonably ancillary to the Commission’s effective performance of its statutorily mandated responsibilities. The Commission’s general jurisdictional grant under Title I plainly encompasses the regulation of apparatus that can receive television broadcast content, but only while those apparatus are engaged in the process of receiving a television broadcast. Title I does not authorize the Commission to regulate receiver apparatus after a transmission is complete. As a result, the FCC’s purported exercise of ancillary authority founders on the first condition. There is no statutory foundation for the broadcast flag rules, and consequently the rules are ancillary to nothing. Therefore, we hold that the Commission acted outside the scope of its delegated authority when it adopted the disputed broadcast flag regulations.14

The court determined that broadcast flags operate as a curb on the ability of digital television reception equipment to redistribute digital broadcast content after having received the content and not during the actual broadcast transmission.15 Finding no statutory authority for the FCC to regulate consumers’ use of already received broadcast content, the court refused to defer to agency expertise.16 The court reasoned that absent the need for explicit congressional authority the FCC would have plenary authority to regulate any consumer electronics and computer device.

14 Id. 406 F.3d 691-692.
15 “The effectiveness of the broadcast flag regime is dependent on programming being flagged and on devices capable of receiving broadcast DTV signals (collectively "demodulator products") being able to recognize and give effect to the flag. Under the rule, new demodulator products (e.g., televisions, computers, etc.) must include flag-recognition technology. This technology, in combination with broadcasters’ use of the flag, would prevent redistribution of broadcast programming.” Id. 406 F.3d 693.
16 See Chevron U.S.A. Inc. v. Natural Resources Defense Council, Inc., 467 U.S. 837, 104 S.Ct. 2778, 81 L.Ed.2d 694 (1984), and United States v. Mead Corp., 533 U.S. 218, 226-27, 121 S.Ct. 2164, 150 L.Ed.2d 292 (2001). The Supreme Court supported deferral to the expertise of a regulating agency “if the intent of Congress is clear.” Chevron, 467 U.S. at 842-43, 104 S.Ct. 2778. If “Congress has not directly addressed the precise question at issue,” and the agency has acted pursuant to an express or implied delegation of authority, the agency’s statutory interpretation is entitled to deference, as long as it is reasonable.” Id. at 843-44, 104 S.Ct. 2778.
The court also rejected the Commission’s ancillary jurisdiction rationale based on the Communications Act. The court noted that all prior cases with precedential value that endorsed ancillary jurisdiction involved entities engaged in “communication by wire or radio”:

The Court’s decisions in Southwestern Cable, Midwest Video I, and Midwest Video II were principally focused on the second prong of the ancillary jurisdiction test. This is unsurprising, because the subject matter of the regulations at issue in those cases—cable television—constituted interstate communication by wire or radio, and thus fell within the scope of the Commission’s general jurisdictional grant under Title I of the Communications Act. However, these cases leave no doubt that the Commission may not invoke its ancillary jurisdiction under Title I to regulate matters outside of the compass of communication by wire or radio.17

The court also rejected the FCC’s rationale that broadcast flag processing regulations could lawfully fit within the Commission’s congressionally authorized responsibility for promulgating technical requirements for television receiving equipment as part of its implementation of rules relating to the transition from analog to digital television.18

B. The Commission’s Statutory Basis for Applying Network Neutrality Rules (including Title I, Secs. 201(b), 230(b), and 706(a)) Extend Only to Ventures that Provide Internet Access via Wire or Radio.

None of the statutory clauses cited by the Commission to support its assertion of jurisdiction over IAPs can stretch further to include content providers. The FCC cannot credibly read the language in Sections 230(b) and 201(b) of Communications Act, as amended, and Section

17  ALA v. FCC, 406 F.3d at 702.
18  “It is enough here for us to find that the Communications Act of 1934 does not indicate a legislative intent to delegate authority to the Commission to regulate consumer electronic devices that can be used for receipt of wire or radio communication when those devices are not engaged in the process of radio or wire transmission. That is the end of the matter. It turns out, however, that subsequent legislation enacted by Congress confirms the limited scope of the agency’s ancillary jurisdiction and makes it clear that the broadcast flag regulations exceed the agency's delegated authority under the statute.” Id. 406 F.3d at 706.
706(a)\textsuperscript{19} of the Telecommunications Act of 1996\textsuperscript{20} to provide it with authority to regulate any Internet-mediated content.

Section 230(b)(1) states that it “is the policy of the United States . . . to promote the continued development of the Internet and other interactive computer services and other interactive media . . . .”\textsuperscript{21} Section 230(b)(2) states that it “is the policy of the United States . . . to preserve the vibrant and competitive free market that presently exists for the Internet and other interactive computer services,” \textsuperscript{22} hardly an explicit or implicit endorsement of that the FCC’s oversight beyond network operators to Internet content and application providers. Section 201(b) of the Communications Act authorizes the FCC “to prescribe such rules and regulations as may be necessary in the public interest to carry out the provisions of th[e] Act.”\textsuperscript{23} The FCC cannot lawfully bootstrap a statutory grant of authority to establish rules for any substantive area outside its jurisdiction.

Section 706(a) of the Telecommunications Act of 1996 directs the FCC and state public utility commissions to “encourage the deployment on a reasonable and timely basis of advanced telecommunications capability to all Americans (including, in particular, elementary and secondary schools and classrooms) by utilizing, in a manner consistent with the public interest, convenience, and necessity, price cap regulation, regulatory forbearance, measures that promote competition in the local telecommunications market, or other regulating methods that remove barriers to

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\item \textsuperscript{19} Codified at 47 U.S.C. § 1302(a).
\item \textsuperscript{21} 47 U.S.C. §230(b)(1).
\item \textsuperscript{22} 47 U.S.C. §230(b)(2).
\item \textsuperscript{23} 47 U.S.C. § 201(b), \textit{citing} AT&T Corp. v. Iowa Utilities Bd., 525 U.S. 366 (1999); Alliance for Community Media v. FCC, 529 F.3d 763, 772–74 (6th Cir. 2008) \textit{cert. denied}, 129 S. Ct. 2821 (2009).\
\end{itemize}
infrastructure investment.”24 Congress defined advanced telecommunications capability “without regard to any transmission media or technology, as high-speed, switched, broadband telecommunications capability that enables users to originate and receive high-quality voice, data, graphics, and video telecommunications using any technology.”25 The statute clearly focuses on promoting access to the Internet, i.e., the wire and radio facilities used by IAPs to provide last-mile Internet access to end-users. It is limited to enhancing public access to Internet conduits, whether classified as telecommunications services26 or information services.27

C. The FCC Only Has Extended Regulations to Applications Where the Service Provider Offers a Related Telecommunications Service or, in Special Circumstances, Provides Telecommunications to End Users.

Nothing in the FCC’s growing involvement with matters pertaining to the Internet evidences an intention on the Commission’s part to extend its authority to include Internet-mediated content and services. The Communications Act of 1934, as amended, expressly limits the FCC’s substantive jurisdiction, and with limited and narrow exceptions, services that fit within the information services classification face limited FCC oversight.

Mindful that the information services classification significantly constrains what it can do to serve the public interest, and aware of the artificial competitive advantages that result from incorrect regulatory classification, the FCC on occasion has needed to clarify which regulatory

26 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.” 47 U.S.C. § 153(46).
27 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.” 47 U.S.C. § 153(20).
obligations apply to particular types of operators. In the context of the Internet, the Commission determined that routing telecommunications services via the Internet does not automatically convert these services into information services. The Commission has also asserted ancillary jurisdiction and has applied selective regulatory requirements to Voice over the Internet Protocol ("VoIP") service providers, primarily those providers that make service available to and from the conventional, dial up, public switched telephone network ("PSTN").

However, selective FCC regulation of information services and VoIP offers no foundation for supporting an expansion of FCC oversight to any other type of Internet-mediated content, application, or service.

i. Internet-mediated Telecommunications Services

The FCC has stated that routing telecommunications service traffic via the Internet does not provide carriers an automatic “safe harbor” opportunity to convert their traffic into a less regulated information service. Remarkably AT&T, the party identified in the Open Internet

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28 Outside the context of the Internet, the FCC has determined, for example, that wireless telecommunications service providers needed to be reminded of their common carrier obligations, including the duty to provide “roaming” subscribers with access to their networks on cost-based and nondiscriminatory terms. Reexamination of Roaming Obligations of Commercial Mobile Radio Service Providers, Report and Order and Further Notice of Proposed Rulemaking, 22 F.C.C.R. 15817 (2007).

29 See, e.g., Regulation of Prepaid Calling Card Services, Declaratory Ruling and Report and Order, 21 F.C.C.R. 7290, (2006), partially reversed, Qwest Services Corp. v. FCC, 509 F.3d 531, (D.C. Cir. 2007)(affirming the FCC’s regulatory determination but reversing the Commission’s different treatment of calling cards that provide access to VoIP versus ones that provide a menu of services and options)[hereinafter cited as Regulation of Prepaid Calling Card Service Order].

30 A safe harbor constitutes “[a]n area or means of protection [or a] provision (as in a statute or regulation) that affords protection from liability or penalty.” BLACK’S LAW DICTIONARY (8th ed. 2004). In light of the lack of a bright line distinction between regulated telecommunications services and largely unregulated information services, ventures possibly can secure a competitive advantage through regulatory arbitrage where ventures seek reduced regulatory oversight by characterizing telecommunications services as information services. The FCC defined regulatory arbitrage as “businesses making decisions based on regulatory classifications rather than on customers’ preferences and innovative and sustainable business plans.” Inquiry Concerning High-Speed Access to the Internet over Cable and Other Facilities, Internet over Cable Declaratory Ruling; Appropriate Regulatory Treatment for Broadband Access to the Internet over Cable Facilities, Declaratory Ruling and Notice of Proposed Rulemaking, 17 F.C.C.R. 4798, 4846 (2002). See also, Rob Frieden, Regulatory Arbitrage Strategies and Tactics in Telecommunications, 5 N.C. J. L. & TECH. 227 (2004).
NPRM as suggesting that the FCC regulate Internet-mediated content and services, attempted without success to convince the FCC that calling card long distance telephone services provided by the company should qualify for the information service safe harbor. 31

ii. VoIP Services

Rather than treat VoIP carriers with the same sort of limited regulatory oversight it applies to information services, the FCC has saddled certain types of VoIP service with some of the regulatory burdens applied to conventional telephone service. The Commission reduces the competitive cost advantage32 for VoIP service providers, which offer subscribers telephone calling access to the PSTN, based on the specific characteristics of these services that make them competitive alternatives to conventional dial-up telephone service. The narrow and specific regulatory incursions stem from the Commission’s public interest concerns about the potential for VoIP service to impact adversely universal service funding, national security, and consumer expectations about the safety and convenience features available from telephone service. Interconnected VoIP service providers must contribute to the universal service fund,33 reconfigure their service to provide wiretapping capabilities to law enforcement authorities 34 provide caller

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31 “AT&T asserted that its cards were ‘enhanced’ because they provided additional information to the calling party in the form of an advertising message provided by the retailer of the card. Accordingly, AT&T contended that the cards provide an information service, rather than a telecommunications service.” Regulation of Prepaid Calling Card Services Order, 21 F.C.C.R. at 7291.


33 Universal Serv. Contribution Methodology, Report and Order and Notice of Proposed Rulemaking, 21 F.C.C.R. 7518, 7538 (2006) (extending section 254(d) permissive authority to require interconnected VoIP providers to contribute to the USF), reh’g denied, vacated in part on other grounds, Vonage Holding Corp. v. FCC, 489 F.3d 1232 (D.C. Cir. 2007).

location identification and emergency 911 access,\textsuperscript{35} and offer service to disabled users.\textsuperscript{36} Such service-specific regulatory burdens provide no precedent for a more broad-based extension of FCC regulation over any and all Internet-mediated services.

\textbf{II. The FCC Has Long-Recognized Competitive and Operational Distinctions Between Facilities-Based Network Providers and Services That Depend on Those Networks to Reach End-users.}

Consistent with its statutory mandates, the Commission applies more comprehensive regulatory oversight where facilities-based, last-mile providers have the incentive and ability to use their control of network infrastructure in ways that interfere with competition and innovation in services that depend on that infrastructure. The Commission has developed a long record of establishing a “bright line” regulatory demarcation between regulated carriers providing telecommunications services -- or, more broadly, wire or radio access -- and unregulated ventures providing content, applications, and software that ride on top of the transport services provided by facilities-based operators.

For example, in its \textit{Second Computer Inquiry},\textsuperscript{37} the FCC established a regulatory dichotomy between regulated basic telecommunications services and unregulated enhanced services based on the potential for facilities-based carriers to abuse their bottleneck control over access to enhanced facilities. The Commission created structural safeguards that required

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\textsuperscript{37} Amendment of Section 64.702 of the Commission’s Rules and Regulations (Second Computer Inquiry), \textit{Final Decision}, 77 F.C.C.2d 384 (1980), \textit{aff’d sub nom.} Computer and Communications Indus. Ass’n. v. FCC, 693 F.2d 198 (D.C. Cir. 1982).
\end{footnotesize}
separation between a facility-based carrier’s Title II regulated common carrier services and unregulated services provided by corporate affiliates. The Commission subsequently concluded in the *Third Computer Inquiry* that a single firm could achieve operational efficiencies without anticompetitive harm by jointly providing basic and enhanced services. However, this relaxation of structural and functional separation requirements did not eliminate the dichotomy between regulated telecommunications services provided by network carriers and unregulated services.

As the FCC notes in the NPRM, the *Computer Inquiry* rules were central to the development of the commercial Internet, helping to “enable thousands of companies to enter the dial-up Internet service provider market, contributing to the rapid growth of the Internet.” As important, the FCC left the data services that ran over the network unregulated. With the enactment of the Telecommunications Act of 1996, Congress mandated continuation of this regulatory dichotomy. The FCC was required to continue to apply Title II common carriage requirements to telecommunications service providers, subject to some regulatory forbearance

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38 “In the *Computer II* rules, the Commission subjected facilities-based providers to common-carrier duties not because of the nature of the ‘offering’ made by those carriers, but rather because of the concern that local telephone companies would abuse the monopoly power they possessed by virtue of the ‘bottleneck’ local telephone facilities they owned.” National Cable & Telecommunications Ass’n v. Brand X Internet Services, 545 U.S. 967, 996, 125 S.Ct. 2688, 2708 (2005).


40 Open Internet NPRM at ¶27.


42 See, e.g., Reexamination of Roaming Obligations of Commercial Mobile Radio Service Providers, *Report and Order and Further Notice of Proposed Rulemaking*, 22 F.C.C.R. 15817 (2007) (clarifying that automatic roaming is a common carrier obligation for commercial mobile radio service carriers that requires them to provide roaming services to other carriers upon reasonable request and on a just, reasonable, and non-discriminatory basis pursuant to Sections 201 and 202 of the Communications Act).
opportunities where the public interest supports partial deregulation. The Commission was granted limited regulatory oversight responsibilities for information service providers, the replacement classification for enhanced services. Neither the Telecommunications Act of 1996 nor any other law provides the FCC with statutory authority to regulate the content, applications, and software that traverse the networks operated by carriers subject to the Commission’s jurisdiction.

III. The Factors Supporting Enforceable Openness Rules for IAPs Do Not Exist for Extending Any Such Rules to Internet Content and Applications.

The extensive scholarly and advocacy literature on network neutrality has concentrated on IAPs and their relationships downstream with end users and upstream with content, applications, and service providers. Experts debate whether these carriers have the incentive and ability to

43 47 U.S.C. §160, Regulatory flexibility (2008) authorizes the FCC to forbear from applying portions of Title II common carrier regulation “if the Commission determines that-- (1) enforcement of such regulation or provision is not necessary to ensure that the charges, practices, classifications, or regulations by, for, or in connection with that telecommunications carrier or telecommunications service are just and reasonable and are not unjustly or unreasonably discriminatory; (2) enforcement of such regulation or provision is not necessary for the protection of consumers; and (3) forbearance from applying such provision or regulation is consistent with the public interest.” Id. 47 U.S.C. §160(a)(1)-(3).

44 “Under its Computer Inquiry rules, which foreshadowed the definitions of ‘information’ and ‘telecommunications services, . . . the Commission forbore from regulating as common carriers ‘value-added networks’— non-facilities-based providers who leased basic services from common carriers and bundled them with enhanced services; it said that they, unlike facilities-based providers, would be deemed to provide only enhanced.” Brand X, 545 U.S. at 1011, 125 S.Ct. at 2716.

discriminate, what they can do under the rubric of network management, and whether consumers and content/applications providers need FCC safeguards to prevent anticompetitive conduct and other harmful practices. The matter of IAPs’ relationships with upstream ventures raises questions about whether the FCC needs to establish rules to prevent prioritization and other preferential treatment of specific content, e.g., content supplied by affiliates, and not whether the Internet has sufficient supply or competitiveness in the marketplace for content, applications, and services.

The factors supporting the creation of enforceable openness rules for IAPs do not exist for extending any such rules to Internet-mediated content and applications. Absent vastly changed

46 “Shifting to a system where access to and use of the Internet are allocated and prioritized according to users’ willingness and ability to pay . . . is also likely to reduce innovation at the applications level, since more of the value of that innovation will be transferred to the owners of the network. And encouraging that applications-level innovation may be more important than encouraging additional innovation in the network itself. In our view, the social opportunity costs of allowing network owners to dismantle the Internet’s infrastructure commons may be tremendous but incredibly difficult to measure precisely because so much of the value generated by the Internet is not fully captured in market transactions. Preserving Internet spillovers requires preserving network neutrality.” Brett M. Frischmann and Mark A. Lemley, *Spillovers*, 107 Colum. L. Rev. 257, 298 (2007).

47 “In the absence of network neutrality regulation, there is a real threat that network providers will discriminate against independent producers of applications, content or portals or exclude them from their network.” Barbara van Schewick, *Towards an Economic Framework for Network Neutrality Regulation*, 5 J. ON TELECOMM. & HIGH TECH. L. 329, 390 (2007). “Like cable television operators, the telephone company and cable modem duopolists in the broadband marketplace in almost all cases provide the sole interactive ‘data pipe’ into subscribers’ homes. They thus have the incentive, given their integration with broadband content providers, to act as ‘gatekeepers’ who can ‘flick the switch’ on competitors or any other online speakers whom they disfavor.” Anthony E. Varona, *Toward a Broadband Public Interest Standard*, 61 ADMIN. L. REV. 1, 123 (Winter, 2009).
circumstances and compelling reasons, the Commission has expressly stated the intention to maintain “an established policy of minimal regulation of the Internet and the services provided over it.”

A. IAPs Have a Unique Technical Ability to Control Applications and Content That Run “Over-the-Top” of Their Networks.

IAPs have the unique capacity to constrain, prioritize, discriminate against, and otherwise shape traffic that runs across their networks. By definition, an end-user depends on the IAP to route traffic to and from other users, as well as content, and application providers. As such, IAPs have bottleneck control over every activity in which the user wishes to engage. Content and application providers do not have a comparable ability. A website hosting provider, for example, can decide not to host certain content, but website operators could still use alternative mechanisms to make their content available to end-users, e.g. using competing hosting providers or buying and using their own servers.

The IAP gatekeeper function grows more powerful in light of the ability to use deep packet inspection techniques to “sniff” and identify types of traffic that the IAP wants to favor or handicap. “An [ability] to examine packets for purposes of assigning bitstreams into various tiers of service also provides an [Internet Service Provider (“ISP”)] with greater knowledge about the nature and type of the traffic it handles. Arguably, an ISP engaging in quality of service . . . and price discrimination through deep packet inspection no longer operates as a neutral conduit lacking actual or constructive knowledge of what the packets represent. IAPs that sniff packets actively

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examine the header of packets that provide traffic routing information, but also can identify characteristics of the content ‘payload’ contained in the packet.”

B. IAPs Have the Incentive to Combine Vertical Integration of Conduit and Content In Ways that Harm Consumers.

The Commission acknowledges that IAPs “have an incentive to use this gatekeeper role to make it more difficult or expensive for end users to access services competing with those offered by the network operator or its affiliates.” IAPs have found it commercially advantageous to combine their conduit role with various activities relating to the creation, packaging, and offering of content via the Internet. For example, cable television companies blend their Internet access conduit function, as a provider of cable modem service, with various video program services that the companies own, or with which they have an affiliate relationship. Similarly, wireless mobile telephone companies provide Internet access, but also showcase and provide easier access to a packaged collection of Internet-mediated content in what is commonly referred to as a “walled garden.”

When the FCC sanctioned Comcast for unnecessarily meddling with subscriber traffic, the Commission identified a situation in which an IAP acted on its incentive and ability to tilt the playing field to disadvantage a competitive alternative to the company’s video on demand services: Peer-to-peer applications, including those relying on BitTorrent, have become a competitive threat to cable operators such as

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50 Open Internet NPRM at ¶101.

51 For background on how wireless carriers adversely impact the marketplace for content, applications, and software by erecting walled gardens, see Rob Frieden, Lock Down on the Third Screen: How Wireless Carriers Evade Regulation of Their Video Services, 24 BERKELEY TECH. L.J. No. 2 819 (Spring, 2009); Hold the Phone: Assessing the Rights of Wireless Handset Owners and Carriers, 69 U. PITT. L. REV. No. 4, 675 (2008).
Comcast because Internet users have the opportunity to view high-quality video with BitTorrent that they might otherwise watch (and pay for) on cable television. Such video distribution poses a particular competitive threat to Comcast’s video-on-demand (“VOD”) service. VOD . . . operates much like online video, where Internet users can select and download or stream any available program without a schedule and watch it any time, generally with the ability to fast-forward, rewind, or pause the programming.  

More generally the Commission has acknowledged that:

a broadband Internet access service provider that is also a pay television provider could charge providers or end users more to transmit or receive video programming over the Internet in order to protect the broadband Internet access service provider’s own pay television service. Alternatively, such a broadband Internet access service provider could seek to protect its pay television service by degrading the performance of video programming delivered over the Internet by third parties. The result may be higher prices or worse service for some content and applications and inefficiently low investment in some content and application markets.

The Commission appreciates the potentially adverse impact on consumers and competition arising from vertical integration in other contexts as well. For example, the Commission extensively regulates cable television operators that vertically integrate content and conduit based on finding the potential for competitive and consumer harm:

[W]e conclude that there are no good substitutes for some satellite-delivered vertically integrated programming and that such programming therefore remains necessary for viable competition in the video distribution market. Based on this finding, we conclude that vertically integrated programmers continue to have the ability to favor their affiliated cable operators over competitive MVPDs [multichannel video programming distributors] such that competition and diversity in the distribution of video programming would not be preserved and protected absent the rule. . . . [W]e also


53  Open Internet NPRM at ¶72.

54  “Where broadband Internet access service providers have market power and are vertically integrated or affiliated with content, application, or service providers, additional concerns may arise.” Open Internet NPRM at ¶72.
find some trends that increase their incentive to withhold programming, such as the increase in horizontal consolidation of the cable industry, the increase in cable clustering, and the recent emergence of new competitors. We also find specific factual evidence that, where the exclusive contract prohibition does not apply, such as in the case of terrestrially delivered programming, vertically integrated programmers have withheld and continue to withhold programming from competitive MVPDs.55

Because cable television companies generate much of the desired video content and control the major medium for distributing it, the FCC has expressed concern that the cable companies can stifle competition, extract rates above competitive levels from subscribers, favor affiliated content providers, and prevent the development of new content sources.56 Note however the Commission does not subject independent, stand-alone content providers to such regulations.

C. Unlike the Applications and Content Markets, Which Are Robustly Competitive, the IAP Market is Concentrated, with High Barriers to Entry and High Switching Costs.

As the FCC notes, “[E]ven if there is competition among broadband Internet access service providers, once an end-user customer has chosen to subscribe to a particular broadband Internet access service provider, this may give that broadband Internet access service provider the ability, at least in theory, to favor or disfavor any traffic destined for that subscriber.”57


56 “Despite the increase in available programming over the past five years, we find that cable operators still own popular programming for which there are no close substitutes. The availability of new, non-integrated networks does not mitigate the adverse impact on competition of a competitive MVPD's inability to access popular vertically integrated programming. The record reflects that numerous national programming networks, RSNs, premium programming networks, and VOD networks are cable-affiliated programming networks that are demanded by MVPD subscribers and for which there are no adequate substitutes.” Id. at 17816.

57 Open Internet NPRM ¶73. See also Barbara van Schewick, Towards an Economic Framework for Network Neutrality Regulation, 5 J. ON TELECOMM. & HIGH TECH. L. 329 (describing how such discrimination may be socially harmful).
However, given the lack of competition in the broadband market, the danger of discrimination is particularly acute.

Broadband deployment triggers high fixed costs and, generally, reliance on public resources, such as rights of way. These characteristics have produced concentrated markets for Internet access. The FCC correctly acknowledges in the Open Internet NPRM that “In many parts of the United States, customers have limited options for high-speed broadband Internet access service.” The Congressional Research Service has described the wireline broadband market as a “broadband duopoly,” and in some cases users have only one provider. While consumers may have more options in the wireless market, the market remains concentrated, with the four carriers together controlling 90% of the national market. In addition, the two largest carriers – Verizon and AT&T, which control over 60% of the market – are integrated with wireline broadband carriers.

Furthermore, most consumers subscribe to, and are locked into, the services of only one carrier. In the case of wireless broadband access, consumers typically agree to one- or two-year service contracts with financial penalties for early termination. For both wireline and wireless broadband access, subscribers may not have many service options and may incur significant switching costs should they learn of discriminatory service.

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59 Open Internet NPRM at ¶4.


62 Id.
These factors add up to make IAPs’ unique technical ability to discriminate much more worrisome. If IAPs discriminate among applications and content, consumers lack the ability to easily “vote with their dollars,” switching to an alternative provider. Also, as the Commission stated in its investigation of Comcast,63 subscribers may not easily detect the source of service degradation even when the underlying carrier engages in anticompetitive conduct.

In contrast, there is robust competition and abundant choice in the content and application markets. So long as IAPs do not interfere, consumers have complete sovereignty in selecting what content, applications, and services to access. Moreover, as Professor Tim Wu notes, “So long as entry is not blocked by actors at the infrastructure layer, better technologies ought to be capable of supplanting inferior ones, even given network effects.”64 The switching costs at the applications and content layers often approach zero; the ability to switch from one news website to another, from one search engine to another, generally only takes one click. Without constant innovation and acute sensitivity to consumer wants, needs, and desires, a currently successful content or applications provider is just one click away from declining market share and insignificance.

The prospect of regulating Internet-mediated content and applications runs counter to frequent FCC conclusions that consumers benefit from a robustly competitive and unregulated Internet marketplace. Rather than seeking to expand its jurisdiction to address phantom issues related to upstream providers of content, the Commission should focus on the real problems in the Internet access market stemming from market concentration.

63 “Many consumers experiencing difficulty using only certain applications will not place blame on the broadband Internet access service provider, where it belongs, but rather on the applications themselves, thus further disadvantaging those applications in the marketplace.” Comcast Investigation, 23 F.C.C.R. at 13058-59.

64 Tim Wu, Why have a Telecommunications Law?, 5 J. ON TELECOMM. & HIGH TECH. L. 15, 28 (2006).
IV. Conclusions

Consistent with the FCC’s examination of potential Internet regulatory issues, including the Open Internet NPRM, the network neutrality debate has focused on IAPs and their relationship downstream to end users and upstream to content, application, and service providers. While stakeholders and researchers have significantly different opinions about whether and how the Commission should act, the debate never has included whether the Commission should become a content regulator. No one can credibly claim that the FCC has to remedy some public harm in what has become a robust marketplace of ideas. The public harm exists at the IAP level where manipulation of packets can hinder the marketplace of ideas upstream. Regulating upstream would reduce the individual and societal benefits that accrue from an open, innovative, and robustly competitive marketplace for Internet-mediated content and applications.

In urging the Commission to apply openness rules to application and content providers, AT&T rhetorically asks, “If the Commission is going to be a smart cop on the beat preserving a free and open Internet, then shouldn’t its beat necessarily cover the entire Internet neighborhood”? 65 AT&T appears to ignore the lines that Congress has drawn in this domain. Congress has crafted anti-trust and other laws that can remedy anti-competitive conduct in the application and content markets, but this is an area outside of the FCC’s purview. Congress has not given the FCC authority to wade into regulating applications and content. Instead, the FCC’s statutory mandate is clearly focused on regulating facilities-based, last-mile providers of network

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infrastructure. If the Commission does not rein in IAPs’ discriminatory practices, recent decisions by the Supreme Court may severely restrict the relief available through judicial appeals.66

The network neutrality debate has motivated provocateurs to raise and legitimize outlandish interpretations of law and policy. The FCC inadvertently may have contributed to confusion and uncertainty simply by acting on AT&T’s invitation to consider extending Internet openness policies to content, applications, and service providers. The Commission can contribute to clarity and certainty by expressly confirming that its jurisdiction is limited to matters pertaining to Internet access and the roles performed by IAPs.

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66 The Supreme Court has concluded that because industry sector-specific legislation provides the FCC with authority to craft regulatory remedies, when the Commission refuses to act, appellate courts have no legal basis for imposing additional antitrust safeguards. See Verizon Communications, Inc. v. Law Office of Curtis V. Trinko, LLP, 540 U.S. 398 (2004) (antitrust laws offer no additional safeguards when the FCC refuses to apply more aggressive safeguards available in the Communications Act, as amended); Pacific Bell Telephone Co., v. Linkline Communications, Inc., slip op. 555 U.S. ___ (Feb. 25, 2009); available at: http://www.supremecourtus.gov/opinions/08pdf/07-512.pdf (where the FCC has failed to investigate and remedy an instance where the wholesale price exceeds the retail price of service, courts have a severely limited basis to investigate further).