The Best Path Forward on Net Neutrality

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Introduction

Net neutrality—the notion that all Internet traffic, regardless of its source or type, must be treated the same by Internet Service Providers (ISPs)—is back on the nation's political radar. The catalyst was the D.C. Court of Appeals' decision last January in *Verizon v. FCC*, which overturned the Federal Communications Commission's (FCC) "Open Internet Order." The essence of the Court's ruling was that the FCC lacked legal authority to impose the specific non-discrimination requirements embodied in that order, which prohibited ISPs and content providers from negotiating rates for speedier delivery or "paid prioritization." The Court's rationale was that the FCC had previously declined to designate Internet access "common carriage" under Title II of the Telecommunications Act, a classification that the Court essentially suggested could have justified its order.

Importantly, the Court also articulated a *less-invasive path* for regulating such arrangements, in which ISPs and content providers could voluntarily negotiate the terms for priority delivery. The FCC could serve as a backstop to adjudicate disputes if negotiations broke down and discrimination was to blame. Moreover, the Court signaled that the FCC could invoke this alternative approach under its existing (Section 706) authority without reclassifying ISPs.

The Court's decision has unleashed a vigorous debate over both paid prioritization and whether Internet access now should be subject to Title II. Broadly speaking, public interest and some consumer groups, coupled with some in the tech community (collectively, the "netizens"), want the same (zero) price for all types of online content, regardless of the volume of traffic on each site. The surest legal way to that result, many in this camp believe, is for the FCC to accept the Court's implicit invitation to impose Title II regulation on Internet access. Understandably, the ISPs, parts of the tech community and many economists oppose that path forward. They fear that imposing public-utility style regulation on Internet access—complete with rate filings and FCC approvals, among other requirements would dampen innovation and investment in more, faster broadband. Unfortunately, the debate between the two sides has taken on the character of a religious dispute, with the FCC caught in the crossfire. The key to a possible resolution, however, may be the eventual realization by the Commission that Title II regulation of Internet access would (1) reduce ISP investment at the "core" of the Internet by more than what it stimulated at the "edge" by content providers, resulting in a net loss in investment, and (2) could one day boomerang on certain major tech companies or be expanded to regulate other ISP offerings. In that case, the FCC will need another way to move forward on net neutrality—and we propose one in this report.

So Which Way Forward? Focus on Investment

The "Internet ecosystem" can be thought of as being populated by two types of players: "edge" providers, who supply the content, devices and apps that arguably drive broadband subscriptions, and "core" providers, who build the infrastructure over which these apps operate. Investment by both types is critical to a properly functioning Internet ecosystem, and due to feedback effects, investment by one depends on the investment by the other. In particular, faster speeds from next-generation networks spawns a new generation of apps that were not previously possible; and the demand for those apps, in turn, provides the impetus for more investment at the core. Internet policy, including the resolution of the net neutrality debate, should be guided, in our view, by a simple rule: Pick the policy that maximizes *total investment across the entire Internet ecosystem*.

The FCC recognizes the importance of investment in shaping Internet policy, as expressed by its recent Open Internet Notice of Proposed Rulemaking¹:

We seek comment on the current role of the Internet's openness in facilitating innovation, economic growth, free expression, civic engagement, competition, and broadband investment and deployment. Particularly, we seek comment on the role the open Internet rules have had in investment in the broadband marketplace—networks and edge providers alike. We are similarly interested in understanding the role that the open Internet may play in the promotion of competition or in identifying barriers to infrastructure investment that an open Internet may eliminate or lessen.

Clearly, the FCC values investment at both the core and at the edges.

The dueling voices in the net neutrality debate, however, have emphasized different types of investment they consider to be paramount. For example, the netizens advocate heavy-handed regulation to protect investment at the edge of the network by content and application providers. Tech analyst Nancy Scola succinctly articulated this edge-centric ethic:²

On a neutral Internet, if two college kids want to start, say, a videobased educational service, they can simply set up their Web site and compete with anyone. But without strict neutrality rules in place, they might face the choice of having to pay Internet service providers to get the same fast, efficient distribution that, for example, Facebook can afford. Their scrappy start-up video service runs well enough, but customers are drawn to speedier, flashier Web sites and apps. These young entrepreneurs eventually give up. And knowing of their struggles, the next generation of would-be online entrepreneurs doesn't even bother trying. The Internet loses the experimentation that has long been its hallmark.

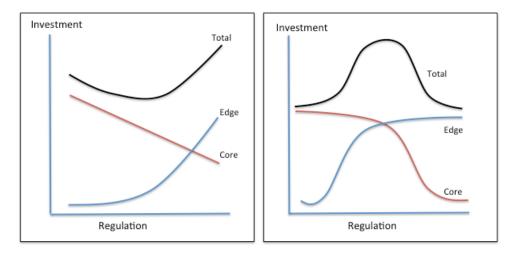
On the other side, advocates give priority to investment at the core of the broadband network by ISPs. They fret that even the slightest regulation of the Internet will discourage investment at the core and contend that antitrust laws are sufficient to protect edge providers. As explained by FTC Commissioner Josh Wright and George Mason Law Professor Thomas Hazlett: "Antitrust law gives consumers a chance to reap the benefits from business arrangements like those between MetroPCS and Google while protecting them from those that truly harm competition."³

The Court in the *Verizon* decision determined that some regulation is justified to promote the "virtuous cycle" of investment by edge providers, which in turn spurs investment at the core:

The Commission's finding that Internet openness fosters the edgeprovider innovation that drives this 'virtuous cycle' was likewise reasonable and grounded in substantial evidence . . . This conclusion finds ample support in the economic literature on which the Commission relied . . . The record amassed by the Commission contains many similar examples, and Verizon has given us no basis for questioning the Commission's determination that the preservation of Internet openness is integral to achieving the statutory objectives set forth in Section 706 [of the Telecommunications Act of 1996].

The Court went on to explain that ISPs "could act in ways that would ultimately inhibit the speed and extent of future broadband deployment." The Court also determined that ISPs, if left to their own devices in establishing pay-for-priority arrangements, would not internalize any "resultant harms to innovation" by edge providers. Finally, the Court found that ISPs "have the technical and economic ability to impose such [investment-deterring] restrictions."

But how much regulation is needed to trigger this "virtuous cycle"? The answer is that the optimal amount of regulation should maximize the *sum total* of investment at the edge and the core. In the spirit of neutrality, the FCC should consider a dollar of investment at the edge to generate the same social benefit as a dollar of investment at the core. Although the "virtuous cycle" theory embraced by the Court suggests that edge investment could be given more weight in the FCC's calculus, there are positive spillovers associated with core investment as well, and there is no objective way to determine the relevant weights. The figure below shows two possible reactions to a change in Internet regulation by core and edge providers.



In both graphs, the vertical axis is the amount of investment and the horizontal axis is the amount of regulation. The red curve depicts edge investment as a function of regulation (more is better), and the blue curve depicts core investment as a function of regulation (less is better). The black curve depicts the sum total of core and edge investment for any level of regulation.

The graph in the left pane depicts a world in which both edge and core investment is sensitive to the amount of regulation, but edge investment is more so. According to this worldview, edge providers should be analogized to orchids, extremely sensitive to their operating environments. Thus, while core investment slowly declines with more FCC oversight, edge investment drops dramatically as regulation is withdrawn. In this world, the optimal regulation of ISPs is a heavy-handed approach, such as common carriage under Title II, which maximizes total investment (and happens to maximize edge investment).

The graph in the right pane depicts a world in which neither type of investment is sensitive to the level of regulation except at the extremes. Core investment is generally robust, unless regulators overreach, and edge investment can be counted on except when regulators fall asleep. In this case, the optimal policy is a light-touch approach under Section 706, which maximizes total investment.

How should the FCC decide which of these two worlds best captures the facts on the ground? There is scant empirical evidence of the "elasticity" of edge investment with respect to a change in regulation, as the Internet is a nascent industry and the regulatory protections for edge providers have hardly changed. By comparison, the elasticity of core investment to changes in other types of Title II regulation, such as mandatory unbundling, has been empirically studied. We briefly review that literature below.

Imposition of Title II Regulations on Investment of CLECs

One good historical example of Title II regulation that received scholarly attention is the mandatory unbundling of local exchange carriers' telephone networks required by the Telecommunications Act of 1996. The results underscore that Title II regulation deters investment at the core. By relying on simplistic models that incorporate investment in backbone infrastructure that was not subject to Title II regulations, some commenters in the FCC's net neutrality proceeding draw the wrong inferences about the impact of the mandatory-sharing obligation on core investment.⁴ The purpose of this section is to set the record straight.

The 1996 Act required the incumbent Regional Bell Operating Companies (RBOCs)—the localized telephone monopolies that were part of the integrated AT&T before it was broken up by court order in 1984—to share or "unbundle" the pieces of their local exchange networks to new "competitive local exchange carriers" (CLECs) to allow the latter to begin breaking down the local monopolies. Many thought the CLECs would adopt a "stepping-stone" strategy to entering local telephone markets, first by reselling all or part of the "unbundled network elements" (UNEs), and then with a customer base in hand, building their own facilities to serve them. To facilitate all this, the FCC required the RBOCs to charge a low price for their UNEs, one just enough to cover long run incremental costs.

Crandall et al (2004) used cross-state variation in the price of constructing local phone lines (adding capacity) relative to leasing unbundled loops to identify the sensitivity of CLEC investment in local lines to these low UNE rates.⁵ The researchers showed that mandatory unbundling at the low UNE rates actually encouraged CLECs to *delay* facilities-based investment: why not simply resell the UNEs and spend no more? The researchers also found that facilities investment by CLECs was actually greater in states with higher UNE charges; in other words, the more generous the subsidy, the less facilities-based CLEC investment.

This empirical finding was corroborated by others. For example, Hausman et al (2005) evaluated the investment effects of mandatory unbundling in the United States, the United Kingdom, Canada, and Germany. Their analysis demonstrated that, contrary to the prediction of the stepping-stone hypothesis—under which CLECs would gradually build their own facilities after initially reselling telephone services of the Regional Bell Operating Companies—the CLECs were increasingly relying on unbundling as their preferred mode of entry. Hazlett (2005) also found that the pattern of CLEC entry in the United States suggests that competition achieved through mandatory unbundling does not lead to facilities-based entry. Instead, rapid growth in the use of unbundled network facilities by CLECs quickly became their dominant form of entry. Professor Hazlett also found that capital expenditures in the network actually declined dramatically for both incumbents and entrants.⁶ He estimated that UNE lines and non-cable facilities-based lines were negatively correlated, indicating that the growth of "rented" UNE lines reduced new investments in the network.

Removal of Title II Regulations on Cable Investment

Although it may not have been clear when the 1996 Telecommunications Act was passed, cable television operators were best positioned to challenge the telcos' hegemony in voice services. But to enter this market, the cable operators first had to upgrade their networks to support Internet protocol (IP)-based transmissions, including voice over IP. Yet cable companies were reluctant to make such investments so long as regulators were providing a less expensive entry path to a favored constituency (the CLECs). High margins in local telephony and Internet access were the signal for new entrants, but the FCC's unbundling experiment was injecting unnecessary noise.

It took a series of court orders and the unraveling of CLEC business plans based on UNEs beginning in 1999 for the cable operators to see the market signal through the noise. To gauge the effect of the unbundling rules on cable operators, one may compare cable investment from the three years following the 1996 Act (or what we call the "wind-up") to the three years beginning in 2000 (or what we call the "wind-down"). Although it does not change the results, we omit 1999 from the comparison, because that year arguably was a transition period. According to the National Cable and Telecommunications Association, the average annual capital expenditure for cable operators during the "wind-up" was \$6 billion (the average of \$5.7, \$6.8, and \$5.6 billion). In comparison, the average annual capital expenditure for cable operators during the "wind-down" was \$15.1 billion (the average of \$14.6, \$16.1, and \$14.5 billion), an increase of 149 percent.

Was the elimination of the unbundling regime responsible for this investment surge? This massive uptick in cable investment coincided with the bursting of the dot-com bubble from 1999 through 2001, which tends to rule out the possibility that cable companies were caught up in some investment craze. Another possible explanation for the timing of cable's investment spike is that the technology to upgrade cable plant for digital services was not ready until 2000. But the DOCSIS standard, which permits the addition of high-speed data transfer over cable's existing hybrid fiber-coaxial infrastructure, was first available in March 1997. DOCSIS was revised shortly thereafter to enhance upstream transmission speeds to support IP telephony, but not until cable operators (and their customers) expressed a demand for it. In the absence of the unbundling experiment, it is reasonable that cable investment in DOCSIS would have occurred two or three years sooner. Yet another factor that may have altered the trajectory of cable investment around this time was the decision of FCC Chairman Kennard in 1999 not to engage in anticipatory regulation of cable modem service. Because cable modem service had never been subjected to unbundling rules, however, it is difficult to measure the impact of Kennard's policy-that is, there was no change in the "treatment" variable. In contrast, the change in the treatment of telcos provides a natural experiment to study the effects of unbundling (and its removal) on cable investment. The unwinding of the unbundling regime for telcos likely bolstered the investment incentives of cable operators, as evidenced by the uptick in cable capital expenditures in the early the 2000s. By June 2011, cable modem connections accounted for 61 percent of all U.S. residential connections capable of providing at least 3 mbps downstream and 768 kbps upstream.

Removal of Title II Regulations on Telco Investment

Perhaps the most pivotal regulatory decision concerning the fate of broadband occurred in 2003. In its Triennial Review Order, which became effective in October 2003, the FCC determined that there would be no unbundling requirement for fiber-to-the-home loops. Once the telcos understood that they were free of the obligation to lease their fiber-based networks to competitors at low rates, they entered into a race with their cable counterparts to begin building the broadband networks that are now transforming the telecom landscape. In the span of just five years, from the FCC's adoption of a policy of regulatory forbearance for fiber and IP networks in 2003, the miles of optical fiber doubled from five to ten million.⁷ The RBOCs collectively poured more than \$15 billion annually into broadband investments.⁸

Would Title II Boost Edge Investment?

To be fair, the type of rule being contemplated here—such as the equal treatment of packets—is a bit novel. Indeed, the D.C. Circuit was persuaded by "the absence of evidence that similar restrictions of broadband providers had discouraged infrastructure investment." But at least there is *some* evidence of the deleterious effect of imposing Title II on core investment. By contrast, the harms associated with not imposing Title II on edge investment are purely speculative. The notion that edge providers should be analogized to orchids has no empirical basis.

It defies logic to believe that an app developer operating out of their parent's garage is going to throw in the towel simply because Netflix, Google, or some other edge behemoth entered into a voluntary, for-pay arrangement with an ISP. Moreover, the service needs of a startup are very different from the needs of an established content provider with tens of millions of customers. This suggests that edge investment will not drop precipitously in response to a modest reduction in regulation. If we are right, then the right pane of the graph shown earlier should guide policy.

Notwithstanding this intuition, in the absence of empirical evidence about likely investment responses, the FCC should preserve its regulatory flexibility and keep a close eye on investment responses. A light-touch approach, in which the agency draws on its authority under Section 706, would preserve flexibility. If we are wrong about what motivates an edge entrepreneur, and if edge investment instead were to fall precipitously under such an approach—that is, the left pane in the graphs above captures the real world—then the FCC could always apply the "commercially reasonable" standard under Section 706 in a more restrictive manner (so long as it permitted some room for bargaining between edge providers and ISPs). While edge investment may be hard to monitor, ISP data is readily available. For example, capital expenditures across all ISPs—wireline, wireless,

and cable—have stayed within a fairly tight band (\$64 to \$70 billion annually) from 2006 to 2012, according to USTelecom.⁹

In contrast, starting with a heavy-handed Title II approach could risk substantial core investment without generating any offsetting incremental investment at the edge. Under the "mother-may-I" approach of Title II, it is much harder to ratchet down regulation once it has been imposed. For example, Title II could entail a rate-setting process for edge- or customer-facing offerings by ISPs; once a regulated rate is established, a new proceeding would be needed to adjust it. Because Title II would limit the FCC's flexibility in the face of such uncertainty over investment responses, the better approach in our view is starting with anti-discrimination enforcement under Section 706. Under this approach, both core and edge providers would be asked to make a modest sacrifice in exchange for the greater good. Barring the unlikely event in which the left panel of our graph depicts reality, total investment would be maximized, and the regulator's flexibility to adjust the rules in response to investment reactions would be preserved.

Title II Could Boomerang on Tech Companies

Title II was included in the original Telecommunications Act of 1934 to address potential problems created by having one company, the "old" AT&T, being the monopoly provider of "telecommunications services," which at the time and for much of the rest of the century meant services provided by the "public switched telephone network." Title II authorized the FCC to regulate the price of telephone services provided across state lines or long-distance calls, while individual states regulated prices of "local" calls within states. Later, after the old AT&T was split up following years of antitrust litigation, and as some competition developed in telephone services, the FCC used Title II, as amended by the Telecommunications Act of 1996, to prohibit the pieces of the old AT&T (the RBOCs) from discriminating against companies wanting access to the network, while overseeing the systems that were developed for payment of traffic origination and termination.

In short, Title II was designed for the bygone world of monopoly-provided telephone service. It was never intended, as advocates of extending Title II to the Internet now urge, to apply to services that are not characterized by monopoly, such as Internet access.

We do not see how, from an economic perspective, it can be appropriate to apply Title II monopoly-style regulation to ISPs, where there are at least two providers of access (wireline and wireless) in virtually all of the United States and at least two providers of wireline access (cable and telephone) in over **90** percent of the United States (when broadband is defined as 6 Mbps down or faster).¹⁰ Of course, it may be possible, as a legal matter, that if the FCC nonetheless decides to take this step, the same Court that decided *Verizon* would not stop the agency from doing so, having essentially invited this result in that opinion. This outcome is not a slam dunk, however, because it is unclear how all of the judges of the D.C. Circuit, sitting *en banc*, or even the Supreme Court might rule on the matter, if given the chance. Once unleashed on the Internet, Title II could be used by future Commissions to regulate other Internet services, including services not offered by ISPs.

More specifically, application of Title II to Internet access could lay the foundation for imposing Title II regulation *on some parties within the tech industry* as well, an outcome that the firms operating at the edge of the network might not have expected but they should begin to worry about if they have not. This prospect also illustrates that the long-run interests of public interest and consumer advocates, on the one hand, and certain tech companies, on the other, are not as aligned as some might think.

Reclassifying Internet access as a "telecommunications service" under Title II, as supplemented by the provisions of the Telecommunications Act of 1996, opens up the possibility that other tech services meet the same test. The clearest example would be Google's ultra-fast broadband service, Google Fiber, which the company is gradually rolling out. But it does not stop there. There is a very slippery slope from subjecting ISPs as common carriers to including other forms of Internet transmissions, because they arguably use "telecommunications services," the legal hook in Title II for its application.

For example, why not then include within the ambit of a telecommunications service the linkage to an advertiser's website that Google or Microsoft provide for users of their search engines? By clicking on links, the search engine uses the Internet backbone; if Internet access is a "telecommunications service," because it provides "transmissions," then so, too, are the search engines. The same logic potentially applies to Amazon's Kindle book reader device and service, because its owners are able to download books from Amazon, but only because they are connected to a wireless provider of Internet access in the process. Indeed, what would stop the FCC from classifying as Title II common carriers *all* device makers that have a connection to an ISP?

In theory, the FCC could decline to take any one of all of these steps—for now. But what happens down the road if public interest and/or consumer advocates decide they want the FCC to impose non-discrimination requirements on any or all of these tech providers? Google, for example, was investigated for several years by the FTC for allegedly discriminating against certain websites in its search results. The FTC pursued the investigation under its broad mandate under Section 5 of the Federal Trade Commission Act to prevent deceptive practices, but ultimately decided against bringing a case (although the competition authorities in the European Union had different ideas, ultimately forcing a settlement with Google which is still being contested).

If Google's search activities, or those of any of the companies just mentioned, were subjected to Title II, then any of them could face discrimination complaints in the future under a different and more specific legal provision than the FTC Act, either from competitors or the public interest/consumer advocacy communities. Even if the Commission did not extend Title II to these activities, the same groups could petition the agency, or seek a ruling from the courts, that it must do so on the ground that if transmitting packets across the Internet is a telecommunications service, then so are these additional activities.

Sound far-fetched? Maybe to some, but we have been around Washington long enough to know that laws or regulations implemented for one purpose are often used at a different time to justify extensions into other realms. The best example is the open-ended definition of pollution in Section 111(d) the Clean Air Act, written over 40 years ago, that is now being used by the Environmental Protection Agency (EPA) to regulate greenhouse gases (after the EPA in 2009 used that provision to define carbon dioxide as a pollutant). Those in the tech community, and within the FCC itself, might want to bear this history in mind: laws or regulations are not simply static words on paper having only one meaning for all time.

As noted above, Title II proponents are not sensitive to the possibility that, once reclassified, the agency could impose other common-carriage obligations on ISPs—for example, regulating broadband access prices—in a way that undermines their incentive to invest. Common-carriage proponents are hazy when it comes to how priority delivery would be prohibited under Title II. One potential approach is to require ISPs to file tariffs for offerings aimed at content providers. Tariffs relating to quality of service could be regulated to a zero rate. But once this process is initiated, it is not clear how other offerings, including those aimed at end users, could be quarantined from the tariffing process.

Case-by-Case Adjudication of Internet Discrimination Is the Way To Go

So what should the FCC do about net neutrality? In 2013, we co-authored a Brookings book, *The Need for Speed*, which outlined one answer. Because much of the impetus for net neutrality arose out of concern that ISPs would discriminate in favor of their own content (think online video), we proposed the FCC implement the same case-by-case process to adjudicate discrimination complaints it has established for cable companies to broadband providers.

In April, FCC Chairman Wheeler floated essentially the same idea as part of his initial reaction to the *Verizon* decision, discussed earlier. Net neutrality advocates claimed that his proposal did not go far enough—specifically did not embrace Title II regulation for Internet access—and sought to kill that compromise. Yet this case-by-case approach is precisely what the *Verizon* majority also said would pass legal muster under Section 706 of the Telecommunications Act without going all the way to a Title II reclassification. This is also the least intrusive of all the options for addressing what is now a potential, not a real, problem. As for paid prioritization, Title II reclassification may not prohibit it: Even if the FCC agrees to impose non-discrimination requirements and other forms of common carrier regulation on ISPs, Title II reclassification would not necessarily ban paid prioritization. As former enforcement director at the FTC, David Balto, has pointed out, the title only prohibits "unjust and unreasonable" differences in services. Carriers regulated under Title II still "may offer different pricing (including volume and term discounts) ... so long as they are 'generally available to similarly situated customers." In plain English, all this means that if some websites, like Netflix, want "faster lanes" on broadband networks, the providers of those networks can charge extra for that service even under Title II, so long as they stand ready to offer the same service to all similarly situated comers.

Two major concerns have been raised about the development of paid prioritization under a case-by-case approach. We address each in turn.

What Will Be the New Default Speed?

There does not appear to be much demand among edge providers for priority delivery *within* an ISP's network. That some edge providers, such as Netflix and Apple, have built their own content delivery network and contracted with ISPs for interconnection directly—that is, for an onramp on the *boundary* of the ISP's network—does not constitute contradictory evidence. In our view, priority offerings would be so rare that building special capacity for the handful of potential users would not undermine the speeds for general traffic. Thus, an edge provider's refusal to pay for priority would mean that its speeds would be unfazed relative to the status quo.

Some edge providers fear that the default speeds would necessarily be reduced under a pay-for-priority regime. For example, Kickstarter founder Yancey Strickler articulated this concern in a recent *Washington Post* editorial:¹¹

Once a fast lane exists, it will become the de facto standard on the Web. Sites unwilling or unable to pay up will be buffered to death: unloadable, unwatchable and left out in the cold. It won't be enough anymore to have a great idea and to execute it well. New entrepreneurs will have to pay their ISP tax, too. . . . This proposed system would incentivize entrepreneurs to divert resources from their customers and staff and into paid deals with ISPs.

We believe such fears are based on the unfounded supposition that providing any priority delivery must come at the expense of existing capacity. But for the same reason that priority delivery by FedEx does not slow down its standard delivery, priority delivery should not alter the default delivery speeds on an ISP's network. Indeed, even private toll roads do not slow down the speeds of public highways. And if the overwhelming majority of edge providers decline the priority offer, as we suspect will happen, then few if any will be disadvantaged vis-à-vis their closest rivals. Finally, if an ISP were to degrade its default speeds in conjunction with the introduction of a priority offering, as feared by Kickstarter, we suspect the FCC would move quickly to squash such conduct under *any* regime, including our light-touch approach: At that point, the hypothetical offering can no longer be characterized as priority delivery; it is closer to blackmail. Rather than fixating on the prospect of "fast lanes," which exudes a covet-thy-neighbor ethic, net neutrality supporters should be more concerned about the development of "slow lanes," which properly focuses on *absolute* (and not *relative*) utility. And slow lanes can be policed via case-by-case enforcement.

Will Disputes Be Too Hard to Enforce?

Enforcement of any case-by-case regime is laborious: it involves discovery and sometimes expert testimony. Decisions by administrative judges can be appealed to the full Commission, and even those decisions can be appealed to the D.C. Circuit. In comments that received significant press attention, Major League Baseball argued that "As the nation's largest edge provider of live event video, we fail to see how the proposed regulatory scheme could provide the type of timely enforcement that would be needed to adequately protect against such harms."¹²

The best predictor of the FCC's ability to adjudicate complaints is to look at the agency's performance in the video industry. There, the FCC has been called upon to adjudicate carriage disputes from independent cable networks, including NFL Network, Tennis Channel, MASN, WealthTV, and Game Show Network. In each case, after its Media Bureau deemed the complaint to be meritorious (assuming the claims were true), the FCC assigned the matter to an administrative law judge, who expeditiously conducted a hearing. Two cases settled (NFL Network and MASN), one case was ruled in favor of the cable operators (WealthTV), and another was ruled in favor of the complainant (Tennis Channel).

The timing issue, as we see it, is the possibility for the losing party to appeal the case to the full Commission and/or the D.C. Circuit. A simple way to streamline the process, however, is for the ALJ's decision to be made binding during the appeal. This would bring faster relief to the complaining party (when it prevailed), and might encourage more settlements. Concerns over timeliness, while important, can be addressed via process improvements, and are secondary to getting the first-order problems straightened out.

Conclusion

For the foregoing reasons, we think the FCC should eschew the heavy-handed approach of Title II regulation, and lean instead on its Section 706 authority to regulate potential abuses by ISPs on a case-by-case basis. Investment across both edge and content providers will be greater compared to Title II, and the FCC can avoid any unintended consequences such as creeping regulation that encompasses content providers or other ISP services.

Endnotes

- ¹ FCC, "Protecting and Promoting the Open Internet", Notice of Proposed Rulemaking,
- ² Nancy Scola, "Five Myths About Net Neutrality", The Washington Post, June 12, 2014, http://wapo.st/1hRq8cD.
- ³ Thomas Hazlett, Joshua D. Wright, "Micromanaging the Web Would Be a Macro Mistake", *Wall Street Journal*, July 13, 2014, <u>http://online.wsj.com/articles/thomas-w-hazlett-and-joshua-d-wright-micromanaging-the-web-would-be-a-macro-mistake-1405291774.</u>
- ⁴ Free Press, Public Comments Submitted to the FCC, July 17, 2014, <u>http://www.freepress.net/sites/default/files/resources/Free_Press_14-28_Comments_7-18-2014.pdf.</u>
- ⁵ Robert W. Crandall, Allan T. Ingraham, Hal J. Singer, "Do Unbundling Policies Discourage CLEC Facilities-Based Investment", *The B.E. Journals in Economic Analysis & Policy*, April 29, 2004, http://www.brookings.edu/c/media/research/files/articles/2004/4/business.cran-

http://www.brookings.edu/~/media/research/files/articles/2004/4/business crandall/20040429.pdf.

- ⁶ Scott Wallsten, "Broadband Penetration: An Empricical Analysis of State and Federal Policies", AEI-Brookings Center for Regulatory Studies, June 2005, <u>http://heartland.org/sites/all/modules/custom/heartland_migration/files/pdfs/17468.</u> <u>pdf.</u>
- 7 Leslie M. Marx, "Commissioner Pai's Principles", July 31, 2014, http://sites.duke.edu/marx/2012/07/31/pai-principles/.
- ⁸ Robert C. Atkinson, Ivy E. Schultz, "Broadband in Ameirca: Where It Is and Where It Is Going", Columbia Institute for Tele-Information, November 11, 2009, http://www.broadband.gov/docs/Broadband in America.pdf.
- USTelecom, "Broadband Investment", <u>http://www.ustelecom.org/broadband-industry/broadband-industry-stats/investment.</u>
- ¹⁰ FCC, "Internet Access Serivces: Status as of June 30, 2013", Industry Analysis and Technology Division, Wireline Competition Bureau, June 2014, https://apps.fcc.gov/edocs_public/attachmatch/DOC-327829A1.pdf.
- ¹¹ Yancey Strickler, FCC's 'Fast Lane' Internet Plan Threatens Free Exchange of Ideas, *The Washington Post*, <u>http://www.washingtonpost.com/opinions/kickstarter-ceo-fccs-fast-lane-internet-plan-threatens-free-exchange-of-ideas/2014/07/04/a52ffd2a-fcbc-11e3-932c-0a55b81f48ce_story.html.
 </u>
- ¹² John Eggerton, "MLB Throws Bean Ball At FCC's 'Commercially Reasonable' Regime", Multichannel News, June 28, 2014, <u>http://www.multichannel.com/news/policy/mlb-throws-bean-ball-fccs-commercially-reasonable-regime/382766</u>.

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