

Testimony of
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on

“The Uncertain Future of the Internet”

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Introduction and Summary

Chairman Walden, Ranking Member Eshoo, and members of the Subcommittee, thank you for inviting me to share the views of the Information Technology and Innovation Foundation (ITIF) on the path forward to preserve and enhance the open and vibrant Internet. The Information Technology and Innovation Foundation (ITIF) is a non-partisan research and educational institute—a think tank—whose mission is to formulate and promote public policies to advance technological innovation and productivity internationally, in Washington, and in the states. Recognizing the vital role of technology in ensuring prosperity, ITIF focuses on innovation, productivity, and digital economy issues. We have long been involved in the open Internet debate, with a goal of articulating appropriate methods to promote a dynamic Internet ecosystem and I very much appreciate the opportunity to comment on those methods here today.

Early in the debate, which has now been ongoing for over a decade, we recommended a “third way” approach to what should really be described as network policy, rather than the loaded and biased term “network neutrality.”¹ Any network policy for the 21st century recognizes that the Internet is not inherently “neutral” and that while some forms of traffic differentiation can be anti-consumer or stifle innovation, others forms can enable innovative new services. This approach also recognizes the need for innovation and investment not just at “the edge” among content and application developers, but also within the network itself. A balanced set of regulations and ongoing oversight is appropriate to both allow innovation and

¹ Robert D. Atkinson and Philip J. Weiser, “A ‘Third Way’ on Network Neutrality” May, 2006, <http://www.itif.org/files/netneutrality.pdf>. Not to be confused with Chairman Julius Genachowski’s “Third Way” proposal.

consumer-welfare enhancing network prioritization while at the same time policing commercially unreasonable and anti-competitive conduct.

The time has come to clarify the Federal Communications Commission's (FCC) jurisdiction and give it the tools of precision it needs to ensure the Internet—at both the core and the edge—continues to be the fount of innovation and creativity we enjoy today. Unfortunately, the FCC is poised to redirect its broadest and most powerful provisions, Title II, to regulate broadband. Where we need a scalpel, the FCC is picking up a sledgehammer.

Not only is Title II overly broad, it also introduces significant uncertainty into the system. It is unclear how courts will view this unprecedented move, it is unclear how future Commissions will treat this authority, and it is unclear how these changes will affect innovation in the throughout the entire network. Reclassification risks untold unintended consequences, including higher network costs, reduced network performance, and reduced network investment.

Happily, there is broad agreement on the high-level principles of net neutrality, and Congress can easily bring closure to this debate. A legislative solution should first and foremost clarify the FCC's jurisdiction and offer it an alternative to Title II. This alone will foreclose years of legal and regulatory uncertainty. Furthermore, legislation should recognize the need for balance in providing the tools needed to ensure the Internet continues to thrive and evolve. Our goal ten years from now should be a better, smarter network than the one we have today—one that supports a rich diversity of applications, not one that delivers all Internet traffic with exactly the same performance.

Uncertainty Under Title II

There are a host of potential problems with regulating the Internet under Title II of the Communications Act, but chief among these is the uncertainty that comes with this approach. Indeed, the title of this hearing today, “The Uncertain Future of the Internet,” is apt, for the FCC is about to put several important industries, including firms on both sides of the network, under a cloud of uncertainty, with clarity unlikely for years.

To be sure, the pending Title II approach appears designed to give edge-providers more certainty—a worthy goal. It is important for innovators to know that under no circumstances will they ever have to pay extra for best-efforts Internet access (although they should be able to voluntarily pay for better than best-efforts access or other types of benefits, such as zero-rating plans for customers of their data). But as described below, this is likely to provide only short-term certainty, as there is a real risk that this FCC action will be overturned or significantly modified within the next few years. And of course, Title II, in contrast to legislation, creates considerable uncertainty for network providers.

First, there is the legal uncertainty of Title II classification itself. Several organizations and companies have indicated they will challenge the preliminary step of classifying broadband as a telecommunication service under Title II. In order to survive these challenges, the FCC must, among other things, support a factual finding that broadband no longer “offer[s] the capability for generating, acquiring, storing, [or] transforming . . . information.”² While the statute is perhaps not the model of clarity, broadband seems like the quintessential technology to offer the capability for acquiring information. My point is not that broadband is an

² Definition of “information service,” 47 U.S.C § 153 (24).

information service, although it seems to me that it is, but rather that there is legitimate uncertainty as to how such a finding would survive a challenge.

On top of this is the political uncertainty of the controversial Title II. This, frankly, could shift regulations in either direction: a future Republican administration would likely appoint an FCC chair who would work to undue the classification or at minimum to forbear from additional sections, while a future Democratic administration might appoint an even more interventionist chair who seeks to expand into rate regulation, local loop unbundling, mandatory deployment requirements, or other investment-harming measures. The reality is that under an FCC-initiated Title II regime, the scope of regulations placed on one of the most vibrant sectors of our economy becomes unpredictable from one administration to the next. This level of political uncertainty translates into future uncertainty for both edge and core providers. And while no legislation is set in stone—a future Congress can always pass new laws—legislation passed by this Congress addressing net neutrality will provide vastly more certainty for the Internet ecosystem in than tomorrow’s FCC vote.

Second, there is significant uncertainty around the forbearance process. Chairman Wheeler has attempted to mollify his critics who assert that a Title II approach will impose significant costs on carriers by claiming that the Commission will simply forebear from the most onerous sets of Title II rules. Forbearance is the process by which the FCC will attempt to not apply those sections of the law that do not apply to broadband networks in the 21st century. Beyond providing explicit recognition that Title II is a kludge of a solution not well suited to the task, the commitment to forbearance brings its own significant risks. The FCC has never attempted this sort of national, industry-wide forbearance, and there is little precedent to

follow. It may be difficult for the Commission to forbear from all portions of Title II, especially those explicitly required by statute like Universal Service contributions. The forbearance process also opens up the door to pressure from a wide variety of interests attempting to craft regulations in their favor. This rent seeking has already begun in earnest, and, with so much of what was settled law now up for debate, will continue for years to come.

One set of groups that will certainly continue to pressure for application of the more onerous utility provisions of Title II are those very advocacy groups who pressured the FCC to invoke Title II in the first place. Indeed, there is good reason to believe advocacy groups such as Free Press and Public Knowledge intentionally coopted the issue of net neutrality into a stalking horse for far broader changes in our nation's heretofore successful Internet policies. Claims to the contrary by those who have long pushed for much more sweeping changes than the formalization of net neutrality norms should not be taken at face value. Indeed, these "public interest" groups have already asserted that Title II can and should be used to impose much more stringent conditions on broadband providers than just complying with net neutrality rules.³ For these groups, it's net neutrality now, broad-based telephone era regulations next (and for many of them, public ownership of networks after that).⁴

³ For example, Public Knowledge has asserted that Title II can and should be used to require broadband providers, including new entrants employing innovative business models to deploy fiber, to serve all areas of community at once. See Meredith Whipple, Public Knowledge, "PK Experts Answer Your Burning Questions on Net Neutrality and Title II" (Feb. 13, 2015) available at <https://www.publicknowledge.org/news-blog/blogs/pk-experts-answer-your-burning-questions>.

⁴ See, e.g., Candace Clement & Matt Wood, "Why Title II Reclassification for Net Neutrality Is the Biggest Deal Ever," Free Press (Feb. 4, 2015), available at <http://www.freepress.net/blog/2015/02/04/why-title-ii-reclassification-net-neutrality-biggest-deal-ever> (explaining the broad authority beyond net neutrality that comes with Title II, and that "[w]ith Title II we have the legal authority we need to win the battles that are coming around the bend.").

A Balanced Policy for Internet Innovation

What is fundamentally problematic in the current net neutrality debate, especially as presented by most advocates of the currently proposed strong net neutrality provisions is the utter lack of balance. For them there is no balance between edge and core, only the needs of edge providers are considered. There is no balance with regard to network operations: indeed, only strict neutrality is proposed, not a regime that encourages pro-consumer network differentiation while banning or severely limiting the risk of anti-consumer discrimination. And finally, there is no balance with respect to the means to accomplish these first two goals: advocates are willing to employ the sledge-hammer of Title II regardless of the collateral damage it may do to network costs and innovation.

To begin with, any network policy rules should balance innovation in the core of the network as well as innovation at the edge. Net neutrality advocates appear to only appreciate innovation at the edge, and are willing to privilege it even if it means limitations on investment and innovation elsewhere. This is in part a reflection of not only their (mistaken) belief in the “dumb-pipe” premise (the idea that networks should have no intelligence built into them) but their almost religious-like assertion that such pipes always have been, always are, and always should be dumb. As ITIF has demonstrated numerous times, such a reading of the Internet’s past, present and future is fundamentally misleading. The Internet is not like the old telephony networks where there was only one application (circuit-switched voice); rather it is a world

where multiple, different applications, each with different network needs, all use the same network.⁵

The light-touch regulatory path that our nation has followed since the Clinton administration has seen tremendous investment and innovation in our communications networks. Continued growth in capacity as well as improvements in stability, reliability, and speed all depend on these investments. Indeed, it is the “virtuous cycle” that drives growth in this area; the two sides of the network derive value from one another. Rules that overwhelmingly favor “protection” of the edge will ultimately undermine overall progress in the core network if they deter investment and innovation in more capable networks themselves.

Second, we need a balance between net neutrality on the one hand and unfair net discrimination on the other. Because not all Internet traffic has the same characteristics, prioritization or other forms of traffic differentiation can enable innovation in new real-time communication and should be supported, not prohibited. Many of the underlying assumptions behind comments arguing for an inflexible ban on any discrimination whatsoever are mistaken; there are undoubtedly forms of differentiation amongst traffic flows and broadband applications that would be beneficial in overcoming inherent architectural biases built into the Internet.⁶

⁵ See Richard Bennett, “Designed for Change: End-to-End Arguments, Internet Innovation, and the Net Neutrality Debate, ITIF (Sept, 2009), available at <http://www.itif.org/publications/designed-change-end-end-arguments-internet-innovation-and-net-neutrality-debate>.

⁶ See, e.g., Jeff Hect, “Net Neutrality’s Technical Troubles,” IEEE Spectrum (Feb., 12, 2015) available at <http://spectrum.ieee.org/telecom/internet/net-neutralities-technical-troubles/> (explaining how “the debate has centered on policy, law, and finance, as if the network itself were a given—it is not.”).

But as ITIF has long argued and continues to strongly assert, just because some differentiation can be pro-innovation, pro-competition, and pro-consumer, it does not mean that all is. Clearly, there is no place for blocking of legal content in any kind of network policy regime. Nor is there any place for requirements placed by network providers on edge providers for extra payments to obtain best-efforts Internet service (e.g., mandatory toll roads). But just as parts of the Washington, DC beltway allow some drivers to pay more to drive in express lanes (but do not require everyone to do so), so should any network policy be open to possibility of the “next Google” voluntarily choosing to pay for prioritized service to ensure their new application can function even better. Although most applications do not need any kind of prioritization to work effectively, some certainly do.

It is key that any legislation recognizes that the Internet now provides services to many different types of applications. Again, Title II regulations were designed for a network of one application (circuit-switched telephones). A regulatory regime should instead encourage continued growth in Internet applications of all types. It is important that we encourage investment in one interconnected network of networks that supports numerous heterogeneous applications, rather than balkanizing new services into separate, private networks. Rules that go too far in forcing all bits to be treated “equal” would be tantamount to putting all forms of transportation, from bullet trains to bicycles, onto one system for the sake of “fairness.”

Many net neutrality advocates argue for “the strongest possible rules” in hopes of a “level playing field.” This is misguided. First of all, the Internet is not a “level” playing field today; some companies sink large amounts of capital into extensive content delivery networks, for example. Large companies will always have advantages, whether it is economies of scale or

a larger marketing budget. What we want is not a totally level playing field, but a playing field not tilted one way or the other by government or by actions of network providers. But in contrast to the net neutrality supporters, this level playing field depends on the ability of all market players, including new entrants to be able to buy the kind of Internet access and transport that best serves the needs of their company, not by locking them all into one model. If we aren't careful, overly-restrictive regulation will protect a "level playing field" for only delivery of email and static webpages, and severely hinder the ability for bandwidth intensive, real-time applications to develop.

Furthermore, because wired networks are fundamentally different than wireless networks, not the least of which is because they are much more capacity constrained, it means that any network policy regime has to be flexible enough to enable robust wireless innovation with the provision of high-quality services.

Finally, we need balance with regard to network policy tools and regulatory framework. Because so many net neutrality advocates dismiss the importance of network innovation, and indeed view most network operators with a certain level of disdain, there is, in their minds, simply no reason to try to seek balance in the regulatory framework for network policy. If, as is certainly possible if Title II is applied to broadband, a regulatory framework provides a high level of certainty, albeit temporary, regarding limiting harms from network differentiation, but imposes a significant amount of collateral damage on future network progress, that is a price more than worth paying for most advocates. But the FCC and Congress should be more ambitious in their goals, seeking to find the scalpel that cuts out the diseased tissue while preserving the healthy. In other words, while some regulations are needed to give the FCC the

tools to prevent unreasonable conduct, ITIF rejects the premise that the only path is Title II and enacting “the strongest possible rules.” Title II, which some point to as the “cure” for net neutrality would almost certainly be worse than the disease, which to date has been quite limited. Indeed, there have only been a handful of examples of even controversial conduct, all of which were resolved through informal processes.

ITIF encourages a balanced, flexible set of guidelines that delineate the types of discrimination that are reasonable and supportive of edge and core innovation from those that are harmful. While we believe the Commission has existing authority for such rules under section 706, a separate grant of authority from Congress could give the FCC the scalpel it needs, rather than the bludgeon that is Title II. And of course, the provision of such a regulatory scalpel by Congress (e.g., network policy legislation) would do wonders to settle surrounding debates and clear what would otherwise be years of uncertainty.

Thankfully Congress can put to rest the long debate over the scope of FCC authority to enact 21st century network policy rules. There is undoubtedly room for compromise on the broad strokes of net neutrality legislation. Everyone is in agreement that we do not want a public Internet where access providers block legal applications or favor their own content over others. An independent grant of authority as an alternative to Title II would do wonders to clarify the issue.

The released Congressional discussion draft is an important start to finding this compromise which, to be effective, will need to be bipartisan. It is encouraging to see the draft bill continue the light touch approach, treating broadband as an information service. The discussion draft also does well in formalizing the widely agreed-upon principles of net

neutrality. Rules against blocking of lawful content, applications, or baseless throttling of lawful traffic, although likely unnecessary due to strong norms against such practices, are unobjectionable. A transparency requirement is likewise generally acknowledged as appropriate.

It is also encouraging to see the discussion draft allow for “reasonable network management.” Independent bodies of engineers, such as the Broadband Internet Technical Advisory Group (BITAG), recognize legitimate technical reasons for actions that may, at first glance, to be unreasonable, so it is important to maintain flexibility in this provision as the legislation moves forward.

It is discouraging, however, that the draft bill would outright ban paid prioritization. As explained above, there are certain types of applications that would only be enabled through prioritization. This is a narrow class of real-time applications. In fact, this class is so narrow that there is likely not currently much of a market for prioritization. Paid prioritization should be thought of as allowing for future growth in types of data-intensive applications particularly sensitive to packet loss or delay—not “toll booths” to extract fees. Sure, there is potential for abuse of such arrangements, and regulatory oversight is appropriate. But to ban these services from the public Internet goes too far.

Conclusion

Finding appropriate policies to guide the protection and promotion of the open Internet surely offers opportunity for a bipartisan success story. There is much that is agreed upon and the downside of inaction is potentially severe. A legislative solution that allows for the appropriate balance would do a world of good.

Thank you again for this opportunity to appear today.