

Three Principles to Guide New Telecommunications Legislation

January 2014

Scott Wallsten

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January 30, 2014

The so-called “convergence” of information and communications technologies and the resulting difficulties of fitting services into predefined sectors such as wireline, wireless, media, and so on, are helping to drive a push towards major revisions of the Telecommunications Act of 1996. The same motivation was partly responsible for the 1996 Act, as well. As Eli Noam (2000) noted, “the Telecommunications Act of 1996 was supposed to accelerate convergence by allowing previously separated industries to compete with each other.”¹ Similarly, Joseph Gattuso of the NTIA explained that the 1996 Act “reflects a new thinking that service providers should not be limited by artificial and now antique regulatory categories, but should be permitted to compete with each other in a robust marketplace that contains many diverse participants.”²

Promoting competition, entry, and experimentation with innovative business models should remain the goal of new legislation. Thomas Krattenmaker’s comment about the 1996 Act serves as useful guidance for today’s reforms: “...to the extent that the new Act destroys entry barriers, I would judge it a success while, to the extent that it creates or strengthens them, I would judge it a failure.”³

This goal is most likely to be accomplished by adopting a three-pronged framework. First, the Federal Communications Commission should be required to adopt a well-defined consumer welfare standard instead of the current, vague, public interest standard and to use competition analysis to make decisions. Second, the agency should apply cost-effectiveness analysis to rules that are not inherently economic in nature, such as social goals like connecting schools and libraries to some minimum broadband standard. Third, new legislation should continue aggressively encouraging spectrum markets both by moving spectrum to market and by making its use as flexible as possible. Reform legislation should also ensure the agency has sufficient accountability and the technical expertise to apply the framework described above.

Consumer Welfare and Competition Analysis

The FCC’s current “public interest” standard is too vague for coherent and consistent policy decisions.⁴ Instead, analysis using a consumer welfare standard would be better-defined and

* Vice President for Research and Senior Fellow, Technology Policy Institute, and Senior Fellow, Georgetown Center for Business and Public Policy.

¹ Eli Noam, “Four Convergences and a Trade Funeral,” in *Convergence in Communications and Beyond*, ed. Erik Bohlin, A. Lundgren, and B. Thorngren, 2000, 405–410, <http://www.citi.columbia.edu/elinoam/articles/4CONV1.htm>.

² Joseph L. Gattuso, “The United States Telecommunications Act of 1996,” *Global Communications Interactive* (1998), <http://www.ntia.doc.gov/legacy/opadhome/overview.htm>.

³ Thomas Krattenmaker, “The Telecommunications Act of 1996,” *Federal Communications Law Journal* 49 (November 1, 1996): 49.

⁴ As early as 1950 Nobel Laureate Kenneth Arrow explained that there is no single, best method of aggregating and ordering society’s preferences. Arrow’s so-called impossibility theorem implies that the public interest cannot be

could take advantage of the voluminous academic literature and real-world experience of agencies like the Department of Justice and Federal Trade Commission in applying this approach to policy.

At least one advantage of adopting a consumer welfare standard is that it enables the FCC to undertake more serious competition analysis. Such analyses should generally be in the domain of the Department of Justice and the Federal Trade Commission, who are largely responsible for antitrust policy across the rest of the economy. But to the extent that such analysis requires expertise available only in a sector-specific regulator, the FCC decisions should be guided by competition analysis.

Decisions made by competition analysis have at least two advantages. First, it becomes possible to construct a framework that allows the Commission to make coherent and consistent decisions. Such a framework might be modeled after the DOJ/FTC Merger Guidelines.⁵ Just as with the DOJ and FTC, the framework itself can be updated as our understanding of competition develops. Second, such analysis explicitly makes it possible to think about and quantify how different technologies, products, and services compete with each other, reducing the “silo” problem.

Cost-Effectiveness Analysis for Rules Aimed at Social Objectives

Some social objectives may not pass strict cost-benefit tests if the benefits are not easily quantifiable. Society may decide, for example, to subsidize broadband access for the poor, provide every hospital with some minimum level of connectivity, or ensure that every road is covered by at least 3G wireless technologies even if the quantifiable benefits do not justify the costs. Requiring cost effectiveness analysis would yield at least two important benefits. First, it makes the costs explicit, allowing policymakers to decide if the social objective truly is worth the cost or if those resources might be better spent elsewhere. Second, it can be used to compare different, less costly, methods of achieving the same goals so as to achieve any given benefit at minimum cost.

Flexible Use Spectrum

The FCC deserves praise for its pioneering use of auctions, which has clearly helped enable the valuable use of wireless products and services.⁶ The FCC should continue working to make as much spectrum as possible available, and Congress could aid the process by continuing to work on schemes that incentivize federal agencies into relinquishing their spectrum for higher-value uses.

Auctions, however, are only part of the story. They create a market mechanism for finding an efficient initial allocation, but do little to ensure that spectrum remains at its highest-value use.

defined definitively. Kenneth J. Arrow, “A Difficulty in the Concept of Social Welfare,” *Journal of Political Economy* 58, no. 4 (August 1950): 328–346.

⁵ I first heard this idea from John Mayo of Georgetown University.

⁶ It’s just a shame it took almost 40 years from when Ronald Coase first proposed the idea for it to actually happen. R. H. Coase, “The Federal Communications Commission,” *Journal of Law and Economics* 2 (October 1959): 1–40.

Legislation should ensure that new spectrum licenses can be used and traded flexibly, subject to interference concerns. An active secondary market in licenses already exists,⁷ and the more spectrum there is that can be traded this way the better these markets will function.

Enable the FCC but Make it More Accountable

New legislation should also reconsider some aspects of the FCC's composition and authority to enable the above framework. It is generally believed that to be effective a regulator must meet several criteria. In particular, it must be independent from short-term political pressures, accountable, capable of doing its job, transparent, and limited in its authority.⁸ The FCC falls short in some of these categories, especially if shaped along the lines described above.

Perhaps the most important shortcoming is that the FCC has little accountability. In principle, it is accountable to Congress and to the courts. Currently, however, Congress, has limited oversight powers short of passing new legislation. And while the FCC does often find itself in court, any entity with repeated interactions with the regulator will hesitate before challenging a rule for fear of reprisal. Also, while the General Accountability Office and Congressional Research Service both evaluate FCC rules, those reports seem to have little influence.⁹

Additionally, while the FCC has a dedicated and talented staff, its current mix of talents may not be best suited for an agency whose primary responsibilities should include competition analysis of highly technical industries. Marcus and Schneir (2010) conducted a survey of regulatory agencies, which illustrated the mix of professions among several regulators.¹⁰ The survey revealed that the FCC has far more lawyers as a share of its workforce than any of the other regulators surveyed (Figure 1). The FCC's senior managers were almost entirely lawyers (Figure 2). Nobody knows what the right mix of skills is, of course, but these numbers suggest that technical and economic analysis are not currently among the FCC's highest priorities.

Conclusion

In sum, a new telecommunications act should focus on encouraging entry, competition, and market experimentation. A three-part framework would help further these goals. First, the FCC should adopt a consumer welfare standard and use competition analysis to make decisions. Second, it should apply cost-effectiveness analysis to rules that are not inherently economic in

⁷ John Mayo and Scott Wallsten, "Enabling Wireless Communications," *Information Economics and Policy* 22, no. 1 (March 2010): 61–72; John W. Mayo and Scott Wallsten, "Secondary Spectrum Markets as Complements to Incentive Auctions," Georgetown Center for Business and Public Policy Economic Policy Vignette, June 2011.

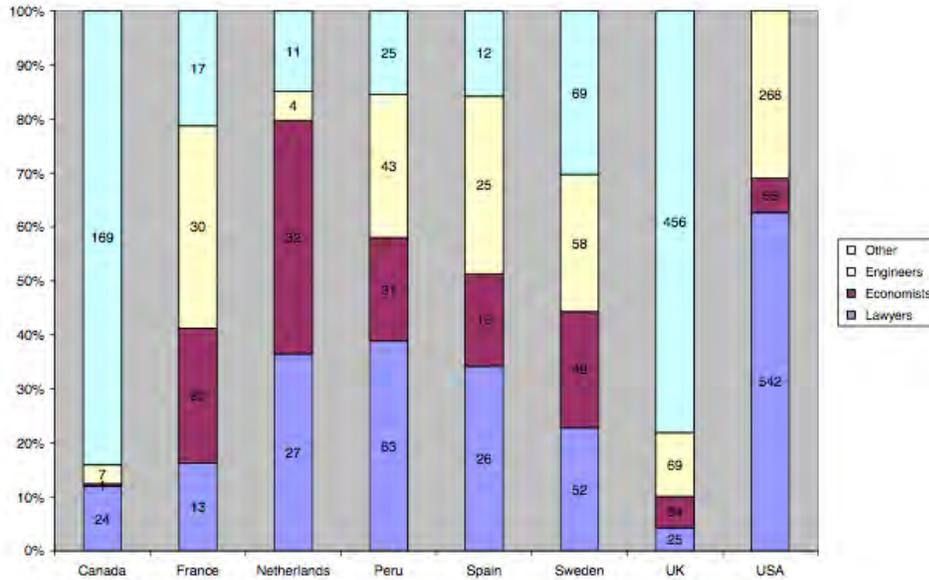
⁸ See, for example, Scott Wallsten et al., "New Tools for Studying Network Industry Reforms in Developing Countries: The Telecommunications and Electricity Regulation Database," *Review of Network Economics* 3, no. 3 (2004): 248–282.

⁹ See, for example, Government Accountability Office, *Digital Television Transition: Increased Federal Planning and Risk Management Could Further Facilitate the DTV Transition* (Washington, DC, 2007); Government Accountability Office, *FCC Needs to Improve Performance Management and Strengthen Oversight of the High-Cost Program*, June 2008, <http://www.gao.gov/new.items/d08633.pdf>; Government Accountability Office, *Telecommunications: FCC Has Reformed the High-Cost Program, but Oversight and Management Could Be Improved* (Washington, DC, July 2012).

¹⁰ Scott J. Marcus and Juan Rendon Schneir, *Drivers and Effects of the Size and Composition of Telecom Regulatory Agencies* (WIK-Consult GmbH, September 2010), <http://ssrn.com/abstract=1675705>.

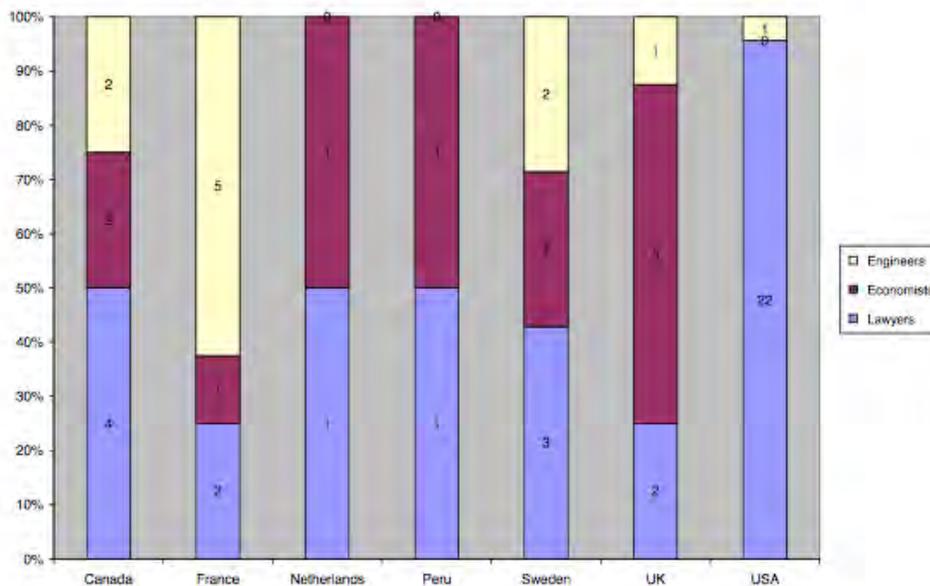
nature. Third, new legislation should continue to encourage spectrum markets by moving spectrum to market and by making its use as flexible as possible.

Figure 1: Distribution of Professions Among Professional Staff



Source: Marcus and Schneir (2010), Figure 4.¹¹

Figure 2: Distribution of Professions Among Senior Managers



Source: Marcus and Schneir (2010), Figure 6.¹²

Note: Excludes “other” category.

¹¹ Marcus and Schneir, *Drivers and Effects of the Size and Composition of Telecoms Regulatory Agencies*.

¹² Ibid.

These comments are submitted on behalf of TracFone Wireless, Inc. and are in response to the white paper issued by the House Committee on Energy and Commerce entitled “Modernizing the Communications Act.”

Any legislation to update the Communications Act should address certain anomalies in the grants of jurisdictional authority to federal and state governments. Historically, the Communications Act afforded the Federal Communications Commission exclusive jurisdiction over interstate communications by wire and radio, but reserved to the states jurisdiction over intrastate telecommunications services (including local telephone service which crossed state lines). That federal/state jurisdictional dichotomy was altered by the Telecommunications Act of 1996 which authorized the FCC to establish rules to open local (*i.e.*, intrastate) telecommunications services to competition.

One particularly problematic aspect of the federal/state jurisdictional delineations in the Act involves the authority to designate Eligible Telecommunications Carriers (“ETCs”) to participate in programs funded by the federal Universal Service Fund. The national policy of universal service is codified at Section 254 of the Communications Act. The act directs the FCC to promulgate rules and to establish programs to advance universal service. The FCC has done so through its Connect America fund (which replaced the FCC’s high cost support program), the Lifeline low-income support program, and the schools and libraries and rural health care programs. Section 254(f) of the Communications Act allows states to establish their own universal service support programs, provided that such rules are not inconsistent with the federal rules. To date, several states have established their own universal service programs. However, most states have not done so.

Despite the fact that the FCC is empowered to establish the Universal Service programs funded by the federal Universal Service Fund, Section 214(e)(2) of the Communications Act delegates to state utility commissions authority to designate ETCs. State commissions have this authority irrespective of whether those states have established their own state universal service programs as permitted by Section 254(f). As a result, telecommunications providers who offer Lifeline service supported by the federal fund are required to apply for ETC designation from state commissions.

TracFone is such a provider and has been designated as an ETC to provide Lifeline service in 40 states. As such, it has had to apply for ETC designation in many of those states and be subject to state program rules. Each state’s rules differ from those of other states and, in many cases, differ from the FCC’s rules. As a

result of these differences, companies like TracFone must implement different processes and procedures in order to enroll consumers in various states under the **federal** Lifeline program. For example, in some states, TracFone is required to obtain certain customer identifying information, including the last 4 digits of the customers' Social Security numbers; in other states, it is required by state regulators to obtain the customers' complete 9-digit Social Security numbers – for no other purpose than to enroll consumers in the federal program.

Moreover, in some states, state commissions have used their authority to designate ETCs under the federal Universal Service Fund program in order to achieve goals under state law – goals having nothing to do with universal service. For example, in Minnesota, the state public service commission has refused to allow TracFone to provide Lifeline service supported by the federal fund to low-income Minnesota households due entirely to a dispute which has arisen between TracFone and another Minnesota state agency – the Department of Public Safety – as to whether that state's 911 fee is applicable to providers of prepaid wireless service. Because of this ongoing dispute between TracFone and the Department of Public Service over the scope of that state's 911 fee law – a matter which is now the subject of litigation, the Public Service Commission continues to preclude Minnesota's neediest consumers from obtaining a federally-supported service.

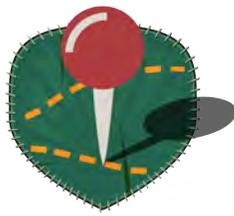
Numerous other examples of inconsistencies among various states' enrollment rules governing the federal Lifeline program could be provided. So too could other examples be provided of states using their Congressionally-granted ETC designation authority to prevent companies from exercising their rights to question the applicability of state laws unrelated to universal service. Any reform of the Communications Act should address and resolve this situation.

Respectfully submitted,



Mitchell F. Brecher
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The Honorable Fred Upton
Chairman
Committee on Energy and Commerce
United States House of Representatives
Washington, D.C. 20515

January 28, 2014

Dear Mr. Chairman:

I am submitting this letter in response to the Committee on Energy and Commerce's request for comments on updating the Communications Act of 1934 ("the Act"). Enclosed is an Op-Ed piece I recently composed for *The Huffington Post* regarding this issue. I applaud the Committee's efforts to modernize the Act because it regulates a critically important area of our nation's economy.

The Act governs a communications and technology sector that has drastically changed over the last decade as new technologies have emerged. Despite this, the Act was last modernized seventeen years ago when public use of the Internet was still fairly new. Applying the same laws from 1996 to our modern use of technology and networks is restricting innovation and entrepreneurs in a thriving period of growth for the technology industry, particularly those who are committed to social innovation. Updating the Act to promote competition will benefit consumers and aid social ventures like mine in solving the growing social problems, such as digital illiteracy in America.

A key problem with the Act is the way it divides regulatory conditions among outdated classifications. By differentiating policies on whether a company offers "telephone" or "cable" service, the Act has failed to address the emergence of modern technologies such as Voice over Internet Protocol (VoIP), which allows voice communication over the Internet. Modern technologies often blend elements from multiple classifications, and conflicting definitions do not provide clarity to Internet service providers (ISPs). Understanding how their services are regulated is vitally important to ISPs and must be clarified under the Act.

Competition to provide faster Internet service in turn empowers entrepreneurs to start companies and create jobs. The Progressive Policy Institute calculated that development of mobile applications has added 752,000 jobs to the American economy since Apple introduced the iTunes App Store. In addition to creating jobs, entrepreneurs can address important social issues. My company, TRAIL, has developed web and mobile platforms for the 60 million Americans who currently do not know how to use the Internet. These people are technologically disenfranchised, and it is critical for companies like mine to have a better grasp on the future of the regulatory landscape as it relates to the services that make our education and business model possible.

The significant growth and development in the technology sector is dependent on a robust market that provides effective and inexpensive Internet service. ISPs require clear definitions from the Act to understand the regulations they must comply with to grow their business. A bipartisan effort to modernize the Act is necessary to ensure the present digital age continues to endure for all Americans.

Clarity in a regulatory context such as this also provides a path to affordability for network connections and, in turn, economic and learning experiences for those who have yet to join us online. My company fundamentally believes that our nation's digital illiteracy problem is quickly becoming a global competition problem for our nation.

Sincerely,

Christina M. Gagnier
Chief Executive Officer
TRAIL, Inc.

Electronic Enclosure

January 27, 2014

HUFF
POST TECH

A Blueprint for Wheeler's FCC

Posted: 01/09/2014 10 34 am



ASSOCIATED PRESS

On Thursday, the new Federal Communications Chairman Tom Wheeler will make his first visit to California to speak at a town hall-style event in Oakland, on the heels of several FCC commissioners speaking at the Consumer Electronics Show, one of the tech industries yearly gatherings. In anticipation of that event, here are three items Wheeler should consider to help improve digital literacy and high-speed Internet access in California and throughout the United States.

First, the FCC Chairman's top priority should be to continue enabling competition throughout the "ecosystem" that makes up the Internet -- all the companies that build networks, create apps and offer services on the Internet. Competition is the engine that fuels Silicon Valley, and it has quickened the pace of innovation in California. While the rivalries between Silicon Valley giants like Twitter, Facebook, Microsoft, Google and Apple are well known, no less important is the rivalry among Internet providers who compete to give customers the best possible service in order to stay ahead of their counterparts. These providers offer the familiar services of voice, video, chat and data and use a variety of methods to do so -- over fiber-optic, cable, satellite and fixed and mobile wireless networks -- which, along with the Internet content companies, all compete to be our favored portal to the digital world.

While we famously know of Moore's Law and the rapid pace in which innovation revolutionizes tech, we also know that it is almost impossible for regulations to keep up. That is why purely a focus on regulations designed for past industries, such as the copper-based, monopoly-era telephone system, could do serious harm to the dynamism of Internet-based economy in California. The FCC should shift its focus under Wheeler to tackling issues that are more manageable and would result in immediate gains, such as digital literacy.

Second, while it may appear that everyone in Silicon Valley is online, seemingly almost 24/7, there are many who remain technologically disenfranchised in tech's own backyard. Tens of millions of Americans are living without the digital literacy skills they will need for the future. In what seems like basic skills to many of us, these "digitally illiterate" Americans cannot or do not know how to send email, search for jobs online, or video chat with friends and family.

Digital literacy efforts can give Americans the ability to navigate the Internet. My company, TRAIL, for example, has created an online application that teaches people these critical online skills. Schools are joining these types of efforts, supported by organizations like Code.org, to put more emphasis on STEM subjects such as computer programming and web development -- skills increasingly in demand in our high-tech economy.

To bridge the digital divide, we need to devote more resources toward improving digital literacy. A recent Pew Internet and American Life Project report found that the leading reason for why people do not use a broadband connect at home is that people saw the Internet as irrelevant in their daily lives. According to Pew, 34 percent find the Internet is just not relevant. This finding underscores that all stakeholders and community leaders should come together to strengthen digital literacy so that Americans can realize the full importance of the Internet today, as we all very much do here in California.

Finally, along with empowering Americans with digital literacy skills and encouraging them to get online, we can do more to build our nation's broadband infrastructure to the remaining places that do not have it. As more Americans go online, companies are investing heavily in this growing sector. The Progressive Policy Institute has found that six broadband companies invested over \$50 billion in 2013 alone to improve our country's networks, making them faster and more widespread. Fortifying these broadband resources boosts our economy and creates jobs.

Robust high-speed Internet helped jumpstart the app economy, which the Progressive Policy Institute has calculated as

supporting 750,000 jobs around the country. With more broadband at their disposal, innovators throughout the United States will be able to come up with ideas to take advantage of our increasing connectivity.

As we move into a new year, an election year, and a new era at the FCC, it is vital that we move our national broadband policy in the right direction. It is also critical that a national digital literacy policy be adopted, with an agenda that enables growth and innovation in California and nationwide.

Follow Christina Gagnier on Twitter: www.twitter.com/gagnier

tw telecom's Responses to Questions in "Modernizing the Communications"
January 31, 2014

1. The current Communications Act is structured around particular services. Does this structure work for the modern communications sector? If not, around what structures or principles should the titles of the Communications Act revolve?

The Communications Act contains a broad, flexible grant of jurisdiction to the FCC that, if properly interpreted and implemented, is more than sufficient to account for changes in technology and in the marketplace that occur over time. Specifically, Section One of the Act grants the Commission comprehensive subject matter jurisdiction over all communications by wire or radio. The specific terms of the Titles in the Act then set forth comprehensive directions from Congress as to how the Commission should exercise its subject matter jurisdiction.

While some of the directions from Congress to the Commission in the terms of the Communications Act refer to particular services, most of the key provisions of the Communications Act are service-neutral and technology-neutral. For example, most provisions in Title II apply to common carrier services or telecommunications services (the two are essentially the same). These categories encompass any and all pure transmission services, and they are technology-neutral. They can therefore be applied as needed as technology and market conditions evolve.

The treatment of telecommunications services in the statute illustrates the point. Telecommunications services are 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." Telecommunications, in turn, is defined as "transmission, between or among points specified by the user, of information of the user's choosing, without change in the form or content of the information as sent or received." Importantly, the term "transmission" in his definition is not limited to any type of technology: it encompasses analog, digital, time division multiplexing, packet-switched, IP, or any other technology that may be used to transmit information. Moreover, the phrase "information of the user's choosing" is not limited to voice or any other particular type of information. It encompasses voice, data, video, packets, and anything else someone wishes to transmit. It follows that these definitions provide the FCC with the flexibility to update its regulations as needed to account for changes in technology. Moreover, Section 10 of the Communications Act grants the FCC the authority to forbear from a statutory requirement applicable to a telecommunications service. This forbearance power combined with the general flexibility of the provisions in Title II grants the Commission all of the flexibility it needs to adjust its regulations to changes in the marketplace.

tw telecom's Responses to Questions in "Modernizing the Communications"
January 31, 2014

2. What should a modern Communications Act look like? Which provisions should be retained from the existing Act, which provisions need to be adapted for today's communications environment, and which should be eliminated?

The Communications Act is generally sufficient to address the communications policy challenges faced by the FCC today and will likely be sufficient for a long time to come. That is because the terms of the Communications Act are generally technology-neutral and the competition policy and social policy directives contained therein, including access to last-mile facilities, universal service, privacy, and accessibility for the disabled, have endured for many years.

One area in which the Act could be improved, however, is in the reports that the FCC must provide to Congress. The FCC is currently reviewing how to update its competition policies for the critically important business broadband marketplace. As the Commission undertakes this process, it should keep Congress informed as the level of competition in relevant business broadband markets. While the FCC provides the Congress with several helpful reports, including those concerning competition in the mobile wireless and video markets, it does not provide Congress with sufficient information regarding the level of facilities-based competition in relevant business broadband markets. It should do so, since such reports would enhance Congress' ability to monitor the FCC's progress in updating its business broadband competition policies.

3. Are the structure and jurisdiction of the FCC in need of change? How should they be tailored to address systemic change in communications?

As discussed above, the subject matter jurisdiction granted to the FCC in the Communications Act is extremely broad, since it encompasses all communications by wire and radio. Moreover, the structure of the Act is sufficiently flexible for the Commission to continue to advance the policy objectives established by Congress. This is especially true of Title II, which establishes appropriately broad and flexible mandates, including the requirement that services be provided on just and reasonable terms and conditions, and which can be eliminated or scaled back at any time by exercise of the Commission's forbearance power.

This Committee already has identified several improvements that should be made to ensure that the Commission can function more effectively through H.R. 3675, the Federal Communications Commission Process Reform Act. For example, that legislation will permit more than two Commissioners to meet without violating the Sunshine Act if certain conditions are met. tw telecom believes, as the Committee does, that this provision will improve the Commission's internal deliberations. Moreover, it will facilitate the discussions of the Federal-State Joint Boards on Universal Service and Separations, as well as the Joint Conference on

tw telecom's Responses to Questions in "Modernizing the Communications"
January 31, 2014

Advanced Services - three bodies on which state regulators and the federal Commissioners sit.

4. As noted, the rapidly evolving nature of technology can make it difficult to legislate and regulate communications services. How do we create a set of laws flexible enough to have staying power? How can the laws be more technology-neutral?

The optimal means of addressing changes in technology is to establish requirements that are technology-neutral principles and rules. As explained above, the Communications Act generally, and Title II in particular, do just that.

5. Does the distinction between information and telecommunications services continue to serve a purpose? If not, how should the two be rationalized?

The distinction between information services and telecommunications services is a bedrock of communications policy. Properly applied, it allows the FCC to narrowly target its regulations on underlying transmission services (i.e., telecommunications) while leaving largely unregulated enhanced services that are provided via the underlying transmission services. This makes sense for a number of reasons. First, the FCC has subject matter jurisdiction over transmission services whereas it lacks jurisdiction over many information services. Second, transmission services are subject to very high fixed costs and high market concentration, thereby yielding significant market power for the larger providers of transmission services such as the incumbent LECs. Regulation is often necessary to address such firms' incentive and opportunity to exploit their market power in ways that harm consumers. In contrast, the entry barriers associated with most information services are far lower and the risk associated with the abuse of market power are therefore significantly lower than is the case with telecommunications. It is therefore less likely that regulation will be needed to address harmful conduct by information service providers. Finally, to the extent that the FCC may have classified a service that includes a significant transmission component, such as broadband Internet access, as an information service, it generally has the discretion to reclassify that service as a telecommunications service if it deems it appropriate to do so. This again demonstrates the flexible nature of the Communications Act.

Sincerely,

Kelsi Reeves
VP Federal Public Policy
tw telecom





University of New Hampshire

January 28, 2014

The Honorable Fred Upton
Chairman of the House Committee on Energy and Commerce
2183 Rayburn House Office Building
Washington, DC 20515

The Honorable Henry Waxman
Ranking Member of the House Committee on Energy and Commerce
2204 Rayburn House Office Building
Washington, DC 20515

Dear Congressman Upton and Congressman Waxman:

My name is Rouzbeh Yassini, Ph.D. Twenty years ago I led a team that created the global standard for the delivery of high-speed Internet services over cable modems – a technology that now connects billions of people across the planet.

Today I'm writing in my role as Acting Director of the Broadband Center for Excellence (UNH BCoE) at the University of New Hampshire. The Center is a strategic, focused, interdisciplinary institution that is dedicated to making broadband a ubiquitous resource available to everyone, everywhere.

BCoE engages in this work this because we believe broadband is as vital to our country's success in the 21st Century and beyond as the introduction of electricity was in the late 19th Century.

Based on this view, we support efforts to address modernization of Communications Act, and believe strongly that any modifications to the Act must recognize the primary role broadband plays in the convergence of communications services and technologies in today's digital era.

Agriculture, biotech, e-commerce, healthcare and housing are only a few of the many sectors that have realized important innovations and benefits stemming from capabilities of broadband networks. In fact, the entire commercial transactions system that moves our economy forward can benefit from what broadband has to offer. (The two white papers included under this cover – "Broadband 2020: Achieving Ubiquity" and "Broadband 2030: The Networked Future" – provide additional detail about broadband's rising role.)

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University of New Hampshire

In particular, we support policies that seek to encourage or enable more widespread availability and adoption of broadband connectivity by taking into account these seven critical areas of focus:

- **Availability** — What percentage of people, residences and businesses has access to a broadband service in a given area?
- **Adoption** — What percentage of potential users are connected to a broadband service?
- **Affordability** — How comfortably can an individual or family with average income pay for available broadband services?
- **Performance** — What is the bandwidth of the broadband service to and from the end user?
- **Utilization** — Of the available bandwidth what percentage actually is utilized?
- **Ease of use** — How easy is it to make use of broadband connectivity and applications?
- **Services** — What applications are available that may compel usage and drive improved network performance?

At UNH BCoE we work with partners in the U.S. and from around the world to address these areas of concern. For example, one of our current projects involves a trial of a new technology that uses portions of unused broadcast spectrum – so-called TV White Space – to convey broadband data and potentially to serve as a means to expand access to broadband services. We also provide research, system planning and analysis, business planning and modeling, policy advisement and advocacy in addition to analyzing new technologies.

As policy makers consider updating the Communications Act, UNH BCoE would be privileged to provide information and resources that may be of value in addressing a holistic, encompassing view of communications policy and accounting for the critical role broadband connectivity will play in improving the way U.S. citizens live, work and communicate.

Sincerely,

Rouzbeh Yassini, Ph.D.

Executive Director, UNH BCoE

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January 31, 2014

The Honorable Fred Upton, Chairman
U.S. House of Representatives
Energy and Commerce Committee
2125 Rayburn House Office Building
Washington, DC 20515

The Honorable Greg Walden, Chairman
U.S. House of Representatives
Energy and Commerce Committee
Subcommittee on Communications and Technology
2182 Rayburn House Office Building
Washington, DC 20515

Dear Chairmen Upton and Walden:

United States Cellular Corporation (“U.S. Cellular”) is pleased to respond to the Subcommittee’s White Paper, released January 8, 2014, seeking comment on an update to The Communications Act of 1934, as amended (the “Telecom Act”). As a carrier serving almost five million customers across the nation we share common interests with many other regional and rural carriers. We welcome this timely and important effort to examine the effectiveness of our nation’s telecommunications laws and stand ready to assist the Committee and Subcommittee during this process.

Background

U.S. Cellular is a regional wireless carrier, providing commercial mobile wireless service. The company serves parts of twenty four states including Washington, Oregon, California, Illinois, Wisconsin, Iowa, Nebraska, Kansas, Missouri, Oklahoma, Texas, Indiana, Minnesota, West Virginia, Virginia, North Carolina, South Carolina, Tennessee, Maryland, Pennsylvania, Vermont, New Hampshire, Maine, and New York providing mobile voice and broadband services on 3G and 4G LTE networks. A significant portion of U.S. Cellular's most rural network has been constructed in part using federal universal service support, without which many areas would today have poor quality service, or no service.

To put U.S. Cellular's size in perspective, the two largest facilities-based mobile wireless carriers each serve over 100 million subscribers. The next two each serve over 40 million subscribers. As the fifth largest carrier, U.S. Cellular serves nearly 5 million subscribers. All other carriers are either similar in size to U.S. Cellular, or significantly smaller, with many having less than 100,000 customers.

U.S. Cellular's primary focus is in rural areas. In fact, more than half of our subscribers live in rural areas. We provide high quality service in rural areas of the country that would otherwise have been ignored or underserved. We have been able to deliver superior coverage, and award-winning customer service to the rural markets we serve which has translated to job creation and a boost to these local rural economies. It has not been easy, however, owing to numerous and well documented logistical, geographical and cost issues that do not exist in urban areas but which abound aplenty in rural areas of this country. A Telecommunications Act rewrite

must recognize these differences and ensure that rural consumers and communities continue to receive high-quality service that is reasonably comparable to those in urban areas by incenting private sector investment and providing adequate governmental support where appropriate .

1996 Telecommunications Act

As you well know, the 1996 Telecom Act was a bipartisan piece of legislation that was enacted to promote competition and reduce regulation. Those twin goals should continue to be the central organizing theme for a rewrite or update. Congress should systematically identify all areas where the 1996 Telecom Act failed to increase competition or reduce regulation, and seek to remedy those shortfalls. What we learned from that effort is that it is essential for federal policies to foster competition and creating that competitive ecosystem requires the complex balancing of market freedom, regulatory certainty, and appropriate rules. With that in mind, we suggest the following general principles:

- The FCC’s mandate to promote competitive communications markets must ensure that small business and rural consumers are not disadvantaged.
- Legislation should ensure that all service providers adhere to consumer protection and public safety obligations, and are subject to competitively neutral regulatory structures.

Congress should adopt the following core principles, for all service providers using any technology:

- **Universal Access:** A universal service fund must ensure that consumers living in rural high-cost areas that are not economically viable without such assistance have access to services and service quality that are reasonably comparable to those provided to consumers living in urban areas. A competitively neutral system that promotes deployment of broadband networks in areas that would not otherwise have service is essential to our nation's economic future and is critically linked to public safety in rural

areas. Universal service must promote competition in rural areas by making support available for consumers, not specific carriers or technologies.

- **Competition:** Section 309(j) already requires the Commission to promote the dissemination of licenses. This principle must be maintained and perhaps expanded to ensure that, to the greatest extent possible, consumers have choices in services and service providers. Legislation that requires the FCC to auction smaller blocks of spectrum will increase opportunities for multiple bidders and providers to enter the market including small business, many of which are owned by women and members of minority groups.
- **Interconnection of Networks:** One of the most powerful enablers of competition is a requirement that all consumers must be able to connect to all other consumers. When a carrier refuses to connect its network, either directly or indirectly, it reduces the utility of consumer devices. In the wireless industry, roaming is a form of interconnection, even in an all-IP world. Any discriminatory action that prevents a carrier from efficiently interconnecting its network into the Internet, or roaming on another network, should be prohibited.
- **Public Safety:** All providers must provide access to state of the art emergency services. The FCC must ensure that 911, E-911, and next generation 911 services are rapidly deployed throughout the nation and that consumers have access to easily understood information that explains how modern emergency services can be accessed on any device that is capable of connecting to public communication networks.
- **Technology Neutral Principles.** Over many decades, our nation's telecommunications laws have naturally favored incumbents. Following the 1996 Act, the FCC adopted the core principle of competitive neutrality – that all universal service rules must not favor any particular class of carrier or technology. That same principle should apply wherever possible throughout a revised statutory framework, so that consumers, to the greatest extent possible, are able to choose the services that best suit their needs.

So, Congress is presented with the question of how best to ensure that modern broadband networks, and communication technologies of the future, will continue to be constructed, maintained and operated in a manner that fosters public safety and economic development, and that ensures universal access by all of our citizens. We look forward to working with you on solutions.

Sincerely,

A handwritten signature in blue ink, appearing to read "G. Spellmeyer", with a long horizontal flourish extending to the right.

Grant B. Spellmeyer

Vice President - Federal Affairs & Public Policy



CONGRESS SHOULD CREATE A 21ST CENTURY FRAMEWORK FOR THE COMMUNICATIONS SECTOR

INTRODUCTION

The United States Telecom Association (“USTelecom”) appreciates this opportunity to provide the Committee on Energy and Commerce (“the Committee”) with our views on updating the nation’s communications laws. We commend the Committee for examining how those laws can be modernized in order to ensure that the communications sector continues to serve as an engine for growth and job creation for the U.S. economy. In our view, the long-term efficacy of that legal regime requires the creation of a new pro-consumer framework for the Information Age that appropriately reflects the converged and competitive communications market environment in which our industry now operates – and is likely to be operating for the foreseeable future.

USTelecom is the nation’s oldest and largest association for providers of wired communications – first, traditional voice telephone companies and, today, broadband companies. The association represents some of the largest employers in the U.S., as well as some of the smallest cooperatives and family-owned telecom businesses in rural America. Our members use a variety of technologies and platforms to provide voice, video, and data to residential customers, small businesses, large corporations, and governments at all levels. The networks built and managed by USTelecom members have been, and we fully expect will continue to be, critical to the nation’s ongoing communications revolution.

As the Committee recognizes in its white paper, the vast majority of provisions in the Communications Act of 1934 (“the Act”) are decades old. Even the most recent significant amendments to the Act occurred almost two decades ago, in the Telecommunications Act of 1996 (“’96 Act”), and had their genesis in legislation dating back to the 1980s. The original provisions governing wireline and cable services assumed that such services were provided on a monopoly or near-monopoly basis. Even the ’96 Act assumed that the respective service providers possessed such significant market power that the introduction of competition into those markets would have to be closely managed by the government. Congress enacted these laws in a different era in which technology, competition, and consumer preferences did not resemble the 21st century communications marketplace. The Internet and Internet Protocol (“IP”) technology have obliterated the assumptions underlying the Act and the ’96 Act amendments, calling into question the efficacy and wisdom of today’s legislative and regulatory framework.

NEW TECHNOLOGIES HAVE SPURRED ENORMOUS COMPETITION AND INCREDIBLE CONSUMER CHOICE

In 1996, incumbent local exchange carriers (“ILECs”) served approximately 172 million voice subscribers, other wireline competitors had approximately 1 million customers, and wireless carriers had 44 million subscribers. In contrast, by 2012, ILECs had 82 million voice

subscribers, other wireline competitors possessed 56 million customers (of which cable operators had more than 27 million provided over their own lines), and wireless carriers possessed 305 million subscribers. Based on trends, USTelecom projects that, by year-end 2013, the number of ILEC voice subscribers had dropped still further to approximately 75 million, while other wireline competitors had approximately 57 million, and wireless subscriptions grew to approximately 310 million. In fact, the Centers for Disease Control estimates that almost 40 percent of U.S. households used wireless voice service *exclusively* as of early 2013, and USTelecom estimates that between 43 and 45 percent of households that use telephones used wireless exclusively as of year-end 2013. In addition, there are 6 billion text messages sent and received every day, while 58 percent of Americans communicate via social networking sites, and 35 percent of Americans use online video calling and video chat – including many who do so without any subscription at all to a traditional wired or wireless voice provider. Tens of millions are adopting voice services that work “over the top,” untethered to any particular device or location.

The voice communications market was not the only one to feel the impact of this seismic shift. In 1996, out of 97 million television households, there were 63.5 million cable subscribers and 8.8 million satellite or other competing video service subscribers. Today, out of approximately 115 million television households, there are 55 million cable subscribers, 34 million satellite subscribers, and 12 million subscribers now using video services provided by wireline companies such as USTelecom members. In addition, there are 32 million Netflix subscribers, more than 5 million Hulu Plus subscribers, and an estimated ten million or more – possibly as many as 20 million – Amazon Prime subscribers with access to Amazon Instant Video. These services are not competing simply by offering video content created by others; they are creating consumer demand for their services by successfully competing with Hollywood, broadcasters, and cable networks in the content creation business.

Broadband Internet access was practically non-existent at the time Congress enacted the '96 Act. Since that time, with a bipartisan consensus on a light-touch regulatory policy, broadband has developed into a market characterized by dynamic competition, rapid adoption, and high levels of innovation. As of the end of 2012, there were 65 million fixed connections and 64 million mobile connections defined as “broadband” by the Federal Communications Commission (“Commission”). Among fixed broadband connections, wireline providers served 20 million subscribers (including more than 6 million fiber-to-the-premises subscribers) and cable providers had 44 million subscribers, with satellite and fixed wireless operators providing broadband to the remainder. Among fixed broadband connections, as of the end of 2012, approximately 80 percent were delivering download speeds of 6 mbps or higher. Seventy percent of fixed Internet connections and 38 percent of mobile connections met the Commission’s definition at the end of 2012, up from 41 percent and 1 percent, respectively, at the end of 2008. Based on trends, USTelecom projects that as of the end of 2013 there were more than 75 million fixed broadband connections, a growth of at least 15 percent in just one year, and more than 100 million mobile broadband connections, a staggering increase of at least 50 percent. Thus, the data indicate that, over time, customers are rapidly adopting broadband technologies with greater capacity, mobile broadband is increasingly offering services at speeds

comparable to many fixed broadband connections, and broadband providers are stepping up to deliver the infrastructure and speeds that consumers want.¹

INVESTMENT TRENDS DEMONSTRATE THE EFFECTIVENESS OF A LIGHT REGULATORY TOUCH

The enormous growth in competition and choice that new communications technologies have offered consumers are demonstrably related to the light regulatory touch that Congress took with wireless services, and that the Commission similarly adopted with respect to broadband services. Such an approach steered hundreds of billions of dollars in investment into these sectors, as investors and innovators saw greater opportunity in the less-regulated environment, and consumers in turn reaped the benefits.

While the number of more heavily regulated switched voice connections have declined dramatically and the investment flowing into these older systems is primarily that which legacy legislation and regulation compels, the number of subscribers to lightly regulated wireless and broadband Internet services has increased exponentially. It is no surprise, then, that broadband Internet services, fixed and mobile, have attracted significant investment since the Internet's commercialization in the 1990s – from the technology and telecommunications investment mania of the late 1990s to the growth of advanced broadband since the mid-2000s, when a less-regulatory policy approach to broadband was affirmed by regulators and the courts. Since then, multiple facilities-based broadband providers have competed vigorously for customers. This innovation and investment has transformed the lives of consumers to the point that ubiquitous broadband adoption is now a national priority.

The recent deployment of competing fourth-generation mobile data platforms has been integral to rapid adoption of increasingly powerful mobile devices and services, such as laptops, smartphones, tablets, and evolving cloud-based services provided on these devices. New broadband applications have arisen, from online video to social networking to cloud-based enterprise IT services. Investors have flocked to fund new initiatives in this space because they recognize the potential that exists when companies are allowed to innovate and experiment in the absence of the heavy hand of regulation. And most importantly, consumers have validated this light-regulation approach by adopting these new technologies at an extraordinarily rapid pace.

¹ The FCC defines broadband as 4 mbps download and 1 mbps upload. In addition to the 65 million fixed connections referred to above meeting or exceeding that speed in 2012, there were 8 million fixed connections that met the FCC's threshold for download but not upload, as well as 11 million fixed connections that provided download speeds greater than 1.5 mbps. In addition to the 64 million mobile broadband connections in 2012, another 5 million mobile connections met the FCC's threshold for download but not upload, and 49 million provided download speeds greater than 1.5 megabits per second. Given the growth in the broadband connection numbers through 2013 as projected above, we estimate that a considerable number of these fixed connection subscribers are now receiving full broadband speeds and that millions of consumers have purchased new mobile devices for use on networks that offer broadband speeds.

IMPLICATIONS FOR THE 21ST CENTURY MARKETPLACE

The new and vigorous competition for voice, video, and data services demonstrates several key factors that shape today's communications marketplace. First, the Internet and IP technology enable facilities-based providers previously housed in different product (and regulatory) silos to provide functionally equivalent services in competition with their counterparts in other silos. Second, broadband platforms have spawned an entirely new method of delivering service – “over-the-top” broadband services. Thus, in contrast to the assumptions underlying the Act, barriers to entry into the voice, video, and data markets are exceedingly low today, and companies are utilizing IP technology to compete in multiple product areas.

This multi-layered competition has produced an innovation arms race as competitors vie to create new offerings to attract consumers. The differentiation inherent in these offerings has changed the manner in which consumers perceive their options:

- Consumers can use Google Voice to be contacted on any of their devices.
- Consumers can use Facetime or Skype rather than make a phone call.
- Consumers can watch a show on their tablets while sitting in a Starbucks rather than watch television in their living rooms.
- Consumers can “binge” on a show's entire season on Netflix rather than watch the program once a week on a linear programming lineup.
- Consumers have so much content available, from so many creators, accessible on so many devices and in so many locations, that many of them barely watch traditional “TV” or read traditional print media at all.

These trends represent several major changes in the consumption of communications products and services: (1) place shifting, through which consumers access voice, video, and data services from the location of their choice; (2) device shifting, through which consumers can access the same services or content on multiple devices; (3) format shifting, through which voice conversations can become text messages or video chats; and (4) time shifting, through which consumers decide when they access certain content, rather than relying upon a linear schedule. These trends make competition much more dynamic and change consumer perceptions of products, which further lowers barriers to market entry because new players do not need to adopt traditional models to attract customers.

Nearly three years ago, Jonathan Sallet, now the Acting General Counsel of the Commission but at the time a lawyer in private practice at the intersection of communications and competition policy, authored a paper that examined how “[i]n today's Internet marketplace, the creation of value proceeds in a way that belies traditional understanding, crosses traditional product-market definitions, and upends traditional views of hierarchical value chains. It provides businesses with the opportunity to experiment in the creation of new value propositions and it

provides consumers with additional choices and new forms of value.”² Although his paper primarily studied the wireless broadband market and video entertainment programming, Sallet described more broadly what he termed the “Broadband Value Circle – a world in which broadband connectivity is the glue that permits multiple firms, once walled off from one another in distinct product-market categories, to compete, cooperate, buy, and supply products and services from one another to satisfy customers who are able to buy from any one of them.”³ The Broadband Value Circle model included broadband service providers themselves. Sallet’s conclusions included the following observation:

“The creation of economic growth, the incentivization of innovation, the protection of consumers, the achievement of social goals: all of these public-policy goals depend, in varying ways, on an understanding of market structure and the likely trajectory of market dynamics. Thus, the Broadband Value Circle should be considered by policymakers as well as business people. The biggest implications are likely to arise in the field of economic regulation, including competition policy and other regulatory standards. My past argument in favor of a case-by-case approach to regulation stems directly from the view that calculating the net benefits (or costs) of a prescriptive rule on innovation is difficult where a market is fast-paced, diverse in its value offerings, and uncertain.”⁴

The 21st century communications marketplace exemplifies this Broadband Value Circle, and thus requires a reexamination of the legislative and regulatory model applied to communications services.

HOW TO MODERNIZE THE COMMUNICATIONS ACT

Given the dramatic changes in technology, competition, and consumer preferences, Congress needs to modernize the Communications Act to reflect the 21st century communications marketplace. Congress should eliminate laws designed for a monopoly era as well as those intended to provide the Commission and states with the ability to micromanage the development of competition. As noted above, modernization can unleash new forces of innovation and bring new investment to communications, creating jobs and economic growth.

In particular, the 20th century economic regulation that permeates the Act (much of which is based on 19th century economic concepts, and were themselves derived from English common law developed long before that) should not be imported into a 21st century framework. Because competition has become so much more pervasive, multi-faceted, and dynamic, economic regulation is unnecessary, especially in the absence of a demonstrated market failure, though the Commission should continue to ensure that certain consumer protections are maintained, such as emergency-calling capability, accessibility, and universal service. In addition, Internet governance should continue to be based on the very successful multi-stakeholder model.

² J. Sallet, *The Creation of Value: The Broadband Value Circle and Evolving Market Structures* (Apr. 4, 2011), at 3 [http://papers.ssrn.com/sol3/papers.cfm?abstract_id=1821267].

³ *Id.* at 43.

⁴ *Id.* at 45.

A new statutory framework should recognize that functionally equivalent services should be treated the same, regardless of the entity providing the service. Congress should eviscerate the Act's existing regulatory silos, which would eliminate the disparity caused by less-regulated entities' ability to deploy capital more efficiently. Competition can and should emanate from innovation and risk-taking in the market, not from regulatory arbitrage.

A new statutory framework would also provide greater regulatory certainty, whereas the existing framework's attempt to apply 20th century rules to 21st century technology has resulted in a lack of clarity regarding whether certain aspects of the Act apply to new services and providers. Such a framework should also avoid the regulatory uncertainty caused by the attempt to delineate federal and state jurisdiction over IP services, which are inherently national, if not global, in scope.

In addition to avoiding duplicative and often contradictory enforcement by the Commission and state regulators, Congress should eliminate overlapping jurisdiction between federal agencies. Where a federal agency other than the Commission has expertise and experience, Congress should clarify that such other agency, and not the Commission, has jurisdiction. For example, the Department of Justice should have exclusive authority regarding competition policy, and the Federal Trade Commission should have exclusive jurisdiction over privacy and data security enforcement.

Congress should also change the nature of the Commission's authority to enforce statutory requirements. The Act primarily bestows the Commission with *ex ante* authority to craft prescriptive rules to govern industry conduct. While such a construct made sense in a monopoly era, today's dynamic competition warrants a different approach. Congress should focus the Commission on exercising *ex post* or complaint authority on a case-by-case basis where it has expertise. Such an approach would enable the Commission to be more nimble as it evaluates new services and business models when companies innovate to respond to consumer preferences and advances in technology.

CONCLUSION

USTelecom appreciates the opportunity to provide input to the Committee with respect to the modernization of our nation's communications laws. The 21st century communications marketplace needs a 21st century legal framework that recognizes the enormous changes that have occurred in technology, competition, and consumer preferences. The dynamic communications marketplace needs a legal framework that provides both flexibility and certainty, and that sheds obsolete assumptions about how communications services are provided and how they are consumed.

Hon. Fred Upton
Chairman
Energy and Commerce Committee
US House of Representatives
2125 Rayburn House Office Building
Washington, DC 20515

Hon. Greg Walden
Chairman
Communications and Technology Subcommittee
Energy and Commerce Committee
US House of Representatives
2125 Rayburn House Office Building
Washington, DC 20515

Re: Communications Act Update

Dear Representatives Upton and Walden,

With regard to the update of the US Communications Act, in course before the Congress, I would like to share a professional perspective. I am a telecom competition attorney based in Romania. Until October 2013 I was the Vice-President of the Romanian Competition Council and I was involved mostly in the cases and the debates surrounding the communications.

There is no doubt that communications law is global as communications themselves are truly global, more than any other economic activity. Especially, legislation from the United States can have an impact in Europe, both positive and negative. Europe is still struggling to find its way and to fill the digital and technology divide that separates it from the United States and Japan/South Korea. There are hot ongoing debates about a legislative package at the EU level, which aim is to accelerate the integration of the EU members states market (a feature which is specific to the EU, with serious effects on development and innovation) and, in the same time, solve all the issues pertaining to the digital economy, such as the rather false topic of the "Net neutrality".

As you move through the process, please keep in mind that the following

1. Both the U.S. and the E.U. need a "Digital Age" Communications Act. Laws come to create frameworks for aspects which are the reality of the times in which they are enacted. But the communications and the technology evolve at such a high pace that legislation must not impede such an evolution and the innovation coming with it. It's time to retire outdated classifications that apply to obsolete networks. My hope is that the U.S. will retire these classifications for telephone, cable, radio and so on. Its leadership will be an important example for Europe and other regions to modernize their laws.
2. Innovators and consumers deserve a level playing field in the marketplace. The point of competition law is not to protect competitors, nor is it to give some parties preferential operating conditions. In Europe a number of American internet companies avoid paying tax and complying with data protection laws. Furthermore the profits these companies make in Europe is not taxed in the USA. Meanwhile the local versions of the services stick to the rules

and their development is affected. It is difficult to win a race when you have to press the brakes too much and when your competitors are allowed to use lighter cars (i.e. less money paid as taxes). This cannot be tolerated because competition in technology is global and such imbalances affect the consumers and the progress of technology everywhere.

3. I believe that modernized laws will facilitate dynamic competition. This market competition – not old phone-era regulations – is the best driver of pro-consumer behavior, investment and new innovation.

We are where we are in terms of technology because of the competition and the innovation it facilitated this evolution. Please, do anything you can to preserve this in the future.

Remember of what the late Ronald Reagan used to say: "If it moves, tax it. If it keeps moving, regulate it. If it stops moving, subsidize it".

Thank you for your leadership and I wish God gives you wisdom on your update process.

Yours sincerely,

Valentin Mircea

Telecoms and Competition Lawyer

Romania

Peter B. Davidson
Senior Vice President
Federal Government Relations



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January 31, 2014

Chairman Greg Walden
Ranking Member Anna Eshoo
House Energy & Commerce Committee
Washington, D.C. 20515

Dear Chairman Walden and Ranking Member Eshoo:

Attached you will find Verizon's comments responding to the January 8 white paper on "Modernizing the Communications Act." Verizon welcomes this opportunity to provide input to the Committee on Energy and Commerce. We look forward to working with the Committee to create a 21st Century framework that reflects and promotes today's dynamic and competitive broadband world, the full range of ways that consumers communicate, and the new applications and services that are revolutionizing every aspect of our lives.

Sincerely,

A handwritten signature in black ink, appearing to read "Peter Davidson".

Peter Davidson

cc: Chairman Fred Upton and Ranking Member Henry Waxman



MODERNIZING THE COMMUNICATIONS ACT

Verizon welcomes this opportunity to provide input to the Committee on Energy and Commerce regarding its efforts to modernize the laws governing the communications sector. The communications marketplace has undergone a revolution over the last two decades. The dizzying array of choices that consumers now have to communicate – and the wide range of players competing to meet consumers’ communications needs – bears scant resemblance to the voice-centric, one-wire world for communications that existed when the Communications Act of 1934 (the “Act”) was enacted, or even to the “silos” of discrete technology sectors and service providers reflected in the Telecommunications Act of 1996 (“’96 Act”). The world reflected in the existing statute has been replaced by one in which consumers can choose to communicate in an ever-expanding number of ways, including voice, texts, tweets, e-mail, video chat, social networks and others, with the Internet and broadband networks providing a platform for continued innovations and more choices. Moreover, the competition experienced by today’s consumers is dynamic. Within the Internet ecosystem, network providers, applications providers, device manufacturers, online service providers and others simultaneously cooperate and compete to meet consumers’ evolving communications demands – and all play significant roles that affect and shape the consumer experience.

Given these fundamental shifts, Congress must resist the temptation to merely tweak around the edges of the current statute or focus reform on only the most ill-fitting provisions. This would be a lost opportunity for consumers and likely cause as much harm as good. Instead of an incremental approach, it is time for Congress to start from scratch and create a policy framework for the 21st Century that reflects and promotes today’s dynamic and competitive broadband world, the full range of ways that consumers communicate, and the new applications and services that are revolutionizing every aspect of our lives.

The potential of these innovations has barely been tapped, particularly in areas of health care, education and energy management. By applying broadband technology, amazing new medical technologies could result – wonders such as remote robotic surgery or the real-time analysis of critical 3-D body scans even as an ambulance speeds a patient to the hospital. Similarly, the right governance framework would bring new technology solutions to the U.S. electrical grid. Today, there are some 200 million “smart meters” in use that connect the utility

grid to M2M and cloud platforms and allow supply and demand of energy to be managed more efficiently. This fully connected world is a few years away, but already we're seeing how information technology can save energy. In education, major universities are innovating with massive open online courses, or "MOOCs," which extend the traditional bricks-and-mortar model. Innovations such as the Khan Academy are introducing the idea of the "flipped classroom," with students watching instructional videos online at their own pace and using classroom time to get coaching from teachers and engage with peers. A new governance framework that promotes this kind of innovation and investment will spur collaboration among users, entrepreneurs, practitioners and developers to drive the next wave of digital solutions to our most pressing societal challenges in health care, energy sustainability, education and more.

Accordingly, as Congress considers a framework for the 21st Century broadband world, Verizon suggests that it remain focused on certain long-standing goals that will remain relevant regardless of where the marketplace evolves next: protecting consumers, promoting competition, and encouraging investment and innovation. Furthering these goals in the context of the dynamic Internet ecosystem requires a change of course from the old ways of regulating. It means moving away from the old, prescriptive model that too often inhibits innovation or invites regulators to pick winners and losers. It also means taking into account the foundations for the "network compact" of earlier times, recognizing that the *quid pro quo* of imposing certain regulatory obligations in exchange for a government-sanctioned monopoly have disintegrated, and redefining the network compact in ways that are appropriate for today's competitive IP-based communications sector.

In place of today's outdated framework, Congress should embrace an approach that relies primarily on consumer choice, competition and effective multi-stakeholder processes to protect consumers, guide the evolution of technology and services, and address emerging issues or market failures. Consumers will benefit from such a framework because it will encourage experimentation and collaboration that will unleash the power of technology to transform areas like healthcare, education and energy management. Notwithstanding that significant reorientation, this new framework also should include an effective governmental backstop through an agency with authority and tools to step in as needed to protect competition and consumers when and if real problems arise, regardless of their source. This approach of addressing issues as they arise on an ex-post basis is preferable to the inflexible prophylactic approach that inhibits innovation in today's dynamic marketplace.

Finally, any new framework must continue to account for certain issues specific to the communications marketplace –such as public safety, accessibility and spectrum management – that will continue to be important even as technology and the ways people communicate continue to evolve.

I. The Act Was Designed for a Different Time and Different Marketplace.

Today's Act has its origins in the Interstate Commerce Act of 1887 and 19th Century railroad regulation, and was designed for regulating legacy communications services in a "Ma Bell" monopoly era. Indeed, parts of the regulatory regime not only were based on assumptions of monopoly, they were a *quid pro quo* for a government granted monopoly.

The original framework granted the former AT&T an effective, nationwide monopoly. In exchange, AT&T agreed to provide universal service at regulated rates. Given its monopoly position, myriad forms of cross-subsidization could take place within AT&T itself. AT&T served both high cost areas and low cost areas. It had to provide service in the less attractive (high cost) areas because there were no competitors for customers in the more attractive (low cost) areas. This arrangement led to various regulatory obligations – including carrier of last resort, retail price regulation, regulated and differential rates for intra-LATA/intrastate/interstate, universal service and more. It states the obvious to say that the monopoly part of this equation no longer exists. This has put tremendous strain on elements such as intercarrier compensation and universal service because they are now subject to arbitrage and competitive pressures, rather than part of the coherent whole that was the original framework.

Despite these changes, the last comprehensive update to the Act was in 1996 – and even then was based on developments in the 1970s, '80s and early '90s. The hot items debated at the time of the '96 Act included such issues as whether and subject to what conditions local telephone companies could offer "long distance" services. The Internet was just starting to emerge for the most tech-savvy consumers, and received little mention in the law. Following the '96 Act, the regulatory framework still was based largely on a prescriptive approach to regulation and on dividing different communications sectors into separate "silos," subject to different regulation based on the different types of network technologies used and the particular services provided.

Technology and competition now have evolved to the point where consumers no longer must rely on the legacy provider in their area for each of their separate communications services. Consumers have a variety of different options across and outside the traditional silos. Consumers have moved away from traditional, heavily regulated voice lines and instead flocked to more advanced IP-based voice services and wireless services. Today, only 5% of voice customers rely exclusively on Plain Old Telephone Service, while nearly 40% of households have cut the cord completely and rely exclusively on wireless for their voice services. Not coincidentally, it is the services that have been allowed to develop largely free of overly burdensome regulations that consumers are embracing.

Consumers can also choose between broadband services from multiple competing wireline and wireless providers, and the capabilities and effective prices of these services

continue to drop every year. Consumers now rely heavily on the Internet to communicate, including over e-mail, instant messaging, various forms of voice and video services (e.g., Skype, FaceTime or Vonage), social networking services and others. Competition has evolved into an intense battle among network providers, Internet companies, device manufacturers, application developers and others to meet consumers' communications needs. Unlike traditional network providers, most of these competitors have not been subject to the same legacy regulatory regime and, therefore, have had more flexibility to quickly respond to consumers' changing demands. This is not to suggest that prescriptive regulation now should apply to these new competitors. On the contrary, consumers will benefit most if Congress adopts a new policy framework that will provide *all* companies in the Internet ecosystem with the type of flexibility necessary to encourage innovation and investment, while simultaneously protecting consumer interests.

While the marketplace for "voice" services has perhaps seen the most drastic change, other services and service providers also have experienced similar shifts. For example, in 1996, the only choices most consumers had for video programming were their local cable provider, over-the-air broadcast channels, or the local video rental store. Now, competition exists between cable operators, satellite providers, the traditional "telephone" companies like Verizon and AT&T, and a wide and growing array of video programming providers over the Internet. For example, Netflix now has more than 33 million U.S. subscribers and accounts for more than a third of Internet traffic in the United States during peak hours, while Hulu Plus has more than 5 million subscribers and Amazon Prime has as many as 20 million subscribers with access to Amazon Instant Video.

II. History Has Demonstrated that a Lighter Touch Regulatory Model Has Worked.

To help determine what regulatory framework to adopt going forward, Congress should look to the approach that has allowed competitive wireless and Internet services to proliferate. These have developed largely outside of the more prescriptive, legacy framework that has been applied to traditional wireline voice providers and services. Broadband services have been subject to the lighter touch regulatory approach applicable to "information services," while Congress' decision to require a less regulated approach to wireless services provided similar flexibility. That lighter touch has proven hugely successful, sparking competition and innovation in these sectors that has driven economic growth even during the recent recession.

The success of lighter touch regulation in the wireless, broadband and broader Internet context provides a model for how to proceed more generally. That is not to say that all regulation should be abolished or that Congress should abandon the commitment to certain important societal values and principles that undermine the old statutory framework. Rather, it simply recognizes that we need a 21st Century framework designed for 21st Century technology and marketplace that is increasingly based on broadband technologies and services.

III. Congress Should Not Be Constrained by the Old Statutory Framework.

In deciding how to proceed, Congress should not rely on the old statutory framework and regulatory classifications or try to tweak the current framework to try to make today's marketplace fit into it. Instead, Congress should more broadly consider a new policy framework that better fits today's dynamic and competitive communications marketplace. Congress should start with a blank page and ask what would work best now, regardless of what was done in the past. In place of today's silos and inconsistencies, Congress should focus on a set of technology-agnostic policy principles to guide regulation going forward.

IV. Adopting the Right Model for the 21st Century.

An appropriate 21st Century broadband policy framework should be based on three technology-neutral principles: (1) protect consumers; (2) promote competition; and (3) encourage investment and innovation. Adhering to these principles will better allow for adjustments to market changes and new technologies as they arise.

To promote these three principles, Congress should implement a 21st Century broadband model that will cover the Internet ecosystem with the same pro-innovation and pro-investment approach. Such an approach will rely, in the first instance, on consumer choice and competition to dictate the direction that the marketplace will take and will make greater use of the highly effective and agile multi-stakeholder processes that have helped drive the successes of the Internet. At the same time, it should provide for an effective government backstop that can step in if and when necessary to prevent harm to competition or consumers. More specifically, an appropriate 21st Century approach should have the following key elements:

1. Federal Framework.

To ensure consistent treatment of all relevant providers, the new framework needs to apply at the federal level. Broadband services and the Internet are inherently interstate, and the policy framework must reflect as much. Such a uniform federal approach is in the best interest of consumers, as consumers should not have to navigate a patchwork of differing requirements from state to state (or locality to locality) to determine how they are protected. Moreover, complex and fragmented regulations increase the cost of serving those consumers – a cost that consumers ultimately must bear. Adopting a federal approach will create a more uniform set of expectations, which will help spur innovation and investment. Indeed, using a single, national framework and pre-empting state and local regulation was a key factor underlying the success of wireless and broadband.

2. Light Touch Regulatory Regime.

Congress should extend the light touch approach that has worked well in the wireless and Internet sectors. Such a regime has the following components:

Reliance on Competition rather than Economic Regulation. The new model should rely primarily on competition and consumer choices to drive the marketplace, with regulatory intervention only if and where necessary to protect competition or consumers. Competition drives the best outcomes for consumers. Government regulation generally should occur only where there is a demonstrated market failure and should be narrowly tailored to cure it.

Multi-Stakeholder Approach. The new regime should encourage flexible, multi-stakeholder governance processes to establish industry standards and practices and as a model for problem-solving as new issues emerge. This approach has proven successful in the Internet context and can be expanded, particularly as Internet-based services and companies continue to take on an increasing role in communications. It is a more nimble way of addressing new issues as they arise, regardless of the particular service or technology at issue.

The Role for Government. To encourage innovation, Congress should adopt an enforcement-based regulatory model pursuant to which government intervenes on an ex-post, rather than ex-ante basis. This approach will provide the flexibility necessary to encourage the kind of experimentation that is the life blood for economic growth, while still allowing government to step in if a problem arises. In other words, government should provide a backstop to address anti-competitive or anti-consumer behavior that occurs – for example, on a complaint basis. But it should not preempt innovation with prophylactic rules.

Targeted Regulation As Needed in Some Discrete Areas of Concern. There may be some areas unique to the communications space that deserve some particular regulatory focus and attention. Given the special nature and importance of these issues, Congress should think about whether particularized provisions are needed in the areas of: public safety, universal service, disabilities access, and spectrum management. Even as Congress considers these important areas of concern, however, it must take into account the changed competitive and technological circumstances that would make the reflexive extension of current regulatory obligations problematic and unworkable. Addressing these issues must account both for the wider range of players involved in meeting consumers' communications needs, and for the competition that now undermines the *quid pro quo* that may have justified previous policy approaches.

CONCLUSION

While the principles of protecting consumers and encouraging and investment and innovation are as relevant today as they were in 1934 and 1996, the technology that connects us has outgrown the legislative and regulatory framework that was put in place last century to



promote these principles. Congress should take the opportunity to build a new framework that reflects the realities of today's marketplace, protects consumers and competition, and also encourages the investment and innovation necessary to develop new solutions to meet the societal challenges we face in areas such as health care, energy sustainability, education and more.



Modernizing the Communications Act

COMMENTS OF THE VOICE ON THE NET COALITION

The Voice on the Net Coalition (VON) submits these comments in response to the Questions for Stakeholder Comment, contained in “Modernizing the Communications Act” White Paper, released January 8, 2014, by the Committee on Energy and Commerce. For 17 years, VON (www.von.org) has worked to advance federal and state regulatory policies that enable Americans to take advantage of the promise and potential of IP (Internet Protocol)-enabled communications. VON’s members – including AT&T, Broadvox, the Cloud Communications Alliance, Google, Microsoft/Skype, Nextiva, RingCentral, and Vonage/Vocalocity – are developing and delivering voice, data, video and other communications applications over the Internet. In these comments VON explains how regulation of IP communications has developed, how the market and consumers have fared under the current framework, and makes recommendations relating to questions two and five of the Questions for Stakeholder Comment.

Development of IP Communications Regulation

The history of Internet communications regulation arguably begins in March 1996 when a small trade association of long distance resellers, called America's Carriers Telecommunication Association (ACTA), filed a petition asking the FCC to stop the sale of software that was used to enable voice communications between computers over the public Internet, or in some cases from computers to telephones. ACTA also asked the FCC to begin a rulemaking to define permissible communications over the Internet. ACTA argued that it was

not in the public interest to permit long distance service to be given away and suggested that the software providers should be subject to the same regulations as telecommunications providers.

Comments were filed in response to the ACTA petition but the FCC never issued an order in that proceeding. Basically, not much else happened on the issue for the next seven years. Regulators asked questions, but Internet telephony, as it was known at the time, was still a curiosity; used mostly by hobbyists.

However, during that time the decreasing cost of personal computers and the increasing availability of broadband technologies, naturally led to the growing use of Internet communications. Companies such as Free World Dial-up and ITXC (a wholesale Voice over IP provider) were challenging traditional telecom business models by using the Internet to provide free or low cost international communications services, and a company called Vonage began offering a home voice service over the customer's high speed Internet connection that for the first time allowed residential customers to manage their communications services – providing features and capabilities previously only available to business users; and at much lower prices than were available from traditional telephone companies.

The relative quiet ended in July 2003, when the Minnesota Department of Commerce filed a complaint with the Minnesota Public Utilities Commission asserting that Vonage was providing a telephone exchange service and subject to state law and regulations as a telephone company, including the requirements to get a certificate of operating authority, file tariffs and provide 911. In September 2003, the Minnesota commission issued an order asserting jurisdiction over Vonage, and telling it to comply with state telephone regulations. That order was subsequently reversed by a federal court and that reversal upheld on appeal. But more

importantly, Vonage, while the matter was under appeal, also filed a petition for declaratory ruling with the FCC asking it to preempt the Minnesota PUC order, arguing that its service should be classified as an information service and thus not subject to state regulation; or, in the alternative, that regardless of the regulatory classification its service could not be separated into distinct interstate and intrastate communications.

The FCC agreed with Vonage that it was impractical to separate the service into interstate and intrastate communication, relying in part on the fact that the service was nomadic – that is the service could be accessed from a broadband connection anywhere in the world, and that permitting Minnesota to regulate the service would thwart a federal policy of promoting advanced communications services, noting that multiple state regulatory regimes would likely violate the Commerce Clause. The FCC did not address whether the service should be classified as an information or telecommunications service; that issue remains unresolved today. While the issue was not specifically before the FCC, the Commission did note in its *Vonage* decision that it was likely also to preempt state regulation of other entities, such as cable companies, that provided integrated communications capabilities over the Internet.

Also in 2004, the Commission issued what is now referred to as the *Pulver Order*. In that decision, the FCC specifically declared that Pulver's Free World Dialup (FWD) – which was a directory service that facilitated free, computer-to-computer Internet voice communications between FWD subscribers, using unique numerical identifiers (and not telephone numbers) was an information service and not a telecommunications service. Information services are generally not subject to state regulation and limited, if any, FCC regulation. The *Pulver Order* is important today because it is the basis for the regulatory scheme for companies that offer

Internet-based computer-to-computer voice services that do not interconnect with the public telephone network.

Finally, in 2004, the FCC released a Notice Proposed Rulemaking asking hundreds of questions about the proper scope of federal regulation of IP-enabled services. In summary, the NPRM broached the question of whether Voice over IP (VoIP) or other IP-based services should be classified as information or telecommunications services, or otherwise subject to some or all of the regulations that applied to telecommunications carriers.

Today, the FCC does not classify interconnected VoIP (which is the broadband-based service that can be used, among other ways, as a replacement for basic telephone services) as either telecommunication services or as information services. Information services are generally subject to no state regulation, and limited, if any, FCC regulation. Interstate telecommunications services, in contrast, are subject to significant regulation contained in Title II of the Communications Act. While VoIP services remain unclassified, during the past nine years the FCC has imposed regulatory requirements on interconnected (and in some cases, non-interconnected) VoIP providers, using its Title I or ancillary authority to broadly promote consumer protection and public safety, or pursuant to specific statutory mandates (e.g., 2010 CVAA). These obligations include providing access to E911, complying with CALEA, contributing to the Federal Universal Service Fund, allowing states to impose state universal service contribution obligations on intrastate VoIP revenues, making the service accessible to persons with disabilities, paying FCC regulatory fees, requiring interconnected VoIP providers to port telephone numbers to other communications providers, requiring FCC approval before discontinuing interconnected VoIP service, and requiring interconnected VoIP providers to file reports of network outages with the FCC.

In light of the federal regulatory regime applicable to interconnected VoIP providers and the precedent of the FCC's 2004 Vonage decision, the states have primarily adopted a hands-off approach to regulation of VoIP. In fact, to date, almost 30 states have passed legislation that would prohibit utility-like regulation of IP-enabled services, including VoIP. Those laws have allowed providers to offer ubiquitous communications services to Americans throughout the country, unhampered by geographic boundaries and the hodgepodge of hundreds of state regulations – many of which were developed for a monopoly telephone system. VoIP providers, however, remain subject to compliance with state and federal consumer protection laws, ensuring that consumers have recourse against bad actors.

Current State of VoIP Market

Under this focused regulatory regime, the VoIP market has flourished, growing at a compound annual rate of 17 percent, with more than 40 million users of interconnected VoIP, and hundreds of millions more using one-way and non-interconnected VoIP service. The market for VoIP in the United States is competitive, innovative and growing. Competition among VoIP providers (there are estimates of more than 500 operating in the United States) creates incentives to keep prices low and to continue developing new features, and entirely original products. For example, VoIP providers are testing high-quality audio encoding that would improve sound fidelity of phone calls – known as HD voice. New IP communications applications – for voice, IM, data and video - are developing for use on smart phones, tablets and in gaming and other interactive software. Many of these are used in consumer markets; however, businesses are increasingly using these tools to enhance the customer service experience. Imposing significant new state or federal regulatory responsibilities on VoIP providers could endanger this growth by increasing the cost of providing VoIP services, and slowing technical innovation.

Recommendations

Exclusive federal jurisdiction and limited regulation of IP communications have promoted a competitive marketplace that nurtures innovation. Given the risk that unnecessary regulation can raise costs, slow adoption, and stymie innovative activity, Congress and the FCC should avoid the strained process of applying legacy laws and regulations to IP communications services. Rather, the promotion of public safety and consumer protection should remain the primary focus of regulations. A presumption against regulating beyond such limited and principled confines correctly places the burden on the Commission and commenters to demonstrate the need for new regulations. In addition, any regulation pursued must be technically feasible. Imposing requirements on IP services that cannot be technically achieved at reasonable cost will not provide consumers with meaningful solutions. Finally, whatever changes to the Act, if any, the Subcommittee chooses to make, there needs to be flexibility for the dynamic changes in technology and the communications markets.

Conclusion

VON looks forward to working with subcommittee staff as they consider options for updating the Communications Act. Please contact the undersigned if you have any questions.

Respectfully submitted

VOICE ON THE NET COALITION

Glenn S. Richards
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January 31, 2014



January 21, 2014

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Members of the Panel,

Thank you for the opportunity to submit comments regarding the importance of modernizing the U.S. Communications Act. The House Committee on Energy and Commerce has issued a summary that outlines the need for the Communications Act to be modernized. The Committee's premise for modernizing the Communications Act is that the foundation of U.S. regulatory policy toward the communication and technology sectors is outdated. The Committee could not be more correct.

The market capitalization of the information technology and telecommunications industry is huge – approximately \$7 trillion or around 40 percent of the total market capitalization of the S&P500. More importantly, these sectors are continually improving their products and services which helps increase the productivity of many other industries including the manufacturing industry, the health care industry, and the professional services industry. The information technology and telecommunications sectors also help consumers through enhanced entertainment products and services. While these benefits created by the IT and telecom sectors are tremendous, if not for the current regulatory structure, these benefits could be even greater.

The major obstacle that inhibits the potential growth of these sectors is that the structure of the U.S. Communications Act is incompatible with the modern communications industry. As I discussed in a recent editorial I wrote for Forbes (which I have enclosed), the communications and technology industry exemplifies Joseph Schumpeter's famous maxim that capitalism is a process of *creative destruction*. In fact, vibrant economic growth is synonymous with a vibrant process of creative destruction. This is why the communications and technology sector is so important to the U.S. economy.

The Communications Act creates arbitrary industry silos. In too many instances these regulatory silos "pre-determine" the competitive process by imposing costs and operating restrictions on some parts of the industry that are not applicable to all parts of the industry. The consequence of these regulatory barriers is less innovation. With less innovation the opportunity to create new products and services, or enhance current products and services, or drive down the costs / expand the access to current products and services is lost. These losses reduce our well-being and our potential rate of economic growth.

In light of these considerations, I would urge the Committee to eliminate arbitrary industry classifications in the communications regulations. The Committee should also recognize that the telecommunications and information technology industry will be unrecognizable in 10 years – let alone in 20 years.

Thank you for your time and consideration of my comments.

Sincerely,

Wayne Winegarden, Ph.D.
Contributing Editor, EconoSTATS at George Mason University
Sr. Fellow in Business and Economics, Pacific Research Institute

Forbes

Broadband Regulations Should Heed the Lessons from the Dynamic Technology Industry



Wayne Winegarden

11/13/2013 @ 10:26AM

<http://www.forbes.com/sites/econostats/2013/11/13/broadband-regulations-should-heed-the-lessons-from-the-dynamic-technology-industry/>

In 1998 the U.S. Department of Justice filed suit against Microsoft Corporation alleging that the company used its market dominance over computer operating systems to implement abusive practices that harmed consumers. At the time, fear of Microsoft was rampant and the case was filled with sound and fury. Like Macbeth's famous soliloquy, however, the fears of Microsoft's dominance of the technology industry *signified nothing*.

The regulators back in 1998 maintained a static vision of the computer and technology market; when in fact these markets are notoriously dynamic. Today's competitive losers become tomorrow's economic titans. In the case of Microsoft and the OS wars, one of the competitors that were being harmed by Microsoft was none other than Apple Computer (aka Apple)!

While Microsoft was defending itself against the onslaught of regulators obsessed with yesterday's technology, Steve Jobs of Apple was inventing the future; as was Larry Page and Sergey Brin of Google, and Mark Zuckerberg of Facebook. Today, Apple, along with many other companies that did not even exist back in 1998, has sparked a technological revolution in the computer and technology markets. And, these Internet 2.0 and new technology companies are now thriving while Microsoft is facing existential questions.

The Microsoft experience provides valuable lessons for regulators struggling to find the correct policy framework to match the new market realities across the technology industry today. The technology revolution that dethroned Microsoft has created explosive demand for high-speed Internet connections – both fixed and wireless. Meeting this demand requires the additional deployment of advanced networks, faster speeds for consumers, affordable prices, and expanded access to and adoption of broadband technologies.

Relying on the same static notions that blinded regulators during the late 1990s, however, some critics are arguing that the only way to achieve these goals is through greater regulation of the providers, and by government manipulation of the marketplace. In its more extreme form, some of these critics (e.g. Susan Crawford, Tim Wu and New America Foundation) would see parts of the high-tech world regulated as if it were a public utility.

The calls for new and expansive regulations on the broadband industry are misguided attempts to expand the current top of the line technology to more people at lower costs. These arguments typically start with an over-exaggerated assumption – that the U.S. is losing the global broadband performance competition. But, we are not.

In fact, many parts of the U.S. have world class connectivity and speed. If each individual state was treated as a unique country for the sake of the global connectivity competition, the US occupies eight of the top ten slots in the broadband connectivity ranking.

Additionally, the data that paint a “connectivity problem” fail to consider the services provided by wireless connectivity. If you incorporate wireless connectivity, however, the number of households without broadband access in 2011 would not be the 7 million households estimated by the FCC; it would be about 2 million to 5 million households.

And, the ability for wireless technologies to have a significant impact on the connectivity story is exactly what should be expected in the dynamic technology industry, given that many consumers are choosing to connect through mobile devices. Rapid innovations and the rise of new players continually disrupt the broadband industry creating new consumer and business services and expanding those services to wider and wider audiences.

Broadband providers – both fixed and wireless – compete for each and every consumer’s time; gone are the days of providers flexing their muscles for market share. New players, such as Aero, Hulu, Netflix and others have upended the traditional approach of Internet providers.

Critics of the broadband industry consistently under-appreciate the benefits generated from these new and different types of competitors, viewing the market from the silos of the past. They also under-appreciate how technologies that are unimaginable today can change the entire industry’s dynamic tomorrow.

It is due to these crucial oversights that these critics want to see greater government regulation of the broadband industry. Treating the vibrant 21st century broadband industry as a government regulated industry akin to the 1950s Ma Bell or the modern day Postal Service is a sure way to thwart the very services and coverage the industry’s critics covet.

The technological landscape will be continually evolving at an increasing pace. Antiquated regulatory structures, like those applied to Ma Bell, will lock-down the U.S. broadband industry and push the U.S. technology sector, a current global leader, toward becoming a global laggard.

The best path forward is a regulatory structure that recognizes the true nature of competition in the broadband ecosystem. And, just like with the OS wars of the late 1990s, that competition can (and likely will) come from unexpected sources. The policy environment should empower such technological revolutions. Doing so will only expand the myriad of benefits that the broadband industry is already generating.

** Wayne Winegarden, PhD is a Senior Fellow at the Pacific Research Institute and a Contributing Editor to [EconoSTATS](#) at George Mason University.*

Subject: Response to Questions for Stakeholder Comment

Date: Friday, January 31, 2014 at 4:11:10 PM Eastern Standard Time

From: Elizabeth Bowles

To: CommActUpdate

To Whom It May Concern:

The Wireless Internet Service Providers Association (WISPA) appreciates the opportunity to respond to the “Questions for Stakeholder Comment” included within the “Modernizing the Communications Act” white paper released by the House Committee Energy and Commerce on January 8, 2014. WISPA is the trade association that represents more than 700 wireless Internet service providers (WISPs) that make fixed broadband services available to millions of Americans, many of whom reside and work in rural and underserved areas of the country where choice in broadband providers may be lacking.

As “information service” providers, WISPs are ineligible to obtain universal service fund subsidies, unlike the local exchange carriers with which they sometimes compete. This one example – and there are others – makes clear the need for Congressional consideration of laws that would eliminate the “siloes” nature of our communications laws – silos that are based on outdated categories and distribution technologies instead of on the services a consumer receives.

WISPA looks forward to participating actively in the legislative process to modernize the Communications Act. WISPA’s brief responses to each of the five questions are below:

1. *The current Communications Act is structured around particular services. Does this structure work for the modern communications sector? If not, around what structures or principles should the titles of the Communications Act revolve?*

WISPA Response: WISPA believes that the four principles articulated in the testimony of former FCC Chairman Richard Wiley at the January 15, 2014, subcommittee hearing are worthy pursuits. To summarize, these principles are (1) that industry silos should be abolished and functionally equivalent services should be treated in the same manner, regardless of who provides them or how they are delivered, (2) that the traditional division between interstate and intrastate communications should be eliminated because they no longer make sense in an IP environment, (3) that legislation should focus on consumer protection and public safety, and economic regulations should be considered for non-competitive markets or to remedy market failure, and (4) that new regulations should be adopted with a lighter touch with sunset dates to facilitate regulatory review.

In particular, the legislative structure should not be focused on industry silos, but instead should treat “functionally equivalent” services in the same manner, regardless of who provides them or the technology used to deliver the services. Consumers generally do not care about the technology used to provide broadband access and other services; rather, they make decisions based on service quality, reliability and cost. Our legislative structure should focus on promoting a level playing field among competing technologies, and government policies should not subsidize some technologies and tax others simply based on legacy distinctions that have little place today, and will have less relevancy as future innovation creates new technology platforms. As former FCC Chairman Michael K. Powell stated in his testimony, “the new Communications Act should eliminate silos to reflect how companies and consumers think of services.”

2. *What should a modern Communications Act look like? Which provisions should be retained from the existing Act, which provisions need to be adapted for today’s communications environment, and*

which should be eliminated?

WISPA Response: Overall, WISPA recommends a light regulatory model that does not dictate business models or technologies. As an example where this has worked, the availability of unlicensed spectrum with minimal preclusive rights has led to waves of innovation for services such as Wi-Fi and fixed wireless, and has led to the development of spectrum management techniques such as dynamic frequency selection and geolocation databases. Legislation and regulation should migrate from the “command and control” model to a permissive, lightly regulated model. In addition, at a minimum, the Communications Act must ensure that the FCC continues to have jurisdiction over consumer protection, public safety, spectrum allocation and interference management. The Communications Act also must retain for the FCC enforcement authority.

- 3. Are the structure and jurisdiction of the FCC in need of change? How should they be tailored to address systemic change in communications?*

WISPA Response: WISPA believes that the FCC’s structure should be based on functional equivalency. For instance, the Wireline Competition Bureau and the Wireless Telecommunications Bureau both regulate broadband, but in very different ways. As a suggestion, perhaps the FCC should have a technology-neutral Broadband Services Bureau to which regulation of broadband services is delegated and a separate Spectrum Management Bureau that addresses spectrum management alongside the Office of Engineering and Technology.

- 4. As noted, the rapidly evolving nature of technology can make it difficult to legislate and regulate communications services. How do we create a set of laws flexible enough to have staying power? How can the laws be more technology-neutral?*

WISPA Response: Anticipating changes in technology and determining if and how to regulate such technologies are two very difficult aspects of modernizing the Communications Act. WISPA suggests that the FCC be charged with reviewing regulations on a frequent basis and sunseting regulations where market conditions no longer require them. At a high level, laws can be technology-neutral if they focus on the services that a consumer receives and promote intermodal competition on a level playing field.

- 5. Does the distinction between information and telecommunications services continue to serve a purpose? If not, how should the two be rationalized?*

WISPA Response: The categorical distinctions between “information” and “telecommunications” should be eliminated in favor of a single category that treats all providers of fixed broadband services equally without regard for the technology used to deliver those services. As “information” service providers, WISPs are not eligible to obtain universal subsidies simply because of legacy silos that give the FCC authority to subsidize only providers “telecommunications” services. From WISPA’s perspective, the universal service regime unfairly rewards local exchange carriers by offering subsidies in areas where they have not extended broadband service, while prohibiting fixed wireless broadband providers from receiving any subsidies. By eliminating these distinctions and drafting legislation that levels the playing field for all providers of a given service – in this case, broadband – Congress can eliminate the unfairness associated with silos that treat the same services differently merely because their distribution technology platform uses a wire, a cable, a satellite or spectrum. In addition to universal service, other examples where “telecommunications” providers are afforded greater rights than “information” service providers include pole attachment rights and rights-of-way.

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**Response of WTA – Advocates for Rural Broadband
to the House Energy and Commerce Committee’s White Paper on
Modernizing the Communications Act**

January 31, 2014

In its White Paper on Modernizing the Communications Act, the House Energy and Commerce Committee (Committee) requests public comment on several broad issues related to updating the Communications Act. WTA – Advocates for Rural Broadband (WTA) ¹ appreciates the Committee’s desire to conduct a review of the nation’s communications laws to determine whether they are adequate in regards to meeting the current and future needs of the country and welcomes the opportunity to provide comments on this and future papers regarding this initiative.

The fast-paced nature of change in the communications sector combined with the fact that major revisions to the statute have not occurred since 1996 are good reasons for a review at this time. However, neither changes in the underlying communications technologies nor the age of the statute in and of themselves necessitate fundamental alterations to the Communications Act where current law has proven successful at enabling network evolution and promoting innovation, competition, universal service, and consumer protection.

¹ WTA – Advocates for Rural Broadband is a trade association representing more than 250 rural telecommunications providers offering voice, broadband and video services in rural America. WTA members serve some of the most rural and hard-to-serve communities in the country and are providers of last resort to those communities.

In embarking on its review, the Committee should keep in mind three key points: 1) the communications industry and technology have changed over the decades, yet many of the principles underlying current law remain sound; 2) rural areas of our country served by WTA's members have different market dynamics than more suburban and urban areas and continue to need regulatory structures tailored to these unique circumstances; and 3) federal universal service policies for areas served by rural local exchange carriers (RLECs) have helped to ensure consumers living in high-cost rural areas receive services reasonably comparable to those in more densely populated areas.

WTA's members are rate-of-return regulated RLECs that serve some of the most rural and remote areas of the country with voice and data services. These companies and cooperatives came into existence because the larger, dominant carriers did not show interest in providing communications services to these areas of the country. These RLECs are locally oriented and tend to be some of the largest employers in their rural communities. They would not be able to serve the residents and businesses to the degree that they do today were it not for support from the federal Universal Service Fund (USF). While it predated the Communications Act of 1934, the principle of Universal Service was made explicit in the 1934 Act,² and then it was updated and expanded in Section 254 of the Telecommunications Act of 1996. At that time, there was bipartisan agreement among lawmakers that rural areas are different than suburban and urban areas when it comes to deploying communications infrastructure, and that these differences justified careful and distinct treatment under the law. These differences have not changed with the passage of time. While these rural areas are different, they are no less important than urban areas of the country, as there is interdependency among residents living in urban, suburban and rural areas for goods, services and commodities.

In its White Paper, the Committee correctly notes that intermodal competition has increased since the 1996 Act. WTA's members are prime examples of the convergence that

² The opening paragraph states that the Communications Act's purpose is "regulating interstate and foreign commerce in communication by wire and radio so as to make available, so far as possible, to *all the people of the United States*...a rapid, efficient, Nation-wide, and world-wide wire and radio communication service with *adequate facilities at reasonable charges*..." (emphasis added)

has taken place in the industry. Several decades ago, traditional voice service over copper wires was the sole service provided by WTA's members. Today, WTA's members provide more than voice service over hybrid copper/fiber networks. They have deployed networks capable of delivering high-speed broadband and access to video services and, in some cases, wireless services. To become more efficient and to meet their customers' future communications needs, these companies' TDM-based networks are evolving to become more IP-based. Looking at the industry as a whole, there has been a convergence of technology and services and therefore the dividing line between local telephone, long distance telephone, cable, wireless and wireline voice, and Internet service companies is not as distinct as it once was. In addition, there are types of service providers that did not even exist when the 1996 Act was written.

Despite these changes, the fundamentals and principles underlying much of the Communications Act and its various amendments, especially Section 254, remain highly relevant. Ensuring universal service, protecting consumers, requiring interconnection among common carriers, and encouraging competition where feasible are just as important today as they were twenty years ago. That being said, modernizations and modifications certainly should be made to the USF program despite the fact that the fundamentals and principles still apply today. However, the Federal Communications Commission (FCC) has all the authority it needs to, for example, allow RLECs to seek USF support for consumers that choose not to take the RLEC's voice service but who want only broadband. The FCC also has the authority to update the USF contributions methodology, just like it has addressed USF distributions methodology with its 2011 *USF-ICC Transformation Order*. None of these modernizations require changes in law. However, if the Committee desires to do so, WTA would encourage the Committee to adopt language reassuring the FCC of its authority to pursue reform on these specific issues, and WTA welcomes the opportunity to go into more detail on these issues in response to future questions from the Committee.

Rural America is Different

Evaluating the success of the nation's telecommunications policies must take into account the differences between the more rural areas typically served by smaller telephone companies and the more urban and suburban areas typically served by larger companies. The objective of fostering competition in urban and suburban areas has worked well. Competition among multiple wireline carriers and multiple wireless carriers should continue to ensure that fiber and wireless broadband facilities are extended, that broadband speeds and bandwidths are increased, and that broadband services continue to be rolled out in response to customer requests and preferences.

However, competition does not ensure the same result in rural areas because of issues associated with geography and demographics as mentioned earlier. As the Committee is aware, rural areas lack the population density that encourages communications providers to build expensive infrastructure and compete for rural consumers' business. WTA's members confirm this theory. From informal surveys of WTA's membership, it has been found that, in regards to voice service, the availability of unaffiliated wireless service is inconsistent outside of the towns and away from the major highways. In some instances, such service is not even provided in the towns or on the rural highways. Even less pervasive in these rural high-cost areas are the wireless broadband speeds found in urban areas.

When it comes to fixed or wireline service options, in many urban and suburban neighborhoods customers have a choice of wireline broadband providers, but in rural areas the small RLEC is often the only terrestrial option for broadband for the vast majority of the territory it serves. Some WTA members report broadband competition from a local cable company, but when cable competition exists, its franchise area rarely extends beyond the town limits. The homes, businesses, ranches and farms outside of town rarely receive service. The lack of reliable competition in most rural areas is evidence that market forces alone cannot be relied upon to deliver communications services – basic and advanced – in rural areas that are reasonably comparable in quality and price to urban areas.

The policy of universal service is the key to the success in parts of rural America served by locally focused, rate-of-return RLECs. The principles contained in Section 254 of the 1996 Act – quality telecommunications and information (i.e. broadband) services at just, reasonable and affordable rates for all Americans; reasonably comparable telecommunications and information services in terms of quality and rates in rural and urban areas; and specific and predictable support mechanisms to advance these goals – have ensured that rural America is not faced with a digital divide. Continued adherence to these fundamentals and principles is necessary to make sure that rural areas do not fall behind.

Appropriateness of Separate Regulatory Structures

The Committee questions whether the silos contained in current law are the best method of regulating the industry going forward. When considering increased intermodal competition within the industry and alternatives to the current silos, the Committee should keep in mind that though there has been convergence, the services provided by these differently regulated competitors are not interchangeable or direct and equal substitutes.

In general, wireless communications and wireline (or fixed) services are complementary services. Notwithstanding stories about “cutting the cord,” the substantial majority of American businesses and households currently subscribe to both wireline and wireless services. More than 60% of American households subscribe to wireline voice service despite the benefits of mobility provided by cellular phones.³ In addition, most cellular phone users transfer to a local WiFi network, which is typically a wireline network with a wireless router attached, whenever possible. Wireline and wireless broadband services presently utilize different equipment and technologies and are used by customers for

³ CDC, *Wireless Substitution: Early Release of Estimates From the National Health Interview Survey, January–June 2013*, December 2013. <http://www.cdc.gov/nchs/data/nhis/earlyrelease/wireless201312.pdf>

different purposes and at different times and places. For example, a businessman may use wireline broadband service at work and at home, and wireless broadband service while traveling and commuting. These differences, as well as the trade-offs that customers are willing to make regarding things such as speed, capacity, file size, screen size and mobility, mean that wireline and wireless facilities and services will play separate but complementary roles in the future of the network.

These differences are even more acute in rural areas, where wireless services are less ubiquitous and less robust (not to mention wireless service would not work without an underlying wireline network that transports wireless calls in rural areas from towers to and from the network backbone). To illustrate this point, football, basketball, and baseball are all sports serving different entertainment purposes, but they are not interchangeable simply because they are all sports. They are complementary in that many people like all three. Similarly, wireline and wireless are communication services, but they serve different purposes and complement each other.

Likewise, there are good, historical reasons why cable companies are regulated differently than common carriers, and the reasons for this are readily apparent in rural areas. In rural areas, incumbent local exchange carriers (ILECs), both large and small, have been designated carriers of last resort in order to ensure that all people have access to telecommunications services. Cable companies, understandably, have no such obligations because policymakers have never considered television an essential communications tool. While many traditional cable companies are now providing voice service and many ILECs are providing access to video services, there is still a need for a carrier of last resort in rural and high cost areas of the country. While WTA does not presume to speak for cable or wireless carriers in regards to whether they would want to take on the role and obligations of a carrier of last resort in the future, it does not appear likely at this time, therefore the separate regulation still serves a purpose in rural areas. WTA strongly encourages the Committee to keep the different circumstances of rural areas in mind when considering regulatory silos.

Conclusion

The telecommunications fundamentals, principles and policies adopted over the years have benefited residents and businesses throughout the country. In particular, fostering competition in areas that have the demographics to support it has led to intermodal competition, while universal service policies in rural areas served by small, rate-of-return RLECs have forestalled a digital divide. In rural areas, the USF High Cost program has been an overwhelming success, helping making basic voice service nearly ubiquitous. Should similar policies be continued for the broadband and IP era, rural areas will continue to keep pace with their urban counterparts in terms of access to modern and affordable communications technologies. As it proceeds with its goal of updating the nation's communications laws, the Committee should recognize that bringing broadband to all Americans, regardless of whether they live in urban, suburban or rural areas, requires different regulatory models.

January 31, 2014

The Honorable Fred Upton
Chairman
Committee on Energy and Commerce
House of Representatives
Washington, DC 20515

The Honorable Henry Waxman
Ranking Member
Committee on Energy and Commerce
House of Representatives
Washington, DC 20515

The Honorable Greg Walden
Chairman
Communications and Technology Subcommittee
Committee on Energy and Commerce
House of Representatives
Washington, DC 20515

The Honorable Anna Eshoo
Ranking Member
Communications and Technology Subcommittee
Committee on Energy and Commerce
House of Representatives
Washington, DC 20515

Dear Chairmen Upton and Walden, Ranking Members Waxman and Eshoo:

XO Communications (XO) welcomes the opportunity to respond to the Committee on Energy and Commerce's inquiries regarding modernizing the Communications Act of 1934 (Act) as amended. XO is a facilities-based provider of telecommunications and information services serving business customers and wholesale customers in major markets throughout the United States. XO is truly a product of the Telecommunications Act of 1996, which amended the Act and sought to develop and sustain competition in local telecommunications markets. As such, it believes that competition is far superior to regulation in producing innovative, lower cost services and generating investment in infrastructure. At the same time, where competition does not exist, our communications policy should be directed towards creating the conditions where competition can flourish.

It is important for the Committee to understand that, despite any perceived shortcomings in the Act, it is an economic reality that the statute's provisions have fostered competition, innovation, and investment. Any effort to update the Act should proceed deliberately and maintain, if not enhance, the bedrock principles and provisions that have led to a dynamically competitive industry that is racing to meet customer demands, producing countless new and innovative services and investing in modern infrastructure – over one trillion dollars since 1996. Similarly, the Committee needs to keep in mind that there is a great deal of difference in how residential and business customers connect, and their needs and expectations of communications infrastructure. In response to the Committee's inquiries, XO submits that any changes to the Act should be based on the following principles:

I. The Public Communications Network Should Work For Everyone

At its core, the Act seeks "to make available...a rapid, efficient, Nationwide, and world-wide wire and radio communication service with adequate facilities at reasonable charges." The mission remains as true today as it was when it was drafted 80 years ago. Policymakers continue to have an obligation to

make the network work by ensuring that all Americans have access to communications networks that produce reliable and affordable communications services that evolve to meet consumer needs.

The Act sets forth basic elements for implementing this mission in an era where multiple providers offer services over multiple networks that are interconnected and work seamlessly to allow calls to be completed. First, despite the fact that these networks may use different technologies and despite the fact that these technologies may evolve over time, in order to ensure reliable, high-quality, ubiquitous service, the Act mandates interconnection obligations for all providers. These obligations, which are clear, predictable and transparent, have proven their value over time, are vital for universal connectivity and should continue.

The Act also properly recognizes that all network providers should be obligated to meet fundamental public interest responsibilities. These include providing access to critical public safety and emergency communications (911) services, enabling access by persons with disabilities, and ensuring Americans in higher-cost and more remote areas receive service comparable to that provided in urban areas, poor Americans receive Lifeline service, and our schools and libraries have access to quality services. Any effort to modernize the Act should seek to enhance these key societal responsibilities, and for these important features to be available, we have to ensure the network works using today's technologies or tomorrow's.

II. Markets Should Be Fully Functional

Some 40 years ago, policymakers, in response to the entreaties of new firms and consumers, began to recognize that consumers would be far better off having a choice of communications networks and service providers. Since then, our communications policy has evolved from mere regulation of providers with monopoly or market power to an affirmative effort to create and sustain competition. The results of this shift in policymaking have been nothing short of dramatic. What was once a relatively sleepy industry best characterized by "Ma Bell" is now one of our country's leading economic sectors, where cutting edge innovations are constantly brought to market and billions are invested annually.

The development of competitive communications markets, like in other similarly situated industries, is based on a sound economic – and public interest – approach. First, open and facilitate entry. Then, for each market, deregulate where competition is demonstrated to exist.

The Committee poses the question about whether structuring the Act around particular services would work for the modern communications sector. XO recognizes that the Act's service-based approach can present challenges. For instance, the same or similar voice services may or may not be subject to regulation depending on whether it is offered by a Title II carrier or an "over the top" provider. Yet, a service-based approach has a rational foundation; it has occurred because services have been generally viewed as distinct product markets. In fact, modern competition policy is premised first on defining relevant product and geographic markets, then analyzing whether sufficient competition exists to maintain competitive prices and the provision of innovative services, and finally, where competition is insufficient, adopting and implementing appropriate regulations. The Act should continue to employ that time-tested approach.

In areas where markets are not fully functional, policymakers have used an array of tools to open them so that the benefits of competition can flow and deregulation can eventually occur. This ranges from easing entry (and exit), providing wholesale access to bottleneck services and facilities and access to infrastructure essential to build networks at rates that foster competition, and ensuring cost-based interconnection. These tools need to be preserved, especially when market power exists.

Finally, XO well understands the incredible dynamism of the current communications market and the need for our communications policy to reflect this reality. That means the Federal Communications Commission (FCC) needs to more rapidly adopt rules that can open markets and facilitate competition. And, then, more rapidly retire these regulations when there is evidence competition exists and will be sustained. With market structures and technologies constantly evolving, it is more important than ever that the FCC maintain the tools necessary to be responsive to these changes.

XO looks forward to working with the Committee as these policy deliberations occur and stands ready to provide reflections upon the challenges it faces in providing service to business and wholesale customers.

Sincerely,

A handwritten signature in blue ink that reads "Patrick Thompson". The signature is written in a cursive, flowing style.

Patrick Thompson
Director, Legislative Affairs
XO Communications