MAR 17 2010

WASHINGTON

FCC's Net Neutrality Proceeding Means More Work For State Department

Reclassification could cause government to adjust recommendations

3/17/2010 02:24:57 PM Eastern

By: John Eggerton
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The FCC's actions on network neutrality, particularly if it classifies broadband as a Title II service subject to mandatory access provisions, could create work for the State Department, according to Ambassador Philip Verveer, assistant secretary of state and U.S. coordinator for international communications & information policy.

Following a luncheon speech at The Media Institute, Verveer, a former top FCC official, was asked whether that reclassification would cause the government to have to "adjust or amend" its international policy recommendation that competition, rather than regulation, was the preferred method of dealing with communications issues.

While saying the decision about what to do about network neutrality was in the hands of his colleagues at the FCC, he said the point was an important one.

"I can tell you from my travels around the world and my discussions with figures in various governments around the world there is a very significant preoccupation with respect to what we are proposing with respect to broadband and especially with respect to the net neutrality."

The FCC recognized that possibility when it launched the net neutrality proceeding back in October 2009. In announcing the proposed rulemaking codifying and expanding net neutrality principles, FCC Chairman Julius Genachowski said that "there should be no confusion on this point, at home or abroad. This commission fully agrees that government must not restrict the free flow of information over the Internet.

But Verveer said that the proceeding "is one that could

be employed by regimes that don't agree with our perspectives about essentially avoiding regulation of the Internet and trying to be sure not to do anything to damage its dynamism and its organic development. It could be employed as a pretext or as an excuse for undertaking public policy activities that we would disagree with pretty profoundly."

He says he has tried to assuage his counterparts' concerns over the proceeding. "But [the concern] is there, and depending upon what happens with respect to the net neutrality proceeding, it may well end up having an effect that will cause us at the state department to have to engage in a lot of discussions with our foreign counterparts."

The thrust of Verveer's brief speech, whose brevity he said was in inverse proportion to the importance of the subject, was the impact of cloud computing on privacy and intermediary liability.

He called on his audience, representing trade associations and media companies, to engage in the dialog. The old rules and protections, he suggested, were written in a point-to-point world where it was easier to determine when information crossed boundaries. Now, he said, the explosive growth in Internet use and cloud computing and storage requires new thinking and likely new guidelines. But he also put in a pitch for retaining and pitching to the world the current protections for ISP's and others from liability for the third party content that they host or post on the net, saying that has spurred innovation and creativity.

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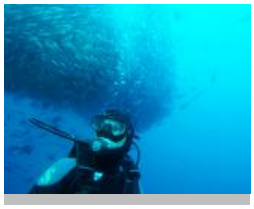

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Public Attitudes Regarding the Federal Communications Commission's Approach to Dealing with the Proposed Net Neutrality Issue

Key findings from a telephone survey
*among a nationwide cross section of 800 adults.**
Conducted February 13-15, 2015
by Hart Research Associates

* Margin of error: ±3.46 percentage points at the 95% confidence level

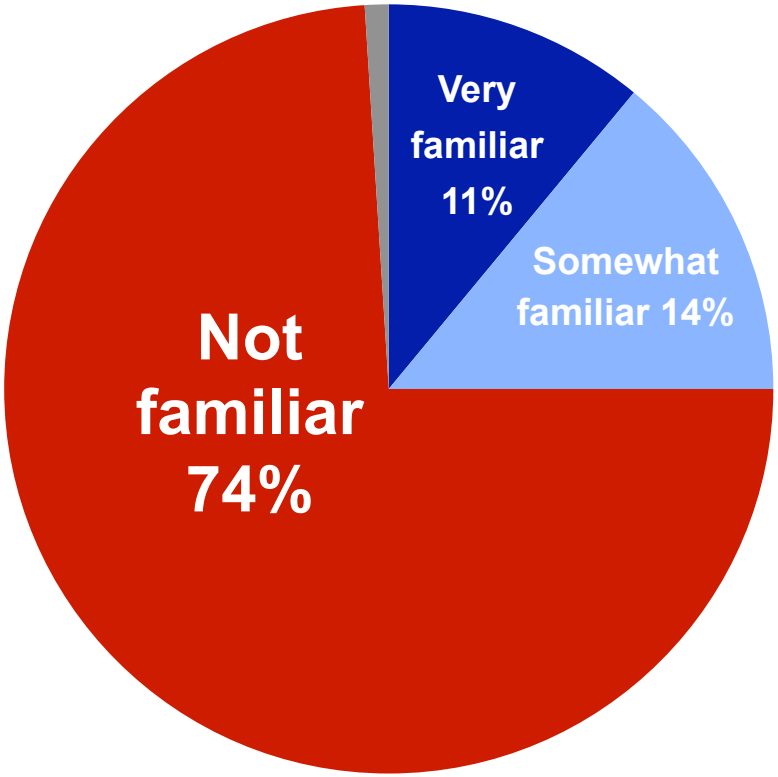
Methodology

- From February 13 to 15, 2015, Hart Research Associates conducted a nationwide survey on behalf of the Progressive Policy Institute (PPI). The survey was conducted by telephone (both landline and cell phone) among a cross section of 800 adults age 18 and over.
- The data's margin of error is ±3.46 percentage points for 800 adults at the 95% confidence level. Sample tolerances for subgroups are larger.

One in four Americans is familiar with Net Neutrality.

Are you familiar with the term Net Neutrality and do you know what it refers to?

All adults nationwide



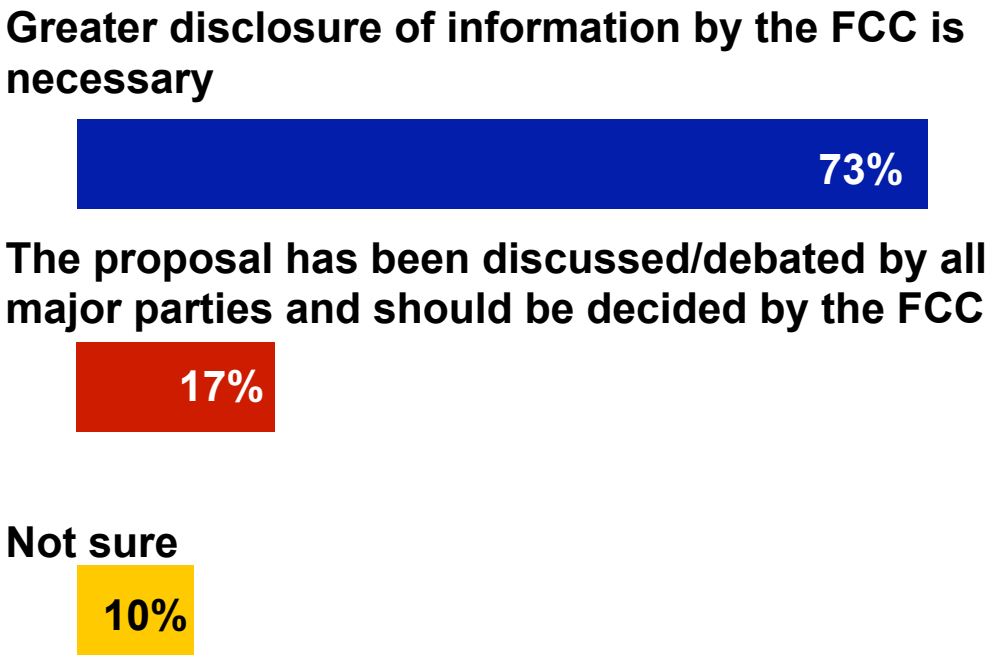
	Very/somewhat familiar
All adults	**25%**
Men	37%
Women	14%
Income under $50K	13%
Income $50K to $75K	30%
Income over $75K	37%
High school grad/less	11%
Some college	24%
College grads	37%
Democrats	25%
Independents	25%
Republicans	27%

The large majority of Americans wants greater disclosure of the details of the FCC's Net Neutrality proposal.

Information prior to question: One principal concern raised by some people is that ONLY the five members of an unelected Federal Communications Commission, or FCC, will decide the future of the Internet without providing an opportunity for the public to see and understand the regulations prior to a vote. Opponents of the Internet regulation plan to seek public disclosure of the exact rules and specific regulations prior to the FCC's official vote. These groups say that, given the importance of the Internet in the daily lives of Americans, the FCC should provide greater information about the proposal to regulate the Internet to better understand its costs and benefits.

Do you think greater disclosure is needed or that the FCC should decide?

All adults nationwide

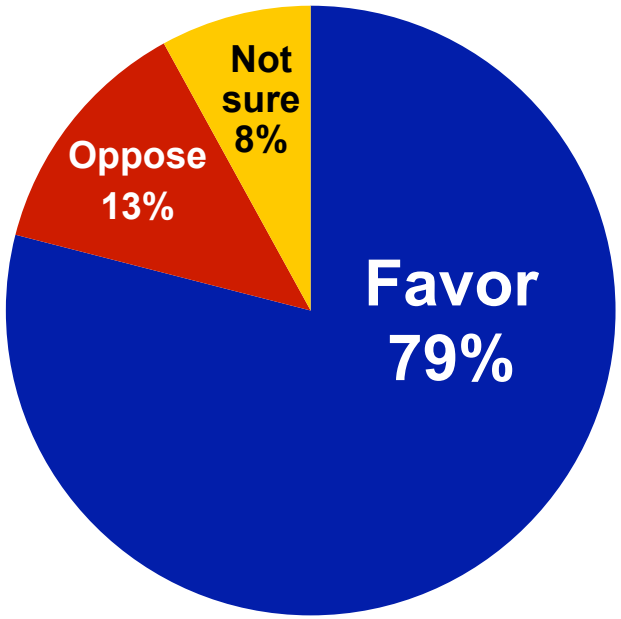


	Greater disclosure	FCC decide
Men	73%	18%
Women	73%	17%
Income under $50K	68%	21%
Income $50K to $75K	74%	16%
Income over $75K	79%	14%
High school grad/less	69%	21%
Some college	75%	15%
College grads	76%	17%
Democrats	72%	16%
Independents	73%	19%
Republicans	78%	15%

Nearly eight in ten Americans favor public disclosure of the exact wording and details of the FCC's Net Neutrality proposal before the FCC votes on it.

Would you favor or oppose that the exact wording and the details of the proposal to regulate the Internet be made public before the Federal Communications Commission is allowed to cast its final vote on the issue of Net Neutrality?

All adults nationwide

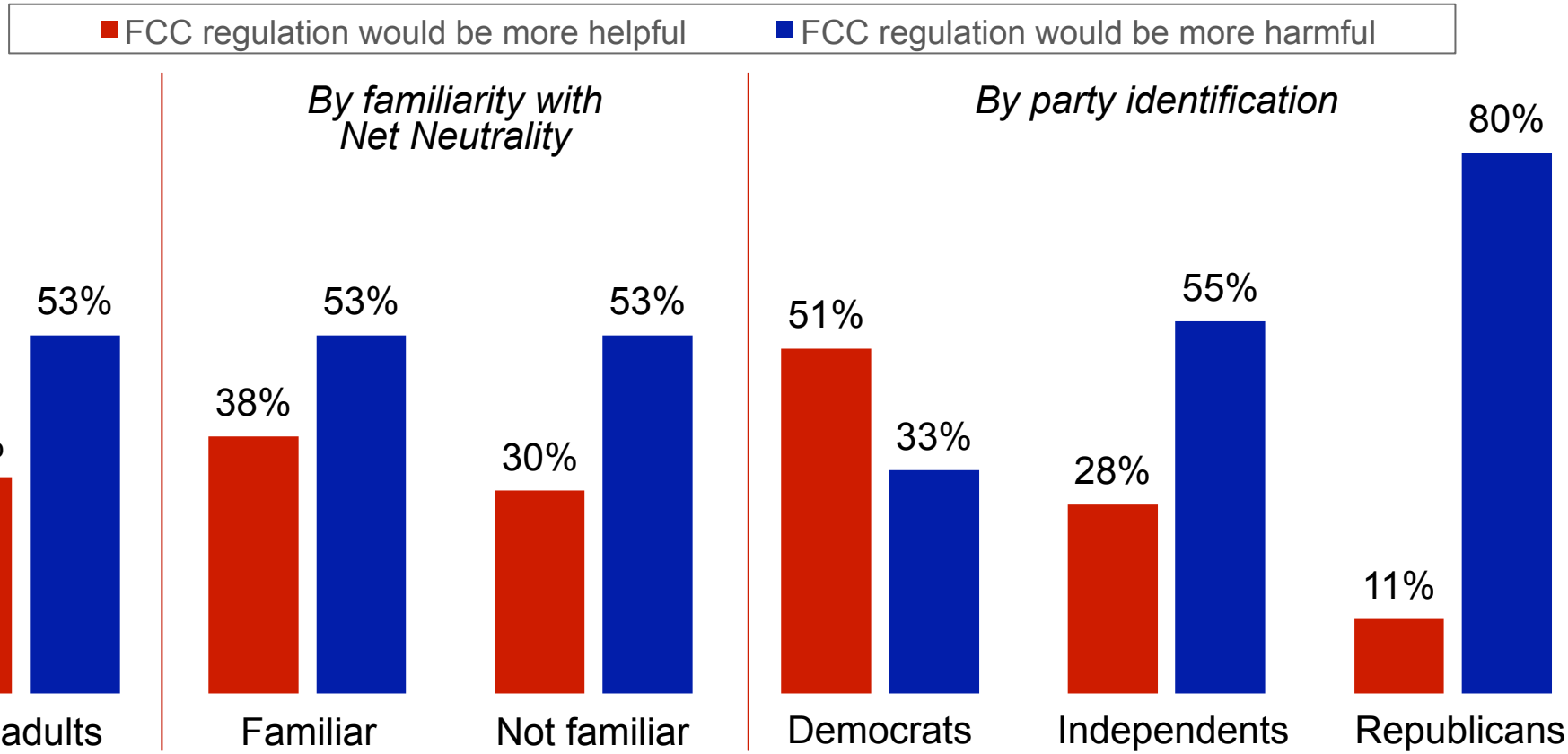


	Favor	Oppose
Men	81%	12%
Women	76%	14%
Income under $50K	76%	16%
Income $50K to $75K	77%	9%
Income over $75K	83%	10%
High school grad/less	76%	14%
Some college	77%	16%
College grads	84%	8%
Democrats	79%	13%
Independents	77%	17%
Republicans	82%	8%

Only one in three Americans thinks that regulating the Internet like telephone service will be helpful.

Information prior to question: Over the past 22 years, the Internet has developed and grown into what we have today, with little government oversight, and has resulted in major private investment by the nation's wired and wireless providers in modern, high-speed broadband networks. President Obama is now proposing that the federal government regulate and oversee the Internet similar to how it oversees the electric or gas public utility industry. Specifically, President Obama proposes allowing the FCC, for the first time, to regulate the Internet with the same authority it has used in the past to regulate monopoly telephone service.

What is your view of FCC regulation of the Internet?



http://www.usatoday.com/story/opinion/2015/02/06/fcc-technology-net-neutrality-technology-congress-washington-column/22762691/

Wheeler move latest blow to bipartisan Internet: Column

Bruce Mehlman and Larry Irving 3:43 p.m. EST February 6, 2015

Partisanship will only stunt progress on internet

(Photo: Alex Wong, Getty Images)

While many things in Washington seemed broken over the past few decades, tech policy has not been one of them. Regardless of which party controlled Congress or the Federal Communication Commission (FCC), technology issues enjoyed civil discourse, bipartisan collaboration and thoughtful compromise. Partisanship stopped at the network's edge.

Until now.

As thought leaders and policy gurus convened last month for the annual "State of the Net" conference, they faced a sobering reality: The State of the Net is imperiled. By Washington. The borderline theological debate over "net neutrality" is breaking the rules and threatening an approach that served our nation well. Policy deliberations once decided by non-partisan engineers have been hijacked by the Occupy Wall Street versus Tea Party legions. Battle is joined, lobbyists engaged, grassroots activated.

And the war reached new heights this week, as FCC Chairman Tom Wheeler proposed regulating our most advanced companies based on the rules designed for our oldest.

For a majority of innovators and entrepreneurs around the nation, partisan paralysis is unwelcome news, likely to spawn years of litigation, cloud investment certainty and potentially slow our economy's most powerful engine. For objective policy analysts, the partisan intensity surrounding the net neutrality debate is unnecessary and counterproductive. Bad politics is making for bad policy.

USA TODAY

Michael Powell: Stop the Internet Iron Curtain

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It has not always been thus. For example, presidents from both parties promoted federal investment in basic research that ensured our research universities' global preeminence and launched the semiconductor, cellular and Internet industries, among others. Bipartisan high-skilled immigration policies encouraged the best and brightest to study here, invent here and create great jobs here. Collaborative support for patent laws helped craft the critical balance needed for intellectual property to flourish, while bipartisanship enabled the world's first incentive for private research — the highly-effective R&D tax credit passed in 1981 — subsequently emulated by most developing economies.

A productive, bipartisan answer to the net neutrality challenge is staring us in the face. Congress makes the laws, and Congressional action here can be bipartisan, focused and effective, ensuring the Internet remains "fair and open." For conservatives, the legislation will ensure that our most advanced technologies are not regulated like 20th century utilities and that FCC authorities are clearly identified by Congress. For liberals, such legislation will explicitly empower agencies to prevent companies from blocking, degrading or placing anti-competitive restrictions on Internet access without risk of yet-one-more legal challenge to their authority. Consumers gain protections, while businesses enjoy greater regulatory certainty. Only the lawyers lose.

America's historic leadership in high technology innovation and entrepreneurship is more than the product of divine providence or cultural exceptionalism. Enlightened policies and regulatory humility have proved essential elements to reward risk-taking and encourage investment and invention. We face many challenges ahead, demanding smart policy. We need more spectrum to accommodate ever-accelerating wireless use and the Internet of Things. Network operators need greater flexibility to handle the exponential waves of new data. We need a united front against growing digital protectionism and assaults on the market-based multi-stakeholder model. Too few Americans possess the digital literacy to thrive in the knowledge economy, while too many cyber criminals remain unchecked.

It is time to return partisanship to the network's edge. There is important work to be done.

Bruce Mehlman served as Assistant Secretary of Commerce for Technology Policy under President George W. Bush. Larry Irving served as Assistant Secretary of Commerce for Telecommunications under President Bill Clinton. They co-founded the Internet Innovation Alliance.

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http://fortune.com/2015/02/18/an-open-internet-how-new-regulations-hurt-both-sides-of-the-debate/

An open Internet: how new regulations hurt both sides of the debate

- by
- Christopher S. Yoo

February 18, 2015, 10:35 AM EST

The U.S. was one of the few countries not to reflexively regulate the Internet like the nation's monopolistic telephone system, but the FCC's new proposals would break with this tradition.

Later this month, the Federal Communications Commission (FCC) is expected to vote on new open Internet rules, bringing the decade-long debate over network neutrality and the future of the Internet to a key turning point. Although the FCC's proposal is intended to protect content providers, such as Netflix NFLX 0.64% , against potential anticompetitive actions of Internet Service Providers, such as Comcast, a closer look reveals that it creates risks for both sides.

One of the most distinctive aspects about U.S. Internet policy is the decision not to impose old regulatory burdens on this new technology. The U.S. was one of the few countries not to reflexively regulate the Internet like the nation's century-old telephone system, which essentially operated like a monopoly. The result was to facilitate a vibrant new industry offering a torrent of new applications and services on advanced networks that are the envy of the rest of the world.Furthermore, among all U.S. companies, network providers have led the way in creating jobs and investing in America's future. In fact, two leading Internet service providers, AT&T T 0.59% and Verizon VZ 0.92% , outpaced all other U.S. nonfinancial companies in capital spending over the past several years, and a third network provider, Comcast CMCSA 1.65% , placed seventh, according to a 2014 report by the Progressive Policy Institute. Together, the broadband industry has created more than 860,000 jobs. For comparison, European broadband providers, who are subject to telephone-style regulation, have invested less than half as much per household as their American counterparts. Statistical analysis finds a significant correlation between these low investment levels and regulation.

The FCC's proposals would break with this tradition; it would reclassify consumer broadband Internet as a utility, banning Internet Service Providers from charging content providers for better service. The risks for network providers are apparent. The effect of telephone-style regulation would be to limit the packages that networks can offer and threaten providers that deviate from the status quo with possible fines. For example, it would endanger popular new plans such as T-Mobile's Music Freedom, which allows customers to stream music without counting that traffic against their data caps. The imposition of such intrusive government oversight would mark a return to command-and-control style regulation that has long been discredited and would impede the spirit of flexibility and innovation that has characterized the Internet since its inception. It would also potentially open the door to another layer of regulation by the states.

Although the FCC has promised to "forbear" from enforcing certain aspects of telephone-style regulation on the Internet, the agency has yet to develop a coherent framework to guide the exercise of this authority. Moreover, any such forbearance would be a product of bureaucratic largesse and would be subject to reversal at any time. The uncertainty created by such an environment would threaten to dampen incentives to innovate and invest.

What is less widely recognized is the risks that such regulations would pose for providers of content and applications, the supposed beneficiaries of open Internet rules. For example, the privacy restrictions that apply to telephone networks (which were developed for a different context and are widely regarded as outdated) may undermine the business models on which many Internet applications are based. In addition, although the FCC does not plan to tax broadband access at this time, it reserves the right to do so in the future. As customers continue

to abandon the fixed-line telephone service that currently supports the universal service fund, the pressure to do so will likely become irresistible.

Furthermore, while previous rules only restricted how traffic was handled *within* a network, the new rules would extend regulation to equalize how traffic is handled *between* networks. This would impose unprecedented bureaucratic oversight on the more than 45,000 networks comprising the Internet, which currently interconnect through bilateral commercial agreements. Parties who think they could get a better deal through regulation than through bargaining will be tempted to hold out. Moreover, network providers may hesitate to extend better terms out of fear that those terms will become a benchmark that will limit all future negotiations.

Finally, supporters of the current proposal must face the danger that the prohibitions on discrimination that they so desire may be rolled back in the future. The last two attempts to enforce network neutrality were overturned by the courts for exceeding the authority that Congress had granted the FCC. The current rules bear considerable risk of suffering the same fate. In addition, a future FCC under a different Administration could simply reverse the rules, and the U.S. Supreme Court has already ruled that no legal barriers would prevent them from doing so. Thus, even those who favor the FCC's proposed rules must acknowledge the risk that the current efforts may prove to be ephemeral.

The rules would be made permanent and all uncertainty about regulatory authority would be eliminated if Congress were to enact compromise legislation establishing network neutrality rules. Several such bills have already been submitted, and the sponsors of those proposals have indicated their willingness to negotiate. For opponents of network neutrality, legislation would eliminate the overhanging threat of the hydraulic expansion of regulation sometime in the future. For supporters, enactment of such a law would ensure the rules could not be reversed by judicial challenge or a subsequent FCC.

The best outcome would thus be for every part of the Internet industry to work together to find common ground. The leaders of both political parties have the chance to act like statesmen and take steps to ensure that the vibrant atmosphere that has promoted innovation and investment so effectively can continue to thrive. We can only hope that they seize the opportunity.

Christopher S. Yoo is the John H. Chestnut Professor of Law, Communication, and Computer & Information Science at the University of Pennsylvania. He is also the Founding Director of the university's Center for Technology, Innovation and Competition.

POLICY

ACA, NCTA Push Pole Position

Seek FCC Action On Attachments Before Title II Vote

2/20/2015 2:00 PM Eastern

By: John Eggerton
Follow @eggerton

The National Cable & Telecommunications Association and the America Cable Association have both called on the FCC to act on a petition on pole attachment rates before the Feb. 26 vote to reclassify ISPs as telecommunications services under Title II.

Cable operators argue that if the agency does reclassify broadband access under Title II regulations, as FCC chairman Tom Wheeler has said it will do, that could **translate into higher pole-attachment rates**, especially for smaller and medium-sized operators.

The telecom rate was traditionally higher than the cable rate. The FCC voted in 2011 to harmonize the rates, but the opportunity remained for pole owners to charge higher rates under some circumstances. The NCTA, Comptel and others sought to resolve that situation in a petition for reconsideration filed back in 2011, asking the FCC to insure that broadband providers can attach at the lowest rate available under FCC rules.

NCTA and ACA argue that reclassifying as a telecom without granting the petition would leave them exposed to hundreds of millions of dollars in increased pole attachment fees, which is why they want FCC action on the petition before the vote, and after almost four years in the pipeline.

They say avoiding that possibility just requires the FCC to grant the petition and eliminate the gap between the cable and telecom rates.

"The cable industry has always been a leader in broadband deployment and the commission's success pole attachment policies have been a significant factor in that success," ACA president Matt Polka and NCTA president Michael Powell said in a letter to Wheeler and the other commissioners. "The upcoming reclassification of broadband needlessly jeopardizes this successful policy and potentially hinders additional deployment, particularly in rural areas."

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Impact of "Title II" Regulation on Communications Investment

A Comparison Between the United States and the European Union

Fred B. Campbell, Jr.

Executive Director, Center for Boundless Innovation in Technology, and
Adjunct Professor of Law, University of Nebraska Space, Cyber, and Telecom Program

Prepared for the Internet Innovation Alliance

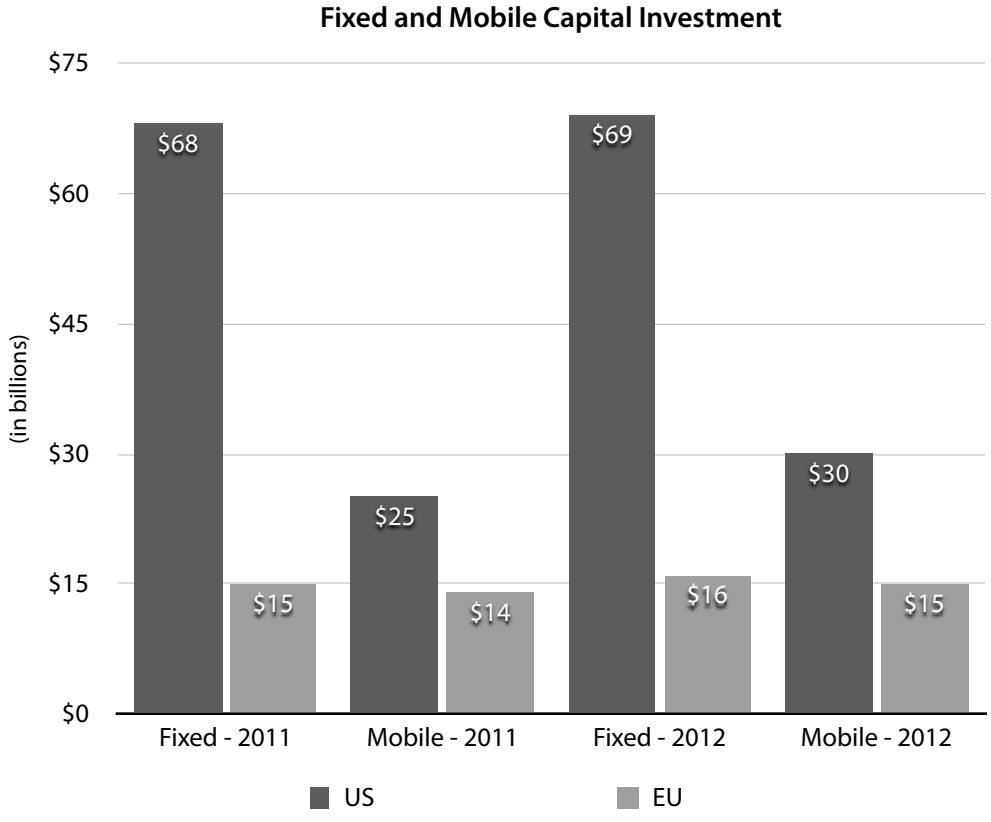
Executive Summary

Title II advocates have long argued that the Title II-style approach to broadband policy adopted by the European Union (EU) in 2002 is superior to the deregulatory approach the United States (US) adopted that same year. "If only our broadband markets could be like Europe's,"[1] they yearn. They may get their wish next month, when many expect the Federal Communications Commission (FCC) to adopt Title II regulations like those applicable in the EU.

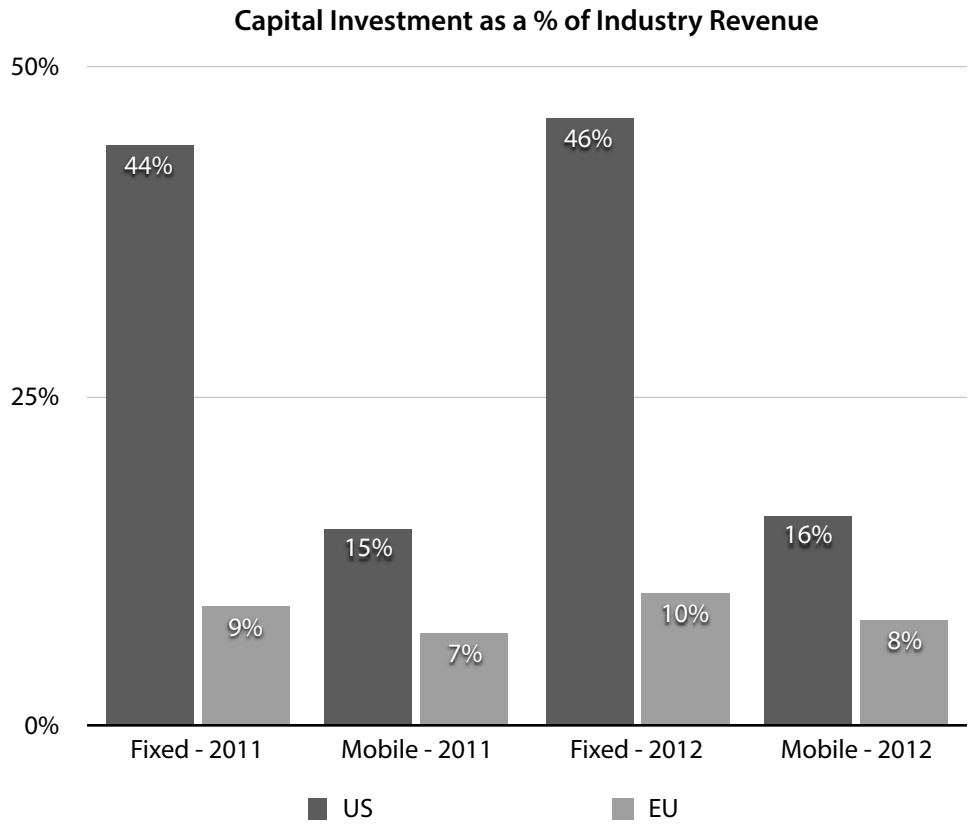
That would be a mistake. Comprehensive data covering 2011 and 2012 reveal that ***the deregulatory approach has produced significantly more capital investment, competition, and broadband coverage in the US***. Even the European Commission (EC) has acknowledged its Title II-style regulatory approach is the reason European broadband networks have fallen behind those in the US.

More Capital Invested in the US

The data show that fixed (e.g., wireline) operators in the US are investing four times more capital in their networks as their counterparts in the EU and that US mobile operators are investing up to two times more.



These enormous disparities in total capital investment cannot be explained by differences in revenue. EU network operators have generally produced more revenue than their counterparts in the US while investing less in their networks. As a result, the relative magnitudes of investment disparities between US and EU operators are essentially the same when capital investment is measured as a percentage of industry revenue.



US Has More Competition and Next Generation Broadband Coverage

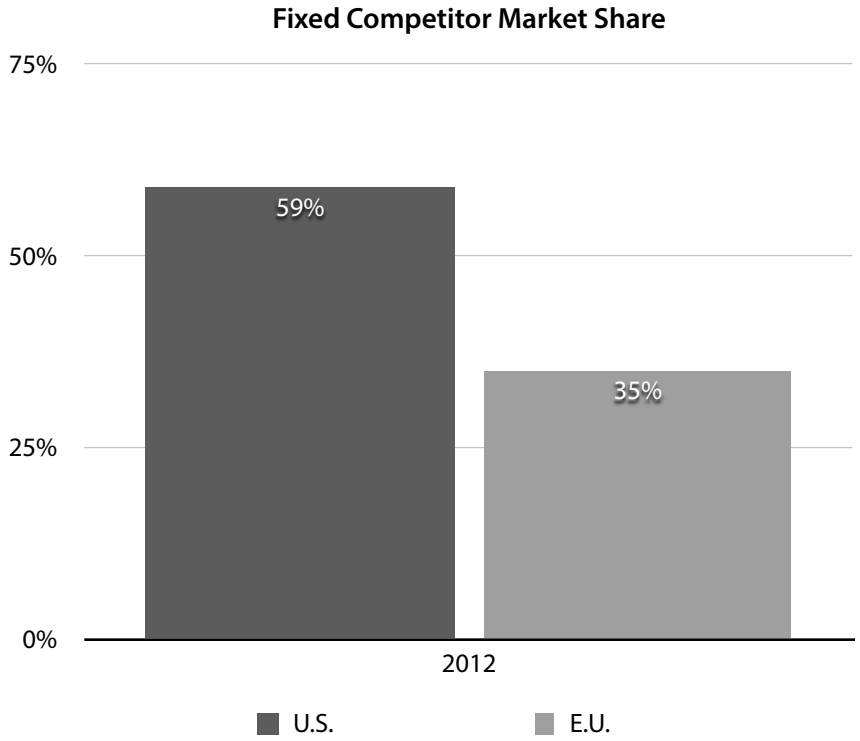
Higher levels of capital investment in the US correlate with higher levels of competition and next generation broadband coverage.

Fixed

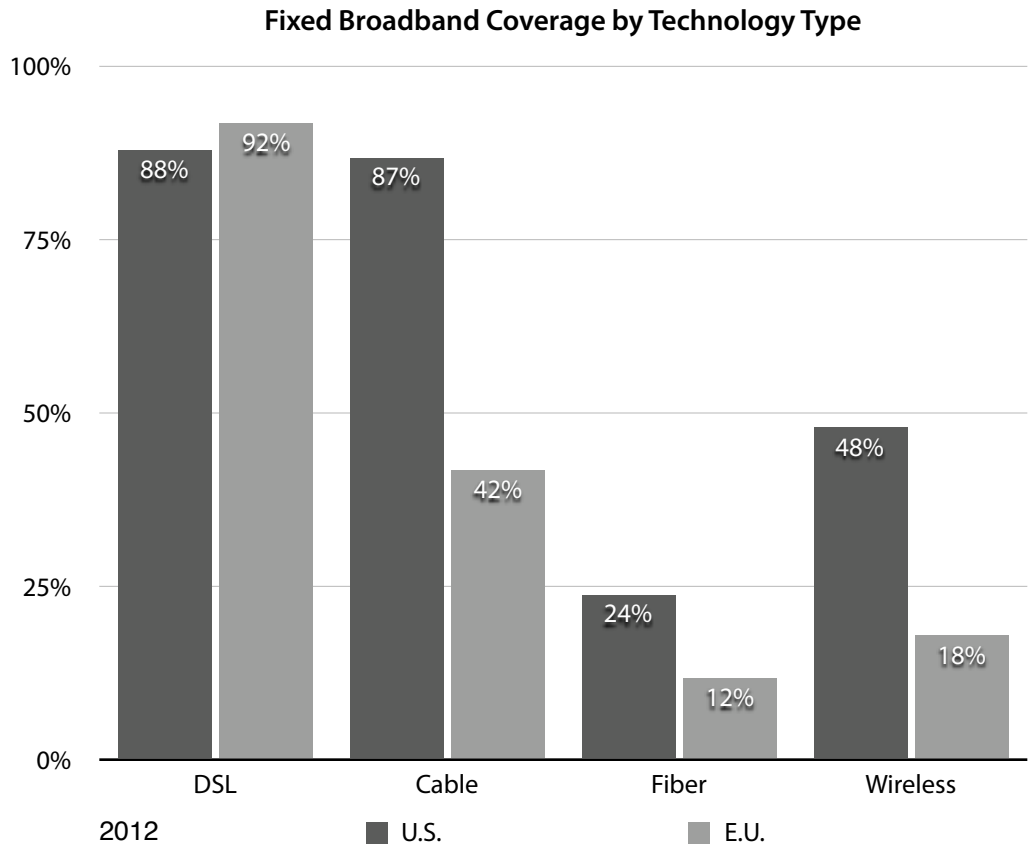
Wholesale access regulations are integral to the EU's Title II-style regulatory approach. These regulations are intended to promote telephone competition by lowering economic barriers to entry. Regulatory proponents have long theorized that this government subsidized approach to compet-

itive entry would result in greater competition than the deregulatory approach implemented in the US.

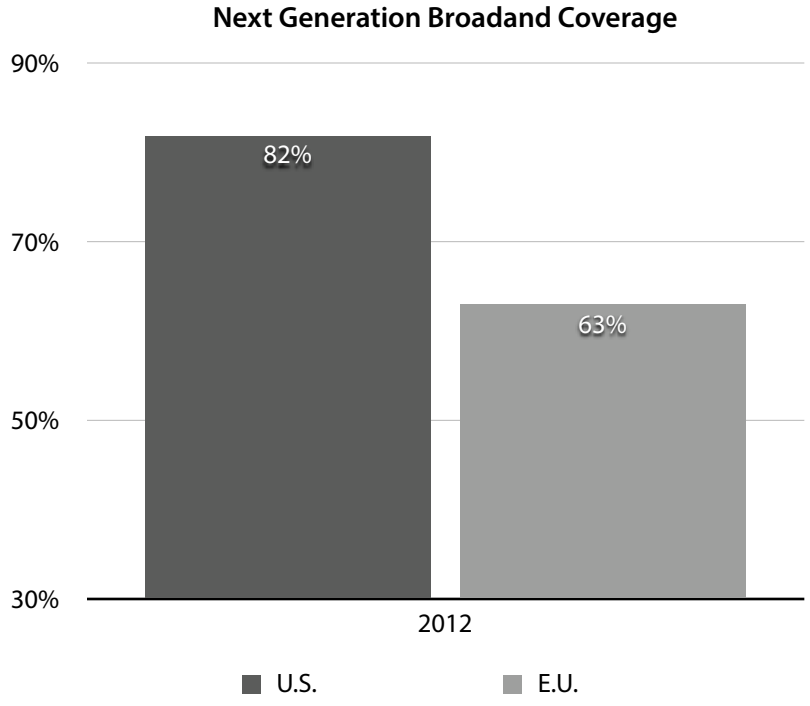
Reality, however, has produced different empirical results. In 2012, competitors held a larger share of the local telephone market (59%) in the US than incumbents (41%), and 92% of US households are in zip codes with access to ten or more non-incumbent telephone service providers. In contrast, EU incumbents retained a presumptively dominant 65% share of the local telephone market with competitors holding only 35%.



Facilities-based broadband competition is also greater in the US than in the EU. The vast majority of US households have access to multiple facilities-based fixed broadband operators. The data show that, in 2012, 76% of US households were located in census tracts with access to three or more providers of fixed broadband access offering download throughput of at least 3 Mbps. A majority of households in the EU lack access to any facilities-based broadband alternative to the incumbent network operator, because competitive cable, fiber to the home, and fixed wireless networks operators in the EU have deployed significantly less infrastructure and provide less broadband coverage than their counterparts in the US.



The US also has significantly greater access to fixed next generation broadband networks — i.e., networks that offer downloads speeding exceeding 30 Mbps (EU) to 50 Mbps (US).



Based on its own analysis of these data, the EU government concluded that "***investments in high speed broadband are taking place more quickly in parts of Asia and in the United States.***"[2]

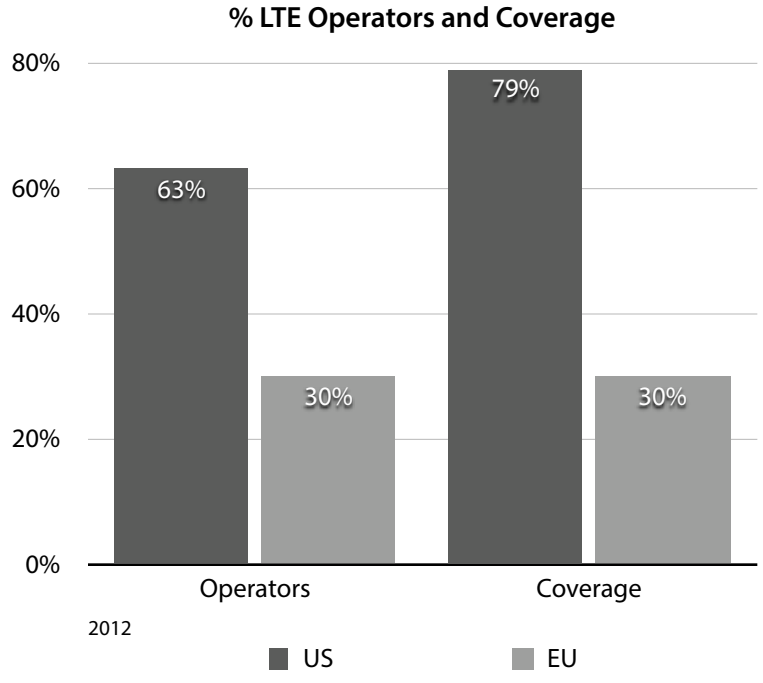
Mobile

The data also reveal similar disparities in competition and coverage between US and EU mobile networks.

The EU averages fewer than four facilities-based mobile operators per market (typically 3-4) while the US has five or more facilities-based mobile operators in most markets.

US mobile operators have been much more aggressive in upgrading their networks to the LTE (long term evolution) standard, a fourth generation (4G) technology that enables next generation mobile networks to provide voice, video, and high speed data services. As late as 2012, nearly half of EU states (twelve) had no LTE coverage, and only 30% of EU mobile operators had begun deploying LTE. During that time, half of the nationwide mobile operators and three of the four multi-regional mobile operators in the US (63% overall) had begun deploying LTE.

LTE coverage in the US was also more than double that in the EU, with LTE covering at least 79% of the US (population) compared to only 30% of the EU (households).



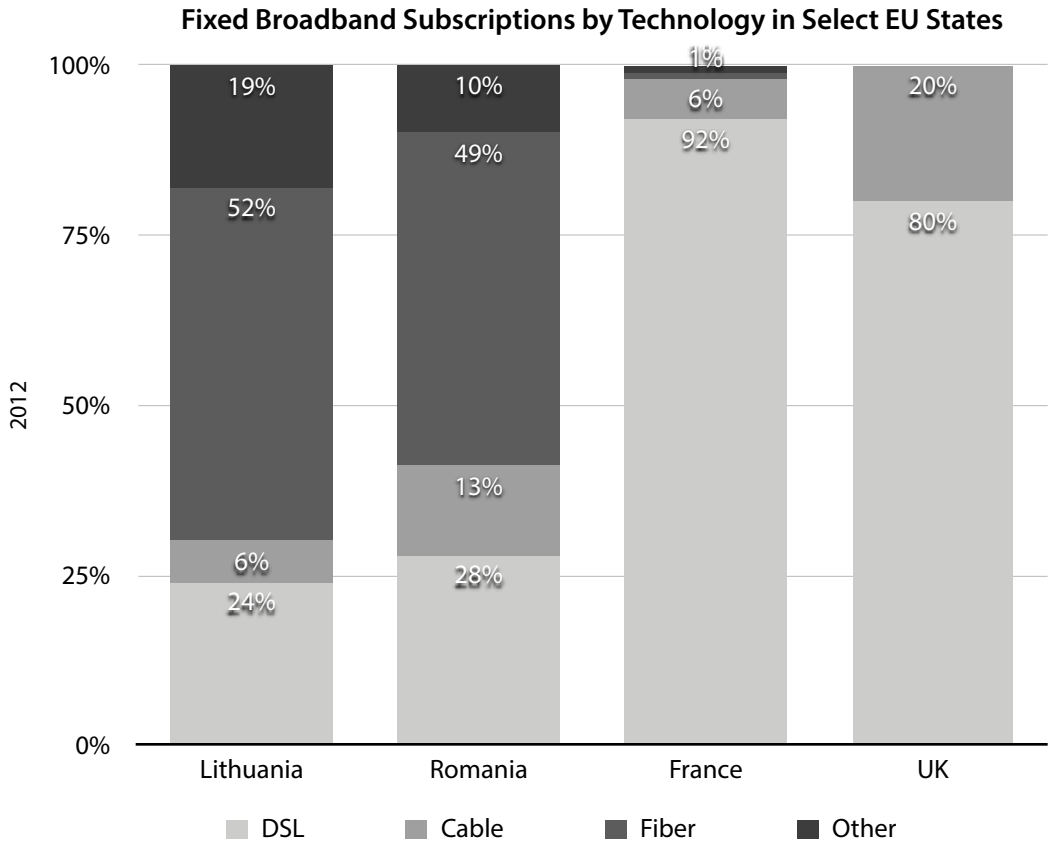
The gap was smaller, however, for older third generation (3G) network coverage, with the EU at 96% and the US at 99.5%.

Title II-Style Regulation Is the Reason the EU Fell Behind in Broadband

The lower levels of capital investment, competition, and broadband coverage in the EU are directly attributable to its Title II-style regulatory approach. In 2013, the EC acknowledged that its regulatory policies are the reason that investments in high speed broadband are taking place more quickly in the US and noted that Europe must adopt investment-friendly broadband policies in order to maintain its global competitiveness. To encourage greater investment in next generation broadband networks, the EC recommended that national regulatory authorities stop imposing regulated wholesale access prices on next generation networks. It concluded, "If wholesale access price obligations were imposed on the access to fibre networks the scope for reaching these win-win [private investment] solutions would be severely reduced"[3] — the same conclusion the US reached back in 2002, when it exempted cable broadband services from Title II regulation.

A comparison of EU states illustrates the point. The EU notes that facilities based competition is strongest where new entrants' presence in the wholesale access market for DSL is marginal. In Bulgaria, Romania, Latvia, Malta, Estonia and Lithuania, there is virtually no competition in the DSL market, but there is strong facilities-based competition. However, in states that have embraced aggressive wholesale access regulations — e.g., France and the UK — new entrants have the majority of DSL subscriptions and there is virtually no facilities-based competition. The vast majority of new entrants' DSL subscriptions are provided by companies who have chosen to lease incumbent telephone facilities at regulated rates rather than build their own network infrastructure.

For example, 92% of French broadband subscribers have basic DSL (the French government is the largest shareholder in the incumbent DSL network) while 52% of Lithuanian broadband subscribers enjoy high-speed fiber to the home connections.



It is particularly ironic that, shortly after the EC recommended relaxing its Title II-style approach to broadband regulation in order to be more like the US, the FCC began considering whether to impose Title II regulations in the US like those that failed the EU.

The FCC should continue the successful US approach to broadband regulation first adopted in 2002, not reverse course. The EU experience has demonstrated that Title II regulation is an anathema to investment in next generation broadband networks — and that the US had it right all along.

Introduction

Advocates for regulating broadband Internet access under Title II have relied heavily on the emotional pull of a mythical narrative to generate enthusiasm for public utility regulation.[4] In this broadband myth, the Federal Communications Commission (FCC) fell from grace in 2002, when it exempted broadband services from common carrier regulation under Title II.[5] The myth makers say we can return to our broadband Shangri-La only if the US applies Title II to broadband.[6]

It is an appealing, but false, narrative. Its falsity is demonstrated by empirical evidence comparing the development of broadband in the US with the EU. This comparison is particularly enlightening, because the EU embarked on applying Title II-style common carrier regulation to broadband services the very same year the US began deregulating them.

The most recent comprehensive data produced by the EU and US governments reveals the truth: ***The deregulatory approach to broadband adopted by the US has produced significantly more capital investment, competition, and broadband coverage than the Title II-style approach adopted by the EU.***

The data indicate that the significantly lower levels of capital investment, competition, and broadband coverage in the EU are attributable to its Title II regulatory approach. Last year, the EU government itself acknowledged that investments in high speed broadband are taking place more quickly in the US and concluded that EU regulatory policy was to blame.[7] The EU determined that Europe must adopt investment-friendly broadband policies in order to maintain its global competitiveness.

Ironically, the US is poised to go in the opposite direction. The FCC is expected to impose Title II regulation on broadband providers when it votes on net neutrality rules in February.[8]

This paper concludes that the US should maintaining its current, deregulatory approach to broadband. The European experience with Title II-style regulation demonstrates that imposing common carrier obligations on broadband would slow investment in

next generation networks, harm competition, and limit coverage.

This paper presents a more detailed analysis in three primary parts: (1) The first part provides an overview of Title II-style common carrier regulation and the primary differences between the US and EU approaches to broadband regulation; (2) part two analyzes data regarding demographics, capital investment, competition, and broadband coverage in the US and EU during the years 2011 to 2012; and (3) part three discusses the relationship between the data and the different regulatory approaches in the US and EU.

Common Carrier Regulation

Common carrier regulations (known as Title II in the US) are typically applied to one or more communications market segments:

1. ***Retail*** services provided to end users (e.g., residential or business telephone services).

2. ***Wholesale*** services provided to other carriers. This category includes (1) unbundled access to network elements (in which an incumbent carrier is required to lease its infrastructure to competitors on an *à la carte* basis) and (2) resale of communications services (in which an incumbent carrier must sell its complete service to competitors who can then repackage it under their own brand and offer it to consumers).

3. ***Interconnection*** services related to the interconnection of networks and exchange of traffic between carriers. This category includes (1) payments between carriers for the origination or termination of traffic (intercarrier compensation); and (2) collocation (in which an incumbent carrier is required to permit competitors to place their equipment on the incumbent's property).

During the monopoly era (1930s to 1980s), common carrier regulations were aimed primarily at retail communications services. The goal was to promote telephone subscribership (or "universal service") while ensuring that retail telephone rates were reasonable and non-discriminatory. Government price regulation through tariff filings (in the US) or government ownership of the telephone system

(in the EU) were the chosen means of accomplishing this goal.

After competition in communications markets proved sustainable and capable of producing reasonable rates without price regulation or government ownership,[9] policymakers shifted their focus toward promoting competition by removing regulatory and economic barriers to new entry in communications markets with dominant incumbents (which included the privatization of government owned networks in the EU).[10]

This new, competitive approach to common carrier regulation removes most regulatory barriers outright and attempts to reduce economic barriers to entry by imposing wholesale access and interconnection regulations on incumbent operators.[11]

In the 1990s, both the US and the EU embraced competition as the primary way to protect consumers while promoting investment and innovation in communications networks. And, at least initially, both embraced interconnection and wholesale access regulations as a way to promote competition in local telephone and broadband markets. Their approach remained similar until 2002, a watershed year in which US and EU broadband policies diverged.

US Experience

The US pioneered the wholesale access approach to telephone regulation in the Telecommunications Act of 1996,[12] which created a "novel ratesetting [methodology] designed to give aspiring competitors every possible incentive to enter local retail telephone markets, short of confiscating the incumbents' property."[13] At the time, policymakers believed that mandating unbundled network access at "forward looking" rates would accelerate the construction of new facilities by competitors.[14]

By 2002, however, the US experience had disproved this hypothesis.[15] "At the local level, relatively little new facilities investment by CLECs took place."[16] Government inducements to market entry had instead encouraged excessive market speculation and outright accounting fraud.[17]

Former Chairman Michael Powell recounted the "devastating results" of this speculation in his testimony before Congress after WorldCom, once the second largest telecommunications company in the world,[18] declared bankruptcy:

> Talk of the internet doubling every 100 days, infinite bandwidth, and 'Internet time' dominated the pages of magazines. Investors, too, bought into and fed the hype—literally—as they flooded the market with cheap capital that was consumed by thousands of companies.[19]

When this unsustainable bubble popped, approximately $2 trillion of market value was erased, the communications sector was saddled with nearly $1 trillion in debt, and 500,000 people in the US lost their jobs.[20]

The US response to this catastrophe was swift and decisive. In a series of competition and classification decisions beginning in 2002, the FCC exempted all broadband services from Title II regulation.[21]

The US had learned a valuable lesson from the failure of its wholesale access regulations: A "minimal regulatory environment"[22] is the best way to "encourage investment in next-generation network architecture"[23] and promote facilities-based competition in broadband services.[24]

EU Experience

When the EU revamped its communications policies in 2002,[25] it took the opposite approach: It decided to apply Title II-style regulations to broadband and telephone services alike, including wholesale access regulations.[26]

The EU adopted a Title II-style approach, despite its failure in the US, because European policymakers and incumbent telephone companies were often one and the same.

In the US, the largest telephone monopoly (i.e., the "Bell System") was privately-owned. When the US sought to introduce competition in the telephone market, the government simply filed an antitrust lawsuit against the private company in court.[27] Because the US government did not have an ownership interest in the company, it had little incentive to protect the Bell System from facilities-based competition.

In Europe, however, most telephone monopolies had traditionally been owned by their na-

tional governments and were often integrated into governmental administrative systems.[28] Though some European states had fully privatized their telephone monopolies by the 2000s,[29] several of the largest states had not. For example, the German government owned a 60% voting interest in Deutsche Telekom AG (the German telephone incumbent) as late as 2001,[30] and the French government is still the largest shareholder in Orange SA (the French telephone incumbent).[31]

Government ownership posed formidable political and legal barriers to introducing facilities-based competition in Europe: National governments viewed the public telephone monopoly as an important revenue source, and antitrust authorities lacked the ability to sue their own administrations to force government divestiture.[32] In many EU states, this created "a situation which allowed for hardly anything else than service based competition in this field."[33]

EU policymakers also believed that DSL provided through existing copper telephone lines would "play a key-role in the years to come in the development of broadband services."[34] This belief focused European broadband regulation on incumbent telephone networks rather than the deployment of next generation network facilities.

For these reasons, the EU concluded that mandating wholesale access to telephone networks would be "the most appropriate means to deliver broadband services relatively cheaply, rapidly and efficiently" in 2002[35] — the same year the US determined that deregulation would better accomplish the same result.

Broadband Regulation

As a result of their divergent experiences and views with respect to next generation networks, the US and EU approaches to interconnection and wholesale access regulations have differed significantly over the last decade.[36]

Retail Price Regulation

During the period covered by the data in this report, both the US and EU generally regulated retail rates for local telephone service.[37]

Interconnection Regulation

With the notable exceptions of rural areas, national interconnection was generally un-

regulated during the monopoly era. In the absence of competition, there were no other carriers with whom the monopolist could interconnect and exchange traffic.[38]

During the competitive era, the US imposed stringent regulation on intercarrier compensation rates and collocation with respect to incumbent local telephone operators only.[39] The US requires that long distance and mobile carriers pay incumbent telephone operators for originating and terminating long distance calls (payments known as "access charges") and regulates these payments through tariff filings.[40] The FCC does not require long distance or mobile carriers to pay access charges to mobile carriers.[41] Payments between telephone carriers for the exchange of local calls (known as reciprocal compensation) are generally negotiated by carriers in the US.[42] Finally, broadband providers exchange data traffic through private agreement — they are exempt from intercarrier compensation regulation.[43]

Intercarrier compensation is regulated more extensively in the EU than in the US. In Europe, intercarrier compensation is based on a "calling party network pays" principle, which means that a termination rate is set by the called network and paid by the calling network.[44] In 2009, the EU imposed cost-based price regulations on mobile termination charges for the first time.[45] This move created regulatory uncertainty with respect to mobile capital investment, yet has failed to provide the expected benefits.[46]

Wholesale Regulation

The US has always recognized that wholesale network unbundling "is not an unqualified good," for it "comes at a cost, including disincentives to research and development by both [incumbents] and [competitors] and the tangled management inherent in shared use of a common resource."[47] Under US law, unbundling is available only when "necessary" and a lack of wholesale access would "impair" a competitor's ability to provide service.[48] The role of this "necessary and impair" standard is to balance the "advantages of unbundling (in terms of fostering competition by different firms, even if they use the very same facilities) and its costs (in terms both of 'spreading the disincentive to invest in innovation and creat-

ing complex issues of managing shared facilities')."[49]

Under the necessary and impair standard, the US has exempted most communications services from wholesale access obligations, including (1) residential telephone services (from unbundling local switches only),[50] (2) mobile services (from unbundling and resale), and (3) broadband services (from unbundling and resale).[51]

Until recently, however, policymakers in the EU generally did not recognize the costs of wholesale access regulations. They embraced service-based competition — the "synthetic competition"[52] enabled by unbundling — for old telephone infrastructure and new broadband networks alike.[53] Unlike the US, the EU decided that, when an incumbent operator deploys fiber, national regulatory authorities "should in principle mandate unbundled access to the fibre loop" at regulated, cost-based rates.[54] Only mobile networks have generally been exempted from wholesale network access obligations in the EU, though mobile roaming is subject to price regulation in Europe.[55]

Status of US and EU Common Carrier Regulation

		UNITED STATES		EUROPEAN UNION	
		REGULATED (Y/N)			
		Residential	Business	Residential	Business
TELEPHONE	Retail	Y	Y	Y	Y
	Wholesale	N	Y	Y	Y
	Interconnection	Y	Y	Y	Y
MOBILE	Retail	N	N	N	N
	Wholesale	N	N	N	N
	Interconnection	N	N	Y	Y
BROADBAND	Retail	N	N	N	N
	Wholesale	N	N	Y	Y
	Interconnection	N	N	Y	Y

A summary of the primary differences between the US and EU approaches to Title II-style regulation during the relevant time period is provided in the table above.

Comparative Data

Both the US and EU governments have published extensive data regarding their communications markets. In most cases, the datum measures are the same or similar, which facilitates comparison.

This paper analyzes data regarding capital investment and competition during the years 2011 to 2012 — the most recent two-year period with complete government datasets. The data are comprised primarily of official US and EU governments statistics.[56]

The data clearly demonstrate that capital investment in broadband infrastructure, competition, and broadband coverage in the EU are all lower than in the US.

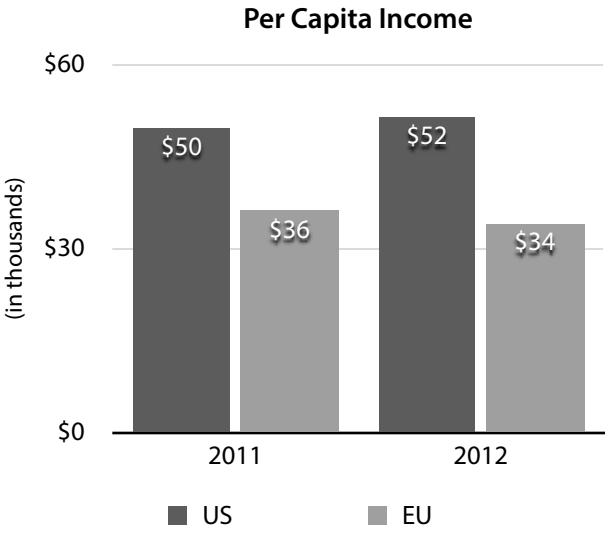
Demographic Data

These disparities in investment, competition, and coverage cannot be adequately explained by demographic differences between the US and Europe.

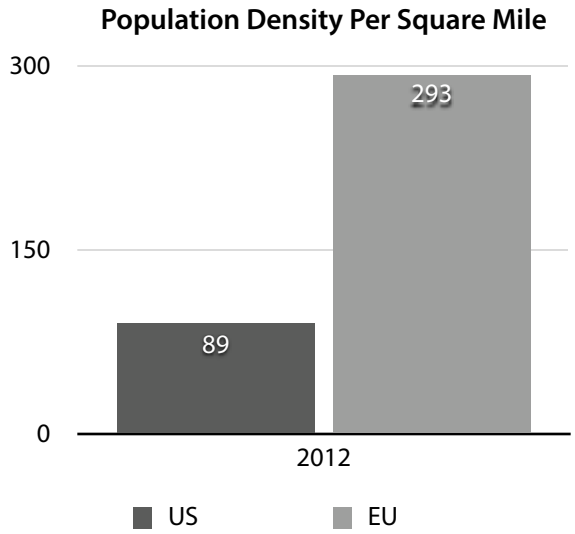
For example, the EU has a higher gross domestic product (GDP) than the US.[57]

All else being equal, the EU's greater productivity suggests that it should have similar or greater capital investment and next generation broadband subscriptions than the US.

The US has a higher per capita income than the EU, however, which would suggest the opposite, all else being equal.[58]



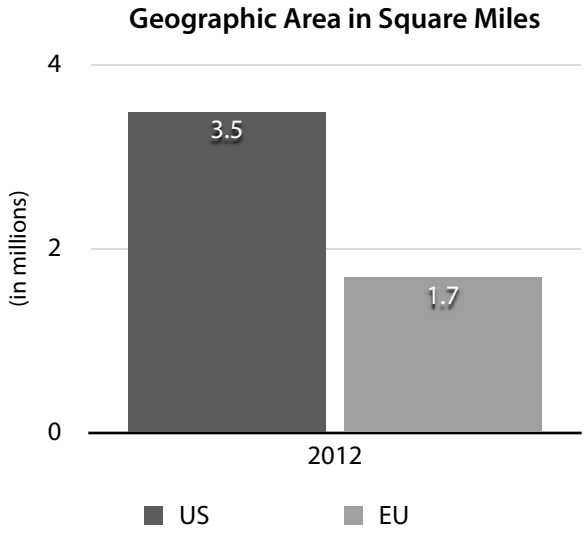
On the other hand, the EU's population density (293 per square mile) is much higher than that in the US (89 per square mile).



The higher population density in the EU suggests that it would require less capital investment to achieve the same broadband coverage that is available in the US and that operating costs in the EU would be lower, all else being equal.

Though some have noted that the degree of urbanization within a given geographic area may be more relevant to deployment costs than population density,[59] the overall size of the geographic area is also relevant. It generally costs more to interconnect far-flung urban areas than it does to connect similarly dense urban areas that are separated by shorter distances. This may be especially true for mobile networks, which often provide continuous, coast-to-coast service along highways even in largely uninhabited areas.

The US has a much larger geographic area than the EU, which suggests that broadband deployment is more costly in the US than in the EU, all else being equal.[60]



It is more difficult to compare the relative degree of urbanization in the US and the EU because they measure it differently. In the US, "rural" areas are defined as areas with population densities of less than 500 people per square mile or fewer than 2,500 people.[61] The EU defines a "thinly populated area" (i.e., a rural area) as an area where more than 50% of the population live outside "urban clusters," which are areas comprised of contiguous square kilometer grid cells with a population

density of at least 300 inhabitants per km2 (777 per square mile) and a minimum population of 5,000.[62]

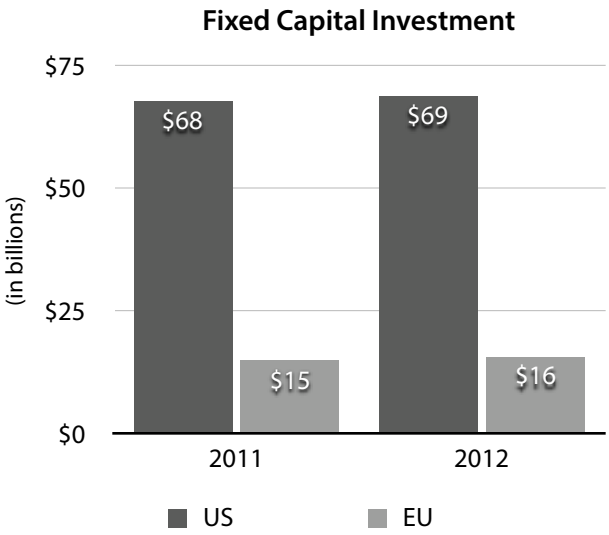
These methodologies are too dissimilar to allow for accurate comparisons between the US and the EU with respect to the degree of urbanization. Based solely on their respective measurement methodologies, the Census Bureau reports that 19.3% of US inhabitants live in "rural" areas, and the EU reports that the 29% of Europeans live in "thinly populated areas," a difference of about 10%.[63] Because these methodologies rely on different area sizes, however, the Census Bureau and EU results are not directly comparable.[64]

When considered as a whole, these demographic differences do not appear sufficient to account for the levels of disparity between broadband capital investment, competition, and coverage in the US and the EU.

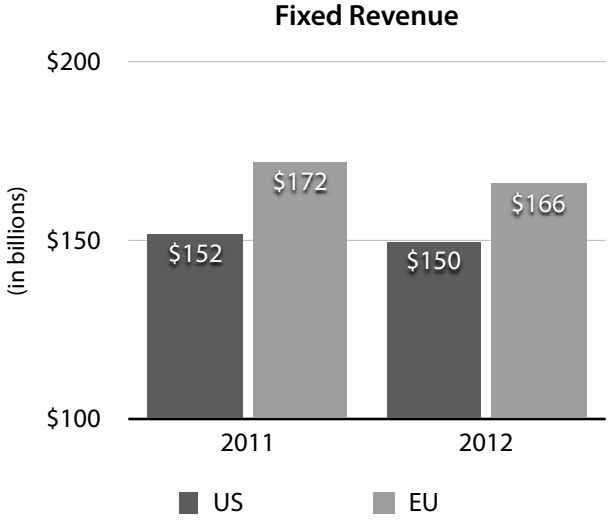
Capital Investment

Fixed Investment

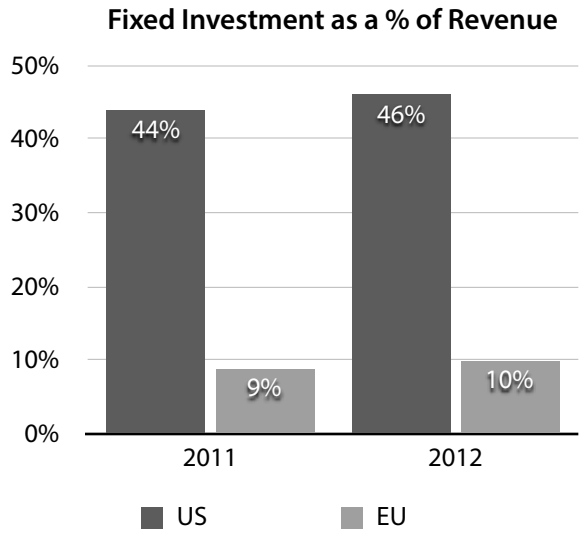
The data shows that fixed (e.g., wireline) operators in the US have invested ***four times more capital in their networks*** than their counterparts in the EU. Operators in the US are investing nearly $70 billion in their networks annually while European operators are investing only about $15 billion.[65]



This enormous disparity in fixed capital investment cannot be explained by differences in industry revenue. Despite having a significantly lower level of investment, the fixed market segment in the EU actually produces more revenue than in the US — $15 to $20 billion more each year.[66]

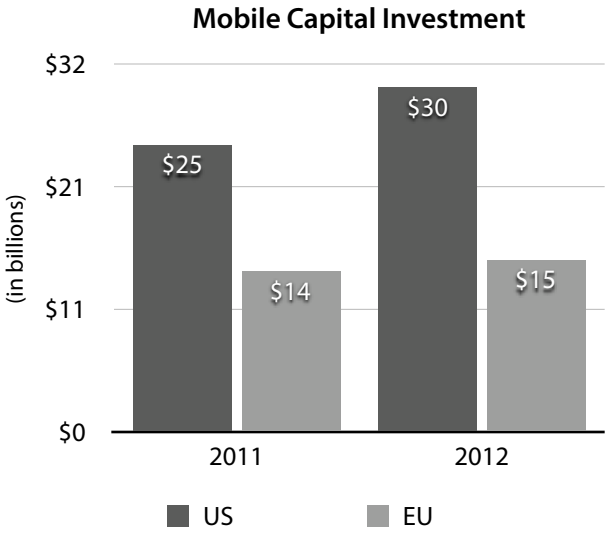


As a result, the relative magnitudes of the investment disparities between US and EU operators are similar even when capital investment is measured as a percentage of industry revenue.

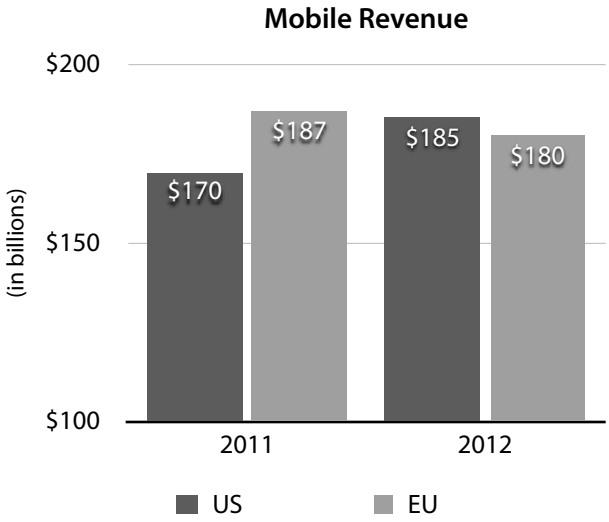


Mobile Investment

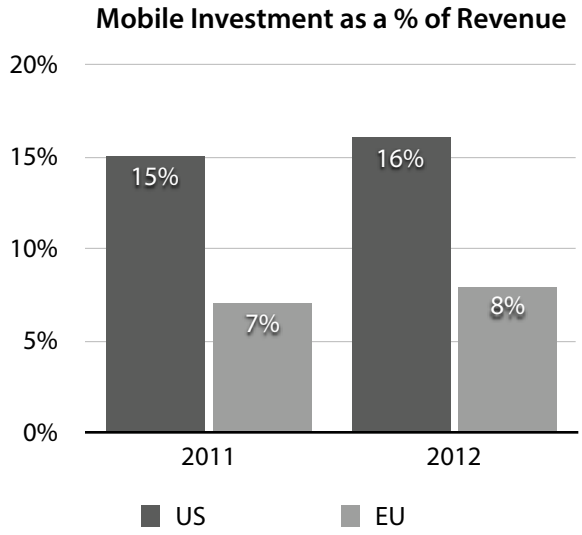
The data also shows a large disparity in capital investment between the US and EU mobile industries. US mobile operators have invested ***twice as much capital*** in their networks as mobile operators in the EU.[67]



As with the fixed market segment, revenue differences did not drive the disparity in mobile capital investment. The mobile industry produced similar revenue totals in the US and the EU. In 2011, Mobile operators in the EU earned more than their counterparts in the US ($187 and $170 billion, respectively), but EU operators earned slightly less than US operators in 2012.[68]



The magnitudes of the investment disparities between US and EU mobile operators are thus virtually the same when measured as a percentage of industry revenue. US mobile operators are reinvesting 15% to 16% of their revenue in their network infrastructure while mobile operators in the EU are reinvesting only 7% to 8%.[69]



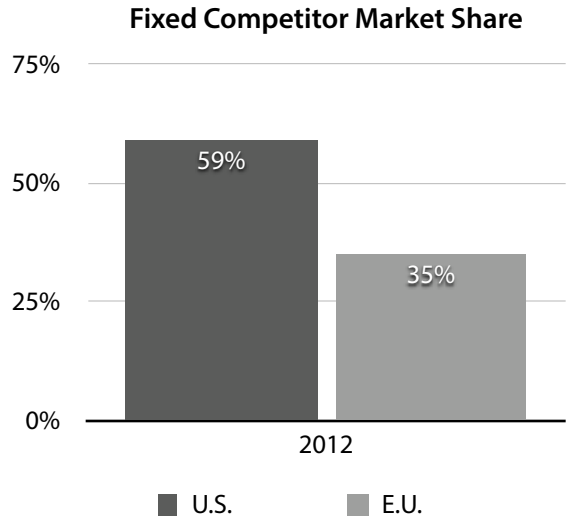
Competition and Coverage

The higher levels of capital investment in the US correlate with higher levels of competition (both facilities- and service-based) and broadband coverage.

Fixed Competition and Coverage

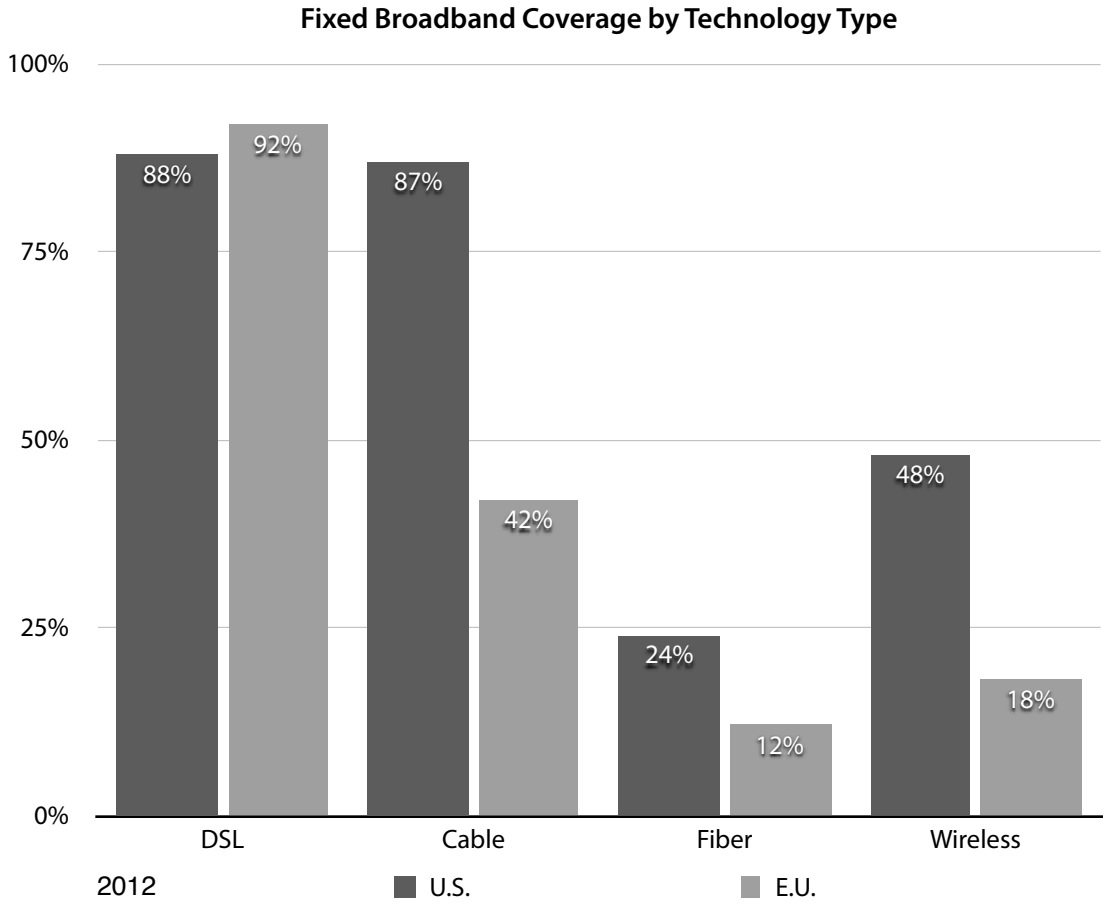
As noted above, the EU imposes unbundling obligations in the residential telephone markets whereas the US does not. Net neutrality advocates have theorized that the EU's approach to wholesale access regulation results in greater service-based competition.[70] But reality has produced different results.

In 2012, competitors held a larger share of the local telephone market (59%) in the US than incumbents (41%), and 92% of US "households" had access to ten or more non-incumbent telephone service providers.[71] In contrast, EU incumbents retained a presumptively dominant 65% share of the local telephone market with competitors holding only 35%.[72]

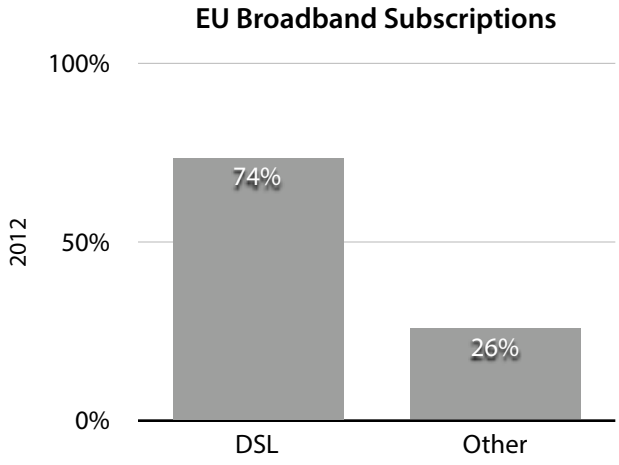


Broadband competition was also greater in the US than in the EU. The vast majority of US households have access to multiple facilities-based fixed broadband operators. According to the FCC, in 2012, 76% of US households were located in census tracts with access to three or more providers of fixed broadband access offering download throughput of at least 3 Mbps.[73] In contrast, a majority of households in the EU lack access to a fixed facilities-based broadband alternative to the incumbent network operator, because competitive cable, fiber to the home, and fixed wireless networks in the EU have provided

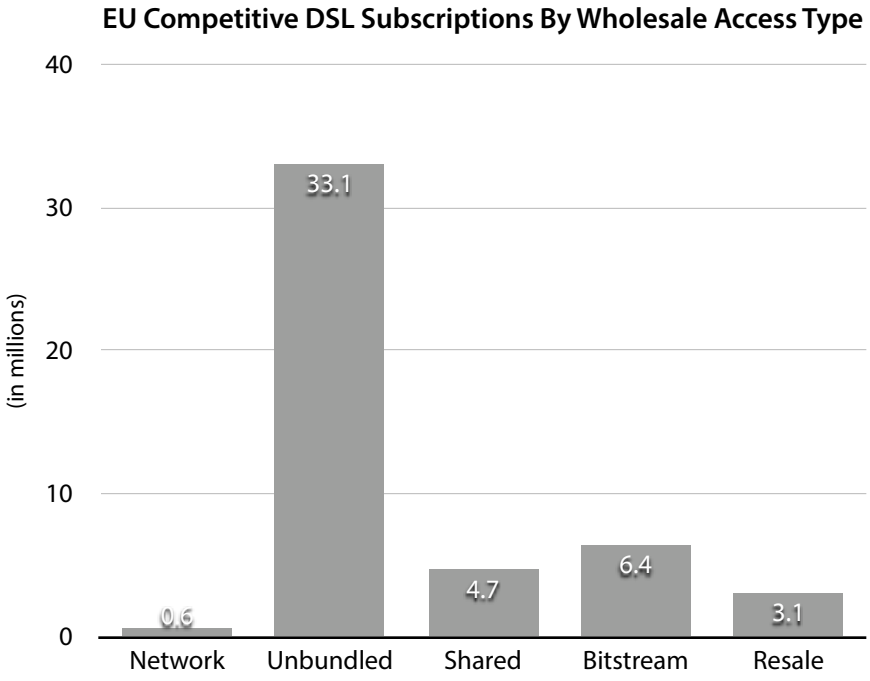
significantly less coverage than their counterparts in the US.[74]



DSL broadband provided over incumbent copper-based telephone facilities is the dominant form of fixed broadband in the EU.



Nearly half of DSL subscriptions (46%) in the EU are provided by new entrants, but these competitors rely almost exclusively on wholesale access to incumbent facilities, rather than their own infrastructure, to provide broadband services to their subscribers. In 2012, competitors in the EU used their own networks to provide DSL access to ***fewer than 1 million*** subscribers.[75]



holds in the EU were covered by broadband networks offering speeds of at least 30 Mbps.[77]

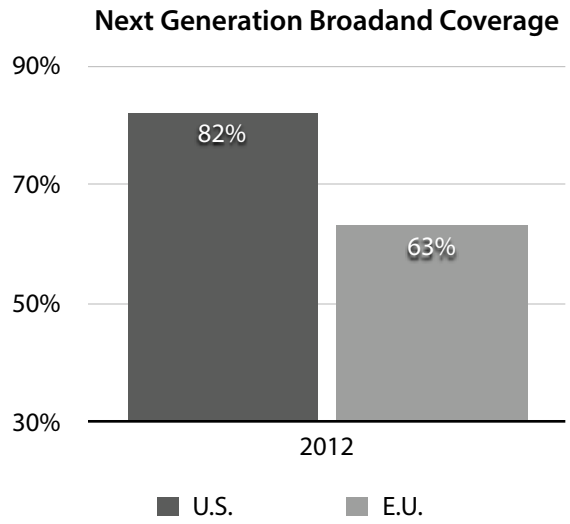
Mobile Competition and Coverage

Facilities-based competition among mobile operators in the US is more robust than in the EU. The EU averages fewer than four facilities-based mobile operators per market (typically 3-4). In the US, there are ***five or more*** facilities-based mobile operators in most markets.

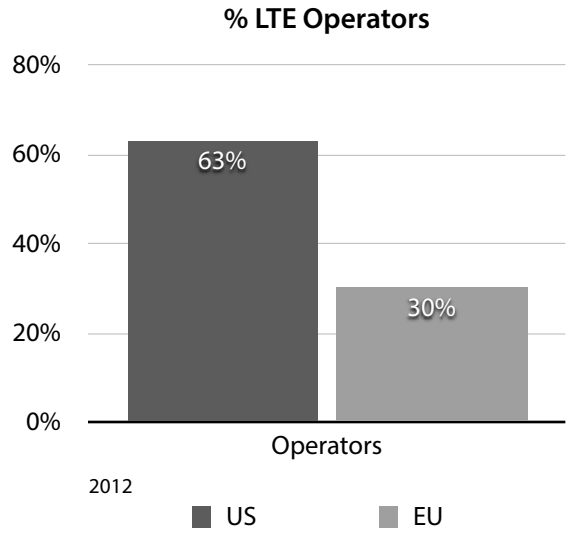
Mobile operators in the US have been much more aggressive in upgrading their networks to the LTE (long term evolution) standard, a fourth generation (4G) technology that enables next generation mobile networks to provide voice, video, and high speed data services.

As late as 2012, nearly half of EU states (twelve) had no LTE coverage, and only 30% of EU mobile operators had begun deploying LTE.[78] During that time, half of the nationwide mobile operators and three of the four

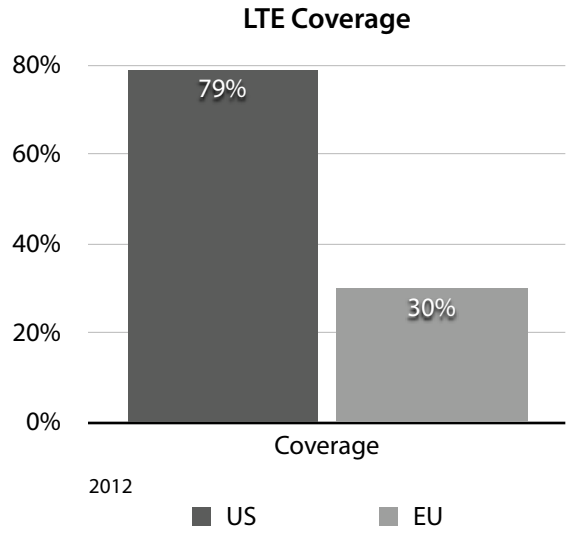
The US also has significantly greater access to fixed next generation broadband networks — i.e., networks that offer download speeds exceeding 30 Mbps (EU) to 50 Mbps (US). In the US, 82% of households were covered by next generation broadband offering downloads speeds of 50 Mbps or more as of the end of 2012.[76] In comparison, only 63% of house-



multi-regional mobile operators in the US (63% overall) had begun deploying LTE.[79]



LTE coverage in the US was also more than ***double*** that in the EU, with LTE covering at least 79% of the US (population) compared to only 30% of the EU (households).[80]



The gap was smaller, however, for older third generation (3G) network coverage, with the EU at 96% and the US at 99.5%.[81]

Regulatory Impact

It is difficult to see how a rational policymaker faced with this empirical evidence could conclude that a Title II approach would improve the state of broadband in the US. Nevertheless, it appears that the FCC is poised to just that[82] in response to a speech by President Obama.[83]

It is particularly ironic that the US is poised to adopt the European approach to broadband regulation now that its failure has become clear.

Based on its own analysis of comparative data, the EU government recently concluded that its Title II-style approach to broadband regulation is to blame for falling behind the US in capital investment, competition, and broadband coverage.[84]

The EU expressly recognized incontrovertible data that Title II advocates in the US attempt to ignore:[85]

- "Investments in high speed broadband are taking place more quickly in parts of Asia and in the United States;"[86]

- "Most of the current NGA broadband connections in the Union are provided through cable networks where no further expansion is expected (only upgrade of current networks);"[87]
- "Investment in Fibre to the Premises (FTTP) networks has been so far very limited;"[88]
- "Europe must step up its investments in broadband in order to keep its global competitiveness;"[89] and
- "The private sector should play the leading role in rolling out and modernising broadband networks, supported by a competitive and investment-friendly regulatory framework."[90]

The EU has already begun to relax its approach to wholesale access regulation in order to encourage investment in next generation broadband networks. In 2013, the EU recommended that national regulatory authorities stop imposing regulated wholesale access prices on next generation networks that are subject to non-discrimination obligations and have at least one retail price competitor.[91]

Though the EU failed to embrace a truly light-touch regulatory approach like that in the US, the EU recognized that investment in next generation networks is inherently risky, because it requires "large and sunk investment" coupled with uncertainty regarding the potential to obtain an adequate return on those investments.[92] The EU also recognized that wholesale price regulation shields access seekers from sharing the risk associated with investment in next generation broadband networks.[93] The EU thus concluded that, "If wholesale access price obligations were imposed on the access to fibre networks the scope for reaching these win-win [private investment] solutions would be severely reduced."[94]

Wholesale access regulations deter investment by imposing the highest risk on incumbents while shifting the highest returns to access seekers. Between 2008 and 2012, European incumbents lost nearly $84 billion in aggregate market capitalization while over-the-top providers, device manufacturers (OEMs), and competitive cable companies gained more than $240 billion.[95] In addition, from 2007 to

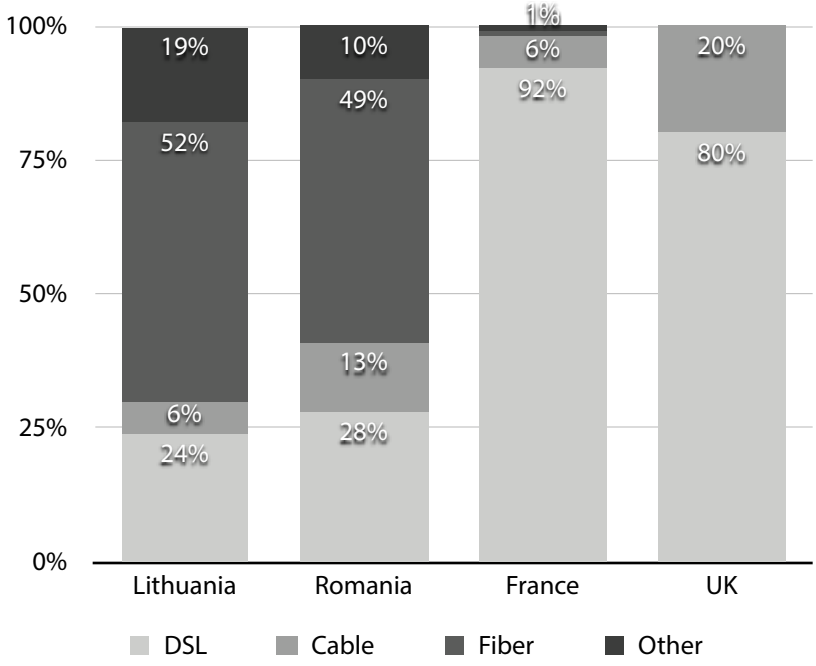
2011, return on capital for the leading incumbents in four major EU markets – France, Germany, Spain, and the UK – averaged only 9% while the average return on capital for leading access seekers ranged from 13% to 21% percent over the same period.[96]

These numbers explain the lower level of capital investment in the EU discussed above. Little incentive to invest in new networks exists when cost-based regulations sever the fundamental link between risk and reward for investment capital in a competitive marketplace.[97] Under the EU regulatory approach, the companies with the largest return on capital are the same companies that ***are not investing*** in broadband infrastructure.

Comparison of EU States

A comparison of EU states supports this conclusion. The EC's Communications Committee has noted that facilities based competition is strongest where new entrants' presence in the wholesale access market for DSL is marginal.[98] In Bulgaria, Romania, Latvia, Malta, Estonia and Lithuania, there is virtually no competition in the DSL market, but there is strong facilities-based competition.[99] Though DSL had 74% market share when measured on an EU-wide basis, DSL had less than 50% market share in these states, with fiber to the home being the dominant form of access in Romania, Lithuania, and Latvia.[100]

Fixed Broadband Subscriptions in Select EU States



At the same time, ***in states with the most aggressive wholesale access regulations*** — e.g., France and the UK — new entrants have the majority of DSL subscriptions and ***there is virtually no facilities-based competition***. In these member states, the vast majority of new en-

trants' DSL subscriptions are provided through mandatory unbundling of local telephone infrastructure owned by the incumbent carrier.

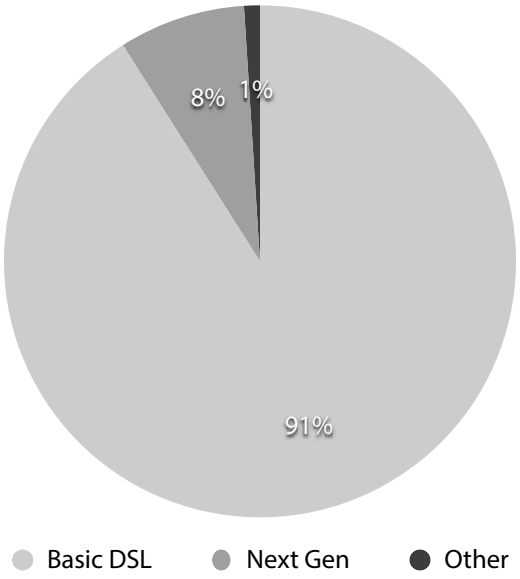
A comparison of the regulatory environments across EU states indicates that their approaches to broadband policy have played a significant role in shaping their markets. A discussion of the differences between broadband regulation and deployment in France and Romania is illustrative.

France

In France, the government is still the largest shareholder in Orange, the incumbent telephone company, and the French regulator maintains a close relationship with it.[101] France is a proponent of service-based competition, which it refers to as "infrastructure sharing." It generally believes that "it can be more efficient for the entire market to allow operators to share existing or future infrastructures," and a 2008 law requires that operators share their "last mile" network infrastructure, including newly built fiber.[102] The French regulator has determined that, in areas covering 81% of French households (roughly 95% of its territory), "optical fiber local loops are to be shared to a very high degree."[103]

The results of this policy? As of January 2014, 91% of fixed broadband subscriptions in France were for DSL, and only 8% were for next generation access.[104]

French Broadband Subscriptions



Romania

In stark contrast to France, the more deregulatory Romanian broadband market is "characterised by platform based competition."[105]

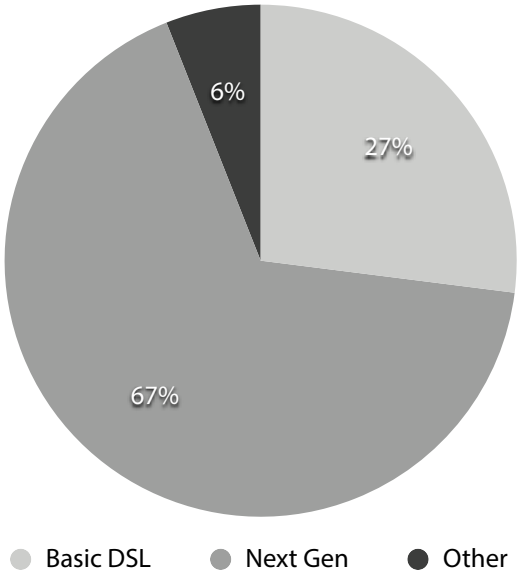
Romania was not subject to the EU's wholesale access policies until it acceded to the EU in 2007.[106] By that time, however, Romania was already being served by "neighborhood networks" — small, privately owned broad-

band networks that were launched in areas where the incumbent had not yet launched DSL services.[107] These neighborhood networks developed in a regulatory gray area similar to US cable networks in the 1950s and '60s. For example, neighborhood networks lowered their deployment costs by installing aerial fiber where duct-based network roll-outs are mandatory.[108]

After its accession to the EU, Romania has promoted facilities-based competition by adopting deregulatory, pro-investment broadband policies. In 2010, the Romanian regulator imposed wholesale access obligations on the incumbent telephone company's copper network, but did ***not*** comply with the European Commission's request to impose wholesale access obligations on the incumbent's fiber lines.[109] Romania also determined that it was not necessary to regulate the retail market for broadband Internet access due to the high level of infrastructure-based competition.[110]

As with the US, the deregulatory approach adopted in Romania has produced more next generation access than the French public utility model. As of January 2014, 67% of Romanian broadband subscriptions are for next generation access.[111] Only 27% of fixed broadband subscriptions in Romania rely on DSL.[112] Nearly half of Romanian broadband subscriptions (48%) are fiber to the home, 14% are cable modem (including DOCSIS 3.0), and 10% rely on other technologies (e.g., wireless).[113]

Romanian Broadband Subscriptions



Conclusion

An objective analysis of the data comparing broadband in the US with Europe shows that the US made the right choice in 2002: Broadband deployment, competition, and coverage do better in a deregulatory environment than under the Title II-style regulation the EU adopted in 2002.

Ironically, the US is poised to reenact 2002 in reverse by imposing Title II on US broadband providers shortly after the EU has realized that its Title II-style regulatory approach is the reason it has fallen behind the US.

The FCC should continue the successful US approach to broadband regulation first adopted in 2002, not reverse course. The EU experience has demonstrated that Title II regulation is an anathema to investment in next generation broadband networks — and that the US had it right all along.

[1] *See* Chris Riley, *If Only Our Broadband Markets Could be Like Europe's*, Free Press (Apr. 22, 2010), available at http://www.savetheinternet.com/blog/10/04/22/if-only-our-broadband-markets-could-be-europes.

[2] Commission Staff Working Document, SWD(2013) 329 at p. 7 (hereinafter "SWD(2013)"), available at http://ec.europa.eu/smart-regulation/impact/ia_carried_out/docs/ia_2013/swd_2013_0329_en.pdf (*accompanying the document* Commission Recommendation (2013/466/EU) of 11 September 2013 on consistent non-discrimination obligations and costing methodologies to promote competition and enhance the broadband investment environment, OJ L 251, 12.9.2013, pp. 13-32 (hereinafter "2013 Recommendation"), available at http://eur-lex.europa.eu/legal-content/EN/TXT/?qid=1417542529933&uri=CELEX:32013H0466).

[3] *Id.* at pp. 44-45.

[4] For a recent example of the broadband paradise myth told by net neutrality advocates, see Candace Clement and S. Derek Turner, *Reclassification Is Not a Dirty Word*, Free Press (Jan. 17, 2014), available at http://www.freepress.net/blog/2014/01/17/reclassification-not-dirty-word.

[5] *See id.*

[6] *See* Chris Riley, *supra* note 1.

[7] *See* SWD(2013), *supra* note 2, at p. 7.

[8] Todd Shields and James Rowley, *FCC Said to Signal It's Heeding Obama's Call for Open-Web Rules*, Bloomberg (Jan. 7, 2015), available at http://www.bloomberg.com/news/2015-01-07/fcc-said-to-signal-it-s-heeding-obama-s-call-for-open-web-rules.html.

[9] Based on its experience with competitive entry, the FCC found that tariff filings are not necessary to ensure just and reasonable prices or avoid discrimination in competitive markets because non-dominant carriers lack sufficient market power to control prices and are presumptively unlikely to discriminate unreasonably. *See* Policy & Rules Concerning Rates for Competitive Common Carrier Servs. & Facilities Authorizations Therefor, First Report and Order, FCC 80-629, 85 F.C.C.2d 1, 31, at ¶¶ 88-89 (1980). In competitive markets, tariff filings actually promote strategic behavior and inhibit innovation. *See* Policy & Rules Concerning Rates for Competitive Common Carrier Servs. & Facilities Authorizations Therefor, Notice of Inquiry and Proposed Rulemaking, 77 F.C.C.2d 308, 315-14, 323-24, at ¶¶ 9, 30 (1979).

[10] *See id.*

[11] *See generally* Telecommunications Act of 1996, Pub. L. No 104-104, 110 Stat. 56.

[12] *See id.*

[13] *Verizon Commc'ns, Inc. v. FCC*, 535 U.S. 467, 489 (2002).

[14] *See* Implementation of the Local Competition Provisions of the Telecommunications Act of 1996, Third Report and Order and Fourth Further Notice of Proposed Rulemaking, FCC 99-238, 15 FCC Rcd. 3696, 3749, at ¶ 112 (1999), *reversed and remanded in part sub. nom. United States Telecom Ass'n v. FCC*, 290 F.3d 415 (D.C. Cir. 2002) (hereinafter "USTA I"), *cert. denied sub nom. WorldCom, Inc. v. United States Telecom Ass'n*, 538 U.S. 940 (2003).

[15] *See* J. Gregory Sidak, *The Failure of Good Intentions: The Worldcom Fraud and the Collapse of American Telecommunications After Deregulation*, 20 Yale J. on Reg. 207, 216 (2003).

[16] *Id*. at 216.

[17] *See* Financial Turmoil in the Telcomms Marketplace: Maintaining the Operations of Essential Communs: Before the S. Comm. on Commerce, Sci., Transp., 107th Cong. (2002) (statement of Michael K. Powell, Chairman, FCC (hereinafter "Powell Testimony"), available at http://hraunfoss.fcc.gov/edocs_public/attachmatch/DOC-224797A1.pdf.

[18] *See In re WorldCom, Inc. Sec. Litig.*, 293 B.R. 308, 312 (S.D.N.Y. 2003).

[19] Powell Testimony at 1.

[20] *Id.*

[21] *See* Inquiry Concerning High-Speed Access to Internet over Cable & Other Facilities, Declaratory Ruling and Notice of Proposed Rulemaking, FCC 02-77, 17 FCC Rcd. 4798 (2002) (hereinafter "Cable Modem Order"), *aff'd sub. nom. Nat'l Cable & Telecomms. Ass'n v. Brand X Internet Servs.*, 545 U.S. 967 (2005); Appropriate Framework for Broadband Access to the Internet over Wireline Facilities, Report and Order and Notice of Proposed Rulemaking, FCC 05-150, 20 FCC Rcd. 14853 (2005), *aff'd sub. nom. Time Warner Telecom, Inc. v. FCC*, 507 F.3d 205 (3d Cir. 2007); United Power Line Council's Petition for Declaratory Ruling Regarding the Classification of Broadband over Power Line Internet Access Service as an Information Service, Memorandum Opinion and Order, FCC 06-165, 21 FCC Rcd. 13281 (2006); Appropriate Regulatory Treatment for Broadband Access to the Internet Over Wireless Networks, Declaratory Ruling, FCC 07-30, 22 FCC Rcd. 5901 (2007).

[22] Cable Modem Order, *supra* note 21, at ¶ 5.

[23] Review of the Section 251 Unbundling Obligations of Incumbent Local Exchange Carriers, Report and Order and Order on Remand and Further Notice of Proposed Rulemaking, FCC 03-36, 18 FCC Rcd. 16978, 17125, at ¶ 241 (2003) (hereinafter "Triennial Review Order"), *vacated in part, aff'd in part sub. nom.* U.S. Telecom Ass'n v. FCC, 359 F.3d 554 (D.C. Cir. 2004), *cert. denied sub nom., Nat'l Ass'n of Regulatory Utility Comm'rs v. United States Telecom Ass'n*, 543 U.S. 925 (2004).

[24] Cable Modem Order, *supra* note 21, at ¶ 5.

[25] *See* Directive 2002/21/EC of 7 March 2002 (Framework Directive), available at http://ec.europa.eu/digital-agenda/sites/digital-agenda/files/140framework_5.pdf. The Framework Directive is part of a "Telecoms Package" of five directives adopted in 2002, which also include (1) Directive 2002/20/EC of the European Parliament and of the Council of 7 March 2002 on the authorisation of electronic communications networks and services (Authorisation Directive); (2) Directive 2002/19/EC of the European Parliament and of the Council of 7 March 2002 on access to, and interconnection of, electronic communications networks and associated facilities (Access Directive), available at http://ec.europa.eu/digital-agenda/sites/digital-agenda/files/140access_1.pdf; (3) Directive 2002/22/EC of the European Parliament and of the Council of 7 March 2002 on universal service and users' rights relating to electronic communications networks and services (Universal Service Directive), and (4) Directive 97/66/EC of the European Parliament and of the Council of 15 December 1997 concerning the processing of personal data and the protection of privacy in the telecommunications sector (Privacy Directive). The Telecoms Package was amended in 2009 by two additional directives: (1) Directive 2009/140/EC of the European Parliament and of the Council of 25 November 2009 amending Directives 2002/21/EC on a common regulatory framework for electronic communications networks and services, 2002/19/EC on access to, and interconnection of, electronic communications networks and associated facilities, and 2002/20/EC on the authorisation of electronic communications networks and services (Better Law-Making Directive); and (2) Directive 2009/136/EC of the European Parliament and of the Council of 25 November 2009 amending Directive 2002/22/EC on universal service and users' rights relating to electronic communications networks and services, Directive 2002/58/EC concerning the processing of personal data and the protection of privacy in the electronic communications sector and Regulation (EC) No 2006/2004 on cooperation between national authorities responsible for the enforcement of consumer protection laws (Citizens' Rights Directive).

[26] *See* Commission Recommendation (2003/311/EC) of 11 February 2003 on relevant product and service markets within the electronic communications sector susceptible to ex ante regulation in accordance with Directive 2002/21/EC of the European Parliament and of the Council on a common regulatory framework for electronic communication networks and services, OJ L 114, 8.5.2003, pp. 45–49 at Annex, pp. 48-49.

[27] *See United States v. American Tel. & Tel. Co.*, 552 F. Supp. 131 (D.D.C. 1982), *aff'd sub nom. Maryland v. United States*, 460 U.S. 1001 (1983), *modified sub nom. United States v. W. Elec. Co., Inc.*, 890 F. Supp. 1 (D.D.C. 1995), *vacated* 84 F.3d 1452 (D.C. Cir. 1996), *amended* 714 F. Supp. 1 (D.D.C. 1988), *aff'd in part, rev'd in part* 900 F.2d 283 (D.C. Cir. 1990).

[28] *See* Herbert Burkert, *The Post-Deregulatory Landscape in International Telecommunications Law: A Unique European Union Approach?*, 27 Brook. J. Int'l L. 739, 756-58 (2002).

[29] *See* BT, Archives Information, available at https://www.btplc.com/Thegroup/BTsHistory/Privatisationinfosheetissue2.pdf.

[30] *See* VoiceStream Wireless Corp., Memorandum Opinion and Order, FCC 01-142, 16 FCC Rcd. 9779, 9784, at ¶ 6 (2001), available at https://apps.fcc.gov/edocs_public/attachmatch/FCC-01-142A1.pdf.

[31] *See* Amy Thomson and Ruth David, *French State-Owned Bank Selling $732 Million Orange Stake*, Bloomberg (Oct. 1, 2014), available at http://www.bloomberg.com/news/2014-09-30/french-state-owned-bank-selling-750-million-stake-in-orange.html.

[32] *See* Burkert, *supra* note 28, at 756-58.

[33] *See id.* at 738 (noting that Europe had not forced divestiture).

[34] *See* Pierre A. Buigues, Head of Unit, Telecom, Information Society DG Competition-EU Commission, *Benefits for Consumers from Competition in the "New Economy": The Case of Access to the Internet and the Local Loop*, European Competition Day, Madrid, Feb. 26, 2002, available at http://ec.europa.eu/competition/speeches/text/sp2002_004_en.pdf.

[35] *Id.*

[36] *See* J. Scott Marcus, Study, *Network Neutrality Revisited: Challenges and Responses in the EU and in the US*, Committee on the Internal Market and Consumer Protection, PE 518.751 at pp. 83-93 (Dec. 19, 2014), available at http://www.europarl.europa.eu/RegData/etudes/STUD/2014/518751/IPOL_STU(2014)518751_EN.pdf.

[37] In late 2014, the EU decided that *ex ante* regulation of retail telephone rates was no longer necessary. *See* Commission Recommendation (2014/710/EU) of 9 October 2014 on relevant product and service markets within the electronic communications sector susceptible to ex ante regulation in accordance with Directive 2002/21/EC of the European Parliament and of the Council on a common regulatory framework for electronic communications networks and services, OJ L 295, 11.10.2014, p. 79–84 (hereinafter "2014 Market Definitions"), available at http://eur-lex.europa.eu/legal-content/EN/TXT/?qid=1417542529933&uri=CELEX:32014H0710.

[38] As noted above, most telephone companies were government owned monopolies in Europe during the monopoly era. In the US, the privately owned Bell System had a monopoly on long distance services nationwide and on local services in most urban markets, but numerous smaller, independent telephone companies served many rural areas. The US subsidized universal service and local telephone rates in rural and residential markets by allowing the Bell System to charge excessive rates for its long distance services (which were used primarily by businesses) in order to offset the costs of providing local services that would otherwise be uneconomic. When the US broke up the monopoly telephone system and introduced competition in the long distance market, this subsidy system was no longer viable. The FCC replaced it with a "transitional" intercarrier compensation system, which required that all long distance providers pay "access charges" to local telephone operators for the origination and termination of long distance calls. *See* Connect America Fund, Notice of Proposed Rulemaking, FCC 11-13, 26 FCC Rcd. 4554, 4703-706, at ¶¶ 496-501 (2011) (hereinafter "CAF Notice").

[39] In 2011, the FCC decided to transition to a "bill and keep" regime that will eliminate terminating access charges over time, primarily to correct market distortions enabled by the "rate averaging" requirement imposed on IXCs. *See* Connect America Fund, Report and Order and Further Notice of Proposed Rulemaking, FCC 11-161, 26 FCC Rcd. 17663, 17905, 17908, at ¶¶ 741, 745 (2011). The Communications Act prohibits long distance carriers from charging customers in one state a rate different from that in another state. To implement this requirement, IXCs charge averaged long-distance rates (i.e., the same rate on a nationwide basis). In effect, the law prohibits IXCs from directly passing on higher access rates to customers that make calls to or from areas with higher access rates. This means that LEC customers have no incentive to choose a LEC with low access rates, which creates a "terminating monopoly" in access rates. *See* CAF Notice, *supra* note 38, at ¶ 654.

[40] *See* 47 C.F.R. § 69.2.

[41] Today, there are three major forms of intercarrier compensation: interstate access charges, intrastate access charges, and reciprocal compensation. *See* CAF Notice, *supra* note 38, at ¶ 34, n.26. Access charges apply to long distance calls. *See* 47 C.F.R. § 69.2(b). The Commission regulates rates for interstate calls and states regulate rates for intrastate calls. *See* CAF Notice, *supra* note 38, at ¶ 34, n.26. Reciprocal compensation today primarily governs "local" calls, and, with the exception of mobile calls (which are already bill and keep), reciprocal compensation rates are either negotiated by carriers or set by states using the Commission's pricing methodology. *See* 47 C.F.R. § 51.705. Intrastate access rates are generally higher than interstate rates, and both are generally higher than reciprocal compensation rates, although large variations exist within each category. *See* CAF Notice, *supra* note 38, at ¶ 34, n.26.

[42] *See* 47 C.F.R. § 51.705.

[43] *See* High Cost Universal Service Support, Order on Remand and Report and Order and Further Notice of Proposed Rulemaking, FCC 08-262, 24 FCC Rcd. 6475 (2008), *aff'd sub. nom. Core Comms., Inc. v. FCC*, 592 F.3d 139 (D.C. Cir. 2010), *cert. denied* 131 S.Ct. 597 (2010).

[44] *See* Commission Recommendation (2009/396/EC) of 7 May 2009 on the Regulatory Treatment of Fixed and Mobile Termination Rates in the EU, OJ L 124, 20.5.2009, p. 67–74, at ¶ (7), available at http://eur-lex.europa.eu/legal-content/EN/TXT/?qid=1417544687818&uri=CELEX:32009H0396.

[45] *See id. See also* 2014 Market Definitions, *supra* note 37, at Annex (defining "wholesale voice call termination on individual mobile networks" as a market subject to ex ante regulation).

[46] *See* Frontier Economics Ltd, London, *The impact of recent cuts in mobile termination rates across Europe, A Report Prepared for Vodafone Group* (May 2012), available at http://www.vodafone.com/content/dam/vodafone/about/public_policy/articles/mtr_impact_of_ec_recommendation.pdf.

[47] *See* USTA I, *supra* note 14, at 429 (*citing AT&T Corp. v. Iowa Utilities Bd.*, 525 U.S. 366, 388, 428-29 (1999)).

[48] *See* 47 U.S.C.A. § 251(d).

[49] *See US Telecom Ass'n v. FCC*, 359 F.3d 554, 563 (D.C. Cir. 2004) (*quoting* USTA I, 290 F.3d at 425).

[50] *See* Unbundled Access to Network Elements, Order on Remand, FCC 04-290, 20 FCC Rcd. 2533, 2537 at ¶ 5 (2005), *aff'd sub. nom. Covad Comms Co. v. FCC*, 450 F.3d 528 (D.C. Cir. 2006). The FCC found that unbundled switching access was not "necessary" because competitors had successfully deployed their own switches. *Id.* at ¶ 199. It also found that,"regardless of any limited potential impairment requesting carriers may still face, we find that the continued availability of unbundled mass market switching would impose significant costs in the form of decreased investment incentives, and therefore we conclude not to unbundle pursuant to section 251(d)(2)'s 'at a minimum' authority." *Id.*

[51] *See* Triennial Review Order, *supra* note 23, at ¶¶ 200, 244.

[52] *See* USTA I, *supra* note 14, at 424.

[53] *See* Commission Staff Working Document, SWD(2014) 298 at p. 40, available at https://ec.europa.eu/digital-agenda/en/news/explanatory-note-accompanying-commission-recommendation-relevant-product-and-service-markets (*accompanying the document* 2014 Market Definitions).

[54] *See* Commission Recommendation (2010/572/EU) of 20 September 2010 on regulated access to Next Generation Access Networks (NGA), OJ L 251, 25.9.2010, at ¶¶ 22-28.

[55] *See* Regulation (EU) No 531/2012 of the European Parliament and of the Council of 13 June 2012 on roaming on public mobile communications networks within the Union, OJ L 172, 30.6.2012, pp. 10–35.

[56] All of the EU data in this paper is based on all 28 members states. A list of these states is available at http://europa.eu/about-eu/countries/index_en.htm. Euros were converted to dollars using an exchange rate of €1 equals $1.20 (or $1 = €0.80).

[57] This gross domestic product data was produced by The World Bank, and is available at http://data.worldbank.org/indicator/NY.GDP.MKTP.CD.

[58] These per capita incomes are based on The World Bank gross domestic product data. *See id.*

[59] *See* Christopher S. Yoo, U.S. vs. European Broadband Deployment: What Do the Data Say?, U of Penn, Inst. for Law & Econ. Research Paper No. 14-35 at p. (Jun. 3, 2014), available at http://papers.ssrn.com/sol3/papers.cfm?abstract_id=2510854.

[60] The US geographic data was produced by the Census Bureau, and is available at http://quickfacts.census.gov/qfd/states/00000.html. The EU data was produced by Eurostat, and is available at http://europa.eu/about-eu/countries/index_en.htm.

[61] *See* Urban Area Criteria for the 2010 Census, Department of Commerce, Bureau of the Census, 76 Fed. Reg. 53030, 53039 (2011), available at http://www.census.gov/geo/reference/pdfs/fedreg/fedregv76n164.pdf. Rural areas are actually defined by reference to "urban areas." An urban area is comprised of a densely settled core of census tracts and/or census blocks that meet minimum population density requirements, along with contiguous territory containing non-residential urban land uses as well as territory with low population density included to link outlying densely settled territory with the densely settled core. To qualify as an urban area on its own, the territory identified according to the criteria must encompass at least 2,500 people, at least 1,500 of which reside outside institutional group quarters. Urban areas that contain 50,000 or more people are designated as "urbanized areas," and urban areas that contain at least 2,500 and less than 50,000 people are designated as "urban clusters." "Rural areas" are all population, housing, and territory not included within an urban area. *Id.*

[62] The EU bases its urbanization statistics on the population densities of square kilometers within predefined areas known as "local administrative units level 2" (LAU2). An LAU2 is considered a "densely populated area" if at least 50% of its inhabitants are living in a "high density cluster", i.e., contiguous one squarer kilometer grid cells with a density of at least 1,500 inhabitants per km2 and a minimum population of 50,000. An "intermediate density area (i.e., towns and suburbs) is an LAU2 with less than 50% of its population living in a higher density cluster and less than than 50% of its population living in rural grid cells, which are cells outside of "urban clusters." An urban cluster is a contiguous grid cells of 1 km2 with a density of at least 300 inhabitants per km2 and a minimum population of 5,000. See Lewis Dijkstra and Hugo Poelman, European Commission Directorate-General for Regional and Urban Policy, *A Harmonized Definition of Cities and Rural Areas: The New Degree of Urbanization*, Regional Working Paper (WP 01/2014), available at http://ec.europa.eu/regional_policy/sources/docgener/work/2014_01_new_urban.pdf.

[63] According to the Census Bureau, 19.3% of the US population lives in rural areas. See https://www.census.gov/geo/reference/ua/urban-rural-2010.html. According to the EU methodology, 29% of Europeans live in rural areas. https://www.census.gov/geo/reference/ua/urban-rural-2010.html.

[64] *See id.* at p. 2 (noting that urbanization comparisons based on different area sizes produced distorted results that reduce comparability).

[65] The US fixed investment data was produced by USTelecom, and is available at http://www.ustelecom.org/broadband-industry-stats/investment/historical-broadband-provider-capex. The EU fixed investment data was produced by the EU, and is available at http://ec.europa.eu/digital-agenda/fast-and-ultra-fast-internet-access-analysis-and-data.

[66] The US fixed revenue data was produced by the FCC, and is available at http://www.fcc.gov/encyclopedia/federal-state-joint-board-monitoring-reports. *See* 2014 USF Monitoring Report, Table 1.1. Note that the inclusion of international and satellite revenue in the USF Monitoring report may result in US revenue being overstated in comparison to the EU. The EU fixed revenue data was produced by the EU, and is available at http://ec.europa.eu/digital-agenda/fast-and-ultra-fast-internet-access-analysis-and-data.

[67] The US mobile investment data for 2011 was produced by the FCC, and is available at http://www.fcc.gov/document/16th-mobile-competition-report. *See* 16th Mobile Competition Report, FCC 13-34 at Table 33 (2013). For the year 2012, the US mobile investment data was produced by CTIA, and is available at http://www.ctia.org/your-wireless-life/how-wireless-works/annual-wireless-industry-survey. The EU mobile investment data was produced by the EU, and is available at http://ec.europa.eu/eurostat.

[68] The US mobile revenue data was produced by the FCC, and is available at http://www.fcc.gov/document/17th-annual-competition-report. *See* 17th Mobile Competition Report, FCC 14-1862 at p. 116, Table II.D.i (2014). The EU mobile revenue data was produced by the EU, and is available at http://ec.europa.eu/eurostat.

[69]

[70] *See, e.g.*, S. Derek Turner, *'Shooting the Messenger'*, Free Press (Jul. 2007) (claiming that Europe is outperforming the US in broadband), available at http://www.freepress.net/sites/default/files/fp-legacy/shooting_the_messenger.pdf.

[71] This data was produced by the FCC, and is available at http://www.fcc.gov/document/fcc-releases-new-data-local-telephone-competition-4. *See* Local Telephone Competition: Status as of December 31, 2012, at Tables 1, 19 (Nov. 2013).

[72] This data was produced by the EU, and is available at http://ec.europa.eu/digital-agenda/fast-and-ultra-fast-internet-access-analysis-and-data. Note that this data was produced only at mid-year. This report uses the data for July 2013, which may be more favorable to the EU.

[73] This data was produced by the FCC, and is available at http://www.fcc.gov/reports/internet-access-services-reports. *See* Internet Access Services: Status as of December 31, 2012, at Figure 5(a), p. 9 (Dec. 2013).

[74] This data was produced by the EU, and is available at http://ec.europa.eu/digital-agenda/fast-and-ultra-fast-internet-access-analysis-and-data.

[75] *Id.*

[76] This data was produced by the National Telecommunications and Information Administration, and is available at http://www.broadbandmap.gov/analyze.

[77] This data was produced by the EU, and is available at http://digital-agenda-data.eu/datasets/digital_agenda_scoreboard_key_indicators/indicators. The EU defines next generation broadband "coverage/availability" as "a supply indicator defined as the percentage of Households living in areas served by NGA. Next Generation Access includes the following technologies: FTTH, FTTB, Cable Docsis 3.0, VDSL and other superfast broadband (at least 30 Mbps download)." *Id.*

[78] *Id.*

[79] The US LTE deployment data for 2011 was produced by the FCC, and is available at http://www.fcc.gov/document/16th-mobile-competition-report. *See* 16th Mobile Competition Report, FCC 13-34 at pp. 7-8 (2013).

[80] The US LTE coverage data for 2011 was produced by the FCC, and is available at http://www.fcc.gov/document/16th-mobile-competition-report. *See* 16th Mobile Competition Report, FCC 13-34 at p. 7 (2013). This data is based solely on the coverage provided by Verizon Wireless as of November 2012, and thus likely understates LTE coverage in the US. For the EU, see http://ec.europa.eu/digital-agenda/fast-and-ultra-fast-internet-access-analysis-and-data.

[81] For US 3G coverage, *see id.* at p. 7. For the EU, see http://ec.europa.eu/digital-agenda/fast-and-ultra-fast-internet-access-analysis-and-data.

[82] *See* Brendan Sasso, *FCC Chief Hints He'll Enact Obama's Net Neutrality Plan*, National Journal (Jan. 7, 2015), available at http://www.nationaljournal.com/tech/fcc-chief-hints-he-ll-enact-obama-s-net-neutrality-plan-20150107.

[83] See Statement of President Barack Obama, available at http://www.whitehouse.gov/net-neutrality.

[84] *See* SWD(2013), *supra* note 2, at p. 7.

[85] *See* Nick Russo, Robert Morgus, Danielle Kehl, and Sarah Morris, *The Cost of Connectivity 2014*, New America Foundation (Oct. 30, 2014) (comparing cities selected by the authors rather than states), available at http://www.newamerica.org/oti/the-cost-of-connectivity-2014/.

[86] SWD(2013).

[87] *Id.* at p. 16.

[88] *Id.*

[89] *Id.* at p. 17.

[90] Regulation (EU) No 283/2014 of the European Parliament and of the Council of 11 March 2014 on guidelines for trans-European networks in the area of telecommunications infrastructure and repealing Decision No 1336/97/EC, OJ L 86, 21.3.2014, p. 14–26 at ¶ (21) (hereinafter "2014 Regulation").

[91] SWD(2013) at p. 34.

[92] *Id.* at p. 44.

[93] *Id.*

[94] *Id.* at pp. 44-45.

[95] *See* Boston Consulting Group, *Reforming Europe's Telecoms Regulation to Enable the Digital Single Market* at p. 11 (Jul 2013), available at https://www.etno.eu/datas/publications/studies/BCG_ETNO_REPORT_2013.pdf.

[96] *See id.*

[97] *See id.* at pp. 39-40.

[98] Communications Committee (COCOM) Report, *Trends in European broadband markets* at p. 19 (2014), available at https://ec.europa.eu/digital-agenda/en/news/scoreboard-2014-trends-european-broadband-markets-2014.

[99] *Id.* at p. 19.

[100] *Id.* at p. 14.

[101] *See generally* Regulatory Authority for Electronic Communications and Posts (Autorité de régulation des communications électroniques et des postes), *ARCEP's Annual Report* (2013) (centering broadband deployment plans on the Orange network), available at http://www.arcep.fr/uploads/tx_gspublication/rapport-activite-2013-english-version.pdf.

[102] *See id.* at pp. 111-12.

[103] *See id.* at p. 112.

[104] CITE broadband indicators data.

[105] *See* Commission Staff Working Document, SWD(2014) 249, Report on Implementation of the EU regulatory framework for electronic communications at p. 244 (hereinafter "2014 Implementation Report"), available at https://ec.europa.eu/digital-agenda/en/news/2014-report-implementation-eu-regulatory-framework-electronic-communications.

[106] *See* Broadband Commission for Digital Development, International Telecommunication Union, Strategies for the Promotion of Broadband Services and Infrastructure: A Case Study on Romania at pp. 3, (2012) (hereafter "Case Study"), available at http://www.itu.int/ITU-D/treg/broadband/BB_MDG_Romania_BBCOM.pdf.

[107] *Id.* at p. 14.

[108] *Id.* at p. 15.

[109] Romania 2011 Telecommunication Market and Regulatory Developments at p. 7 (2012), available at http://ec.europa.eu/digital-agenda/sites/digital-agenda/files/RO_Country_Chapter_17th_Report_0.pdf.

[110] *See id.*

[111] This data was produced by the EU, and is available at http://ec.europa.eu/digital-agenda/fast-and-ultra-fast-internet-access-analysis-and-data.

[112] *See id.*

[113] *See id.*

STOCKS/EARNING

Moffett Downgrades Cable Sector on Title II Woes

Pegs Comcast, TWC, Charter 'Neutral'

2/17/2015 9:45 AM Eastern

By: Mike Farrell
Follow @MikeFCable

Influential media analyst Craig Moffett, principal and senior analyst at MoffettNathanson, lowered his ratings on three top cable distribution stocks (Comcast, Time Warner Cable and Charter) to 'neutral' on Tuesday, citing the threat of price regulation tied to Title II reclassification of broadband and the increased possibility that regulators reject the Comcast-Time Warner Cable merger as hurdles that are too big to ignore.

Moffett has warned about the looming threat of pricing regulation with Title II for months, and though the stocks have stayed stable, perhaps in the thought that a Republican Congress will tamp down any pricing strictures, Moffett is not convinced.

"It would be naïve to suggest that the implication of Title II, particularly when viewed in the context of the FCC's repeated findings that the broadband market is non-competitive, doesn't introduce a real risk of price regulation," Moffett wrote. "Not tomorrow, of course, so yes, near term numbers won't change. But terminal growth rate assumptions need to be lowered. Multiples will have to come down."

Moffett, who in the past gave the Comcast-TWC deal a 70-30 chance of winning approval, dropped those odds to 60-40 on Tuesday, citing increasingly negative sentiment in the press and federal moves to raise the minimum speed classification for broadband to 25 Megabits

per second.

"Mostly, however, our downgrade is simply a matter of a sector that has priced in a awful lot of good news and very little bad," Moffett wrote. "After a strong rally in the face of mounting headwinds, Comcast is now just 1% below our target prices, and Charter just 11%. We believe it is time to reduce exposure."

Removing broadband pricing flexibility also could exacerbate other factors that are weighing on the indstry, he added.

"Worsening viewership and advertising trends are driving programmers to break ranks both with each other and with their legacy distributors," Moffett wrote. "In the past, changes to broadband pricing would have been the natural remedy. That avenue may be no longer open."

The stocks reacted tepidly to the downgrade, with Comcast closing at $58.80, down about 1.1% (67 cents each). Charter finished Feb. 17 down 0.8% ($1.43) to $176.45 and Time Warner Cable fell 1,4% ($2.06) to $147.68 each.

TakeAway

Influential media analyst Craig Moffett downgraded the cable distribution sector to 'neutral' Tuesday on the looming threat of federal pricing regulation and lowered expectations that a Comcast-TWC will be approved.

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OPINION

Why Download Europe's Lousy Broadband Policy?

Treating the Internet like a utility has been tried, with deleterious effects on innovation and costs.

By **RICK BOUCHER** And **FRED CAMPBELL**
Feb. 11, 2015 7:23 p.m. ET

As the Federal Communications Commission prepares to treat Internet companies like public utilities under Title II of the 1934 Communications Act, it is worth asking how government regulation of the Internet would actually work. Conveniently enough, Europe has been experimenting with heavy-handed Internet regulation since 2002, and the results are a warning of what the U.S. can expect.

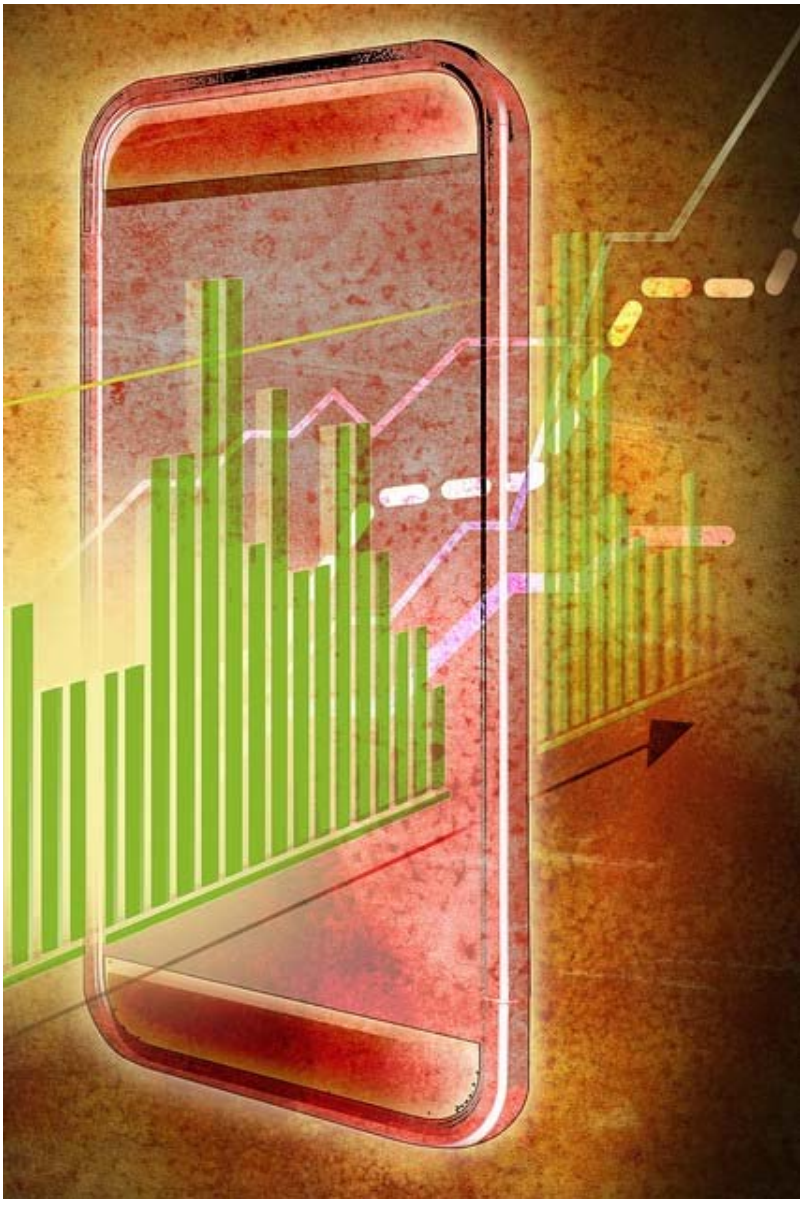
That is the conclusion of a new study by our organization, the Internet Innovation Alliance, a coalition of businesses and nonprofits. Over the past two decades, the U.S. has benefited from a bipartisan, light-touch broadband regulatory regime that has spurred more capital investment, more competition and—perhaps most important—more broadband capacity than in the European Union, which has a larger population and similar economy.

Consider capital investment, without which broadband networks do not exist and cannot be modernized. Fixed-broadband operators in the U.S. invested $137 billion in 2011 and 2012, more than four times Europe's $31 billion over the same time period. U.S. mobile operators, at $55 billion, invested twice as much as their European counterparts' $29 billion. Even when the comparison is made as a percentage of industry revenue, the U.S. investment advantage persists.

Europe's "wholesale-access" regulatory regime, under which fixed operators must make their networks available to competitors at a regulated price, was ostensibly designed to promote competition. Yet in Europe, powerful incumbent

carriers hold 65% of the local telephone market, while in the U.S. 59% of the local telephone market is served by new competitors. More than 90% of U.S. households can choose from among 10 or more providers.

A similar story emerges in facilities-based broadband competition. While 76% of American households have access to three or more fixed-broadband providers, in Europe less than 50% do. This is in large part because European investment has been so weak. Without robust investment, competition cannot flourish, and it is no surprise that 82% of U.S. households have access to high-speed broadband, compared with 63% in the European Union.



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The study's analysis of mobile networks also illustrates how the U.S. offers greater access than Europe to the highest-speed, so-called LTE networks. In 2012 only 30% of European households had access to LTE, while 79% of American households did.

So where does this leave us? Net-neutrality proponents assume that the impact of common-carrier regulations will be minimal and that the U.S. will maintain its technology lead forever, but the European regulatory example suggests that such an outcome is far from certain. It is more likely that imposing regulations crafted for last century's

monopoly telephone service will have a crippling and chilling effect on broadband investment. Investment drives innovation: As the Internet Innovation Alliance study demonstrates, Europe has fallen badly behind the U.S.

The European Union has wisely decided to pull back, recommending in 2013 that member-state regulators not impose wholesale-access prices on the deployment of next-generation networks, fearing that private investment would be severely reduced.

It is ironic that shortly after the European Commission recommended relaxing its Title II-style approach to broadband regulation, the FCC began considering whether to impose such a failed policy in the U.S. The irony is compounded by the reality that the FCC could use its existing authority to adopt strong network-neutrality protections without reclassifying broadband as a public utility.

Sufficient investment and innovation are needed to prevent Internet capability in the U.S. from declining, an alarming prospect for one of the economy's most dynamic sectors. Furthermore, adding regulations while Europe scales back may send capital overseas to a more welcoming investment environment.

Mr. Boucher, a former Democratic congressman from Virginia, is a partner at Sidley Austin LLP and honorary chairman of the Internet Innovation Alliance. Mr. Campbell, formerly chief of the Federal Communications Commission's Wireless Bureau, is the author of the study discussed in this op-ed.

Vox

Republicans are offering a deal on net neutrality. Democrats should take it seriously.

Updated by Timothy B. Lee on February 2, 2015, 11:50 a.m. ET

tim@vox.com

Mark Wilson/Getty Images

The Federal Communications Commission is on the verge of releasing new, stronger network neutrality regulations. These rules are controversial because they are expected to declare residential internet access a public utility, which could open the door to more regulation of

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http://www.vox.com/2015/1/21/7867869/net-neutrality-republican-compromise) that would establish network neutrality rules *without* taking the controversial public-utility step.

But conversations with insiders suggests that this Republican alternative is probably doomed. Democrats and liberal activists think they can get what they want (http://www.washingtonpost.com/blogs/the-switch/wp/2015/01/21/house-democrats-are-itching-for-a-fight-over-net-neutrality/) without new legislation. Meanwhile, the Republicans who favor compromise face pressure from purists who oppose any legislation that would impose network neutrality regulations on the internet.

That's a shame. The internet deserves a more certain resolution to the net neutrality fight than Washington is giving it.

The network neutrality fight has been raging for more than a decade because current law, passed in 1996, is unclear about how the FCC should regulate the internet. At the time, the internet was a new technology and Congress was primarily focused on older telephone networks. So they wrote vague rules that effectively give the FCC broad latitude to figure out how to regulate internet access.

THE CURRENT SITUATION GIVES NETWORK NEUTRALITY SUPPORTERS UNIQUE LEVERAGE

If FCC chairman Tom Wheeler establishes strong network neutrality rules in the coming weeks, as he is expected to do, these rules may not live much longer than Barack Obama's presidency. If a Republican is elected to the White House in

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Wheeler's reforms.

That's a problem because the whole point of network neutrality regulations is to create a predictable environment for online content producers. Network neutrality rules that could expire in 2017 won't give internet content providers the same kind of confidence that permanent rules could provide.

And a situation where the rules change every few years isn't great from the perspective of network neutrality skeptics, either. The public utility rules the FCC is expected to invoke give the agency fairly broad discretion. The next time a liberal takes the White House, she could appoint an FCC chair who imposes even stronger regulations. That kind of uncertainty could discourage investments in broadband.

A legislative compromise would leave both sides unsatisfied, but it would also provide some certainty about how the internet will be regulated in the future. That would give content companies and network providers alike the confidence to invest, knowing that their plans won't be disrupted by another change in the rules.

Network neutrality advocates have told me they prefer to have the FCC establish strong regulations first, and negotiate with Republicans after that. But the current situation, with the FCC on the verge of a major regulatory shift, gives network neutrality supporters unique leverage. Republican leaders — and their influential cable and telephone company allies — are highly motivated to cut a deal and preempt reclassification. But once the FCC reclassifies, that sense of urgency will be lost.

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February 2, 2015

VIA ECFS

Marlene H. Dortch, Secretary
Federal Communications Commission
445 Twelfth Street, SW
Washington, DC 20554

Re: American Cable Association Notice of Ex Parte Presentation, *Protecting and Promoting the Open Internet*, GN Docket No. 14-28; *Framework for Broadband Internet Service*, GN Docket No. 10-127

Dear Ms. Dortch:

On January 29, 2015, Ross J. Lieberman, Senior Vice President Government Affairs, American Cable Association ("ACA"); Betty Zeman, Marketing Manager, Cedar Falls Utilities ("CFU"); Ben Lovins, Senior Vice President, Telecommunications Division, Jackson Energy Authority ("JEA"); Chris Kyle, Vice President Industry Relations & Regulatory, Shenandoah Telecommunications Company ("Shentel"); Thomas W. Cohen, Kelley Drye & Warren and the undersigned, outside counsel to ACA, met to discuss the above-referenced proceedings with, respectively, Matthew Del Nero and Claude Aiken, Wireline Competition Bureau, Andrew Erber and Marcus Maher, Office of General Counsel, and Scott Jordan, Chief Technologist; Gigi Sohn, Daniel Alvarez and Eric Feigenbaum, Office of Chairman Wheeler; and Nicholas Degani, Office of Commissioner Pai. The purpose of the meetings was to discuss the views of ACA[1] and its members that small broadband Internet service providers ("ISPs) lack the incentive and ability to harm Internet openness and they will be harmed if the Commission reclassifies broadband Internet access service under Title II of the Act and does not fully forbear from this action and resolve other collateral issues.

Background on ACA Members. At the meeting, the ACA members discussed briefly background about their companies, the robust competitive environment for broadband Internet access services in their markets, and their recent and planned investments to deploy broadband:

[1] ACA represents more than 800 small and medium-sized cable television operators. No ACA member has more than 1 million subscribers; the medium number of video subscribers per member is about 1,000. These operators aren't only video providers, but have upgraded their one-way cable systems to also provide two-way advanced services such as broadband Internet and voice over Internet Protocol. ACA members combined offer advanced services to nearly 19 million homes (14% of the U.S. total). About 7 million consumers subscribe to video, and more than 6.5 million subscribe to broadband Internet. ACA's membership includes a mix of cable ops, rural telephone companies, and municipalities (nearly 10% of ACA's membership are municipal providers). ACA's members use a mix of broadband technologies – 80% cable modem (DOCSIS), 12% Fiber-to-the-Home ("FTTH"), and 7% digital subscriber line ("DSL"). ACA estimates that its members have invested more than $10 billion in their networks. ACA members provide broadband to smaller markets and rural, hard to serve areas. They have built out broadband to 1.6 million homes that the Commission considers "uneconomic" to serve. ACA members also provide competition to other voice, video and broadband Internet providers (4.8 million homes in urban areas and 0.6 million homes in rural areas.

- Cedar Falls Utilities. Ms. Zeman stated that CFU is a municipal fiber-to-the-home ("FTTH") provider delivering broadband Internet and video services in Cedar Falls, Iowa.[2] CFU today has 12,500 broadband Internet subscribers and competes with both Mediacom and CenturyLink. CFU's standard broadband product, FiberNet Internet service, is up to 1 gigabit per second. To first deploy broadband in 1996 and later upgrade its distribution plant to FTTH, CFU saved cash from subscriber revenues for about half the cost, and raised the rest through debt obligations.

- Jackson Energy Authority. Mr. Lovins stated that JEA too is a municipal public utility in in Jackson, Tennessee using FTTH to provide voice, video and broadband Internet, among other services. JEA passes about 35,000 residences, serving 18,000 broadband Internet subscribers. JEA faces substantial competition – it is the third wireline broadband ISP in the market, competing with Charter and AT&T. It experiences an annualized churn rate of between 20-30%; subscriber acquisition costs are a huge burden and JEA competes hard to keep subscribers from switching. JEA finances its operations and network through subscriber revenues and revenue bonds. Mr. Lovins explained that JEA is actively investing in its network and will increase its investment substantially to expand its gigabit broadband plant; it is planning to spend over $8 million over the next three years.

- Shenandoah Telecommunications Company. Mr. Kyle described Shentel, a 113 year old publicly-traded rural provider focusing today on delivering voice, video and broadband Internet over both cable and telephone plant in portions of Virginia, West Virginia, and western Maryland. Shentel's cable broadband network passes 170,000 households and its DSL networks pass about 22,000 households. Shentel has 51,000 cable broadband subs and about 11,500 DSL subscribers. The company was recognized as being the first 100 gigabit network to be built in Virginia. Shentel's annualized churn for its Internet service is close to 30% per year; the loss of subscribers is very expensive due to need for truck rolls and Shentel also competes hard to try to avoid losses. Shentel also serves a lot of very small and remote communities such as Rural Retreat and Farmville, Virginia with at most only a few thousand households, and also serves economically depressed areas such as McDowell County, West Virginia, the second poorest county in the nation. Although Shentel faces less competition in these areas, Shentel must offer good quality service at a reasonable price to attract customers who have never subscribed to Internet access service.[3] To finance its network, Shentel relies on subscriber revenues and risk capital from the private financial markets.

Perspectives of Small ISPs on Why Title II is the Wrong Approach. In a series of filings, ACA has informed the Commission that reclassification is the wrong approach for small and medium-sized ISPs who lack the incentive and ability to harm Internet openness from a factual, policy and legal perspective, but that if the Commission takes this unnecessary and unwarranted action, it must avoid imposing burdens on these smaller ISPs that will not benefit either consumers or Internet content,

[2] CFU does not offer voice service, although it has reviewed this decision periodically. One reason that CFU does not offer voice service is that it wished to avoid the regulatory burdens associated with offering such service.

[3] In addition to keeping prices affordable, Shentel is working on a variety of efforts to increase adoption in these economically-depressed areas to address issues such as lack of computers and equipment in the home and digital literacy.

applications and services ("edge") providers.[4] CFU, JEA and Shentel buttressed these arguments by describing how they do not, cannot, and do not wish to engage in practices that would harm Internet openness either because they face competition or are striving to drive up adoption, and because they lack the negotiating power to extract compensation from Internet edge providers. CFU, JEA and Shentel described the challenges of serving smaller markets where they face competition from other broadband Internet providers. Shentel also described the challenge of attracting and serving low-income subscribers in areas where there is less competition. They explained that their networks are financed through revenues derived from rates paid by their subscribers and in part through the financial markets in the form of debt. Accordingly, these providers must take a consumer-centric approach to providing service. They explained how harming Internet openness would depress consumer satisfaction with their networks and interfere with their ability to maintain a revenue stream sufficient to cover operations and to repay debt obligations and finance network upgrades and extensions.

Small ISPs Adhere to Open Internet Principles and Lack the Incentive and Ability to Harm Edge Providers. Rather than having an incentive to harm the openness of the Internet, available evidence demonstrates that smaller ISPs are supportive of an open Internet. Ms. Zeman described CFU's support for an open Internet and for the balanced obligations imposed on ISPs by the Commission's 2005 Internet Policy Statement and its 2010 Open Internet rules. CFU, which considered itself a proponent of net neutrality rules under Section 706 of the Act, does not throttle or prioritize traffic on its network, and does not cap throughput. CFU serves in a competitive

[4] *Protecting and Promoting the Open Internet*, Reply Comments of the American Cable Association, GN Docket Nos. 14-28, 10-127 (filed Sept. 15, 2014) ("ACA Reply Comments"); *Protecting and Promoting the Open Internet*, Comments of the American Cable Association, GN Docket Nos. 14-28, 10-127 (filed July 17, 2014) ("ACA Comments"). ACA maintains that the record in this proceeding confirms that there is no factual or policy justification to impose network management rules or network management disclosure requirements that are more stringent or go beyond those adopted in the 2010 Open Internet Order, especially for small and medium-sized ISPs. *Preserving the Open Internet*, Report and Order, 25 FCC Rcd 17905 (2010) ("2010 Open Internet Order"), aff'd in part, vacated and remanded in part sub nom. *Verizon v. FCC*, 740 F.3d 623 (D.C. Cir. 2014) ("Verizon"). In an *ex parte* letter filed January 12, 2015, ACA explained that reclassifying broadband Internet access service as a telecommunications service subject to regulation under Title II of the Act for small and medium-sized broadband ISPs is unsupported by the facts, the record in the above-referenced proceedings, or the Communications Act . *Protecting and Promoting the Open Internet*, Letter of Barbara S. Esbin, Cinnamon Mueller, Counsel for ACA, to Marlene H. Dortch, Secretary, FCC, GN Docket Nos. 14-28, 10-127 (filed Jan. 12, 2015). Such an action would therefore be arbitrary, capricious, and contrary to law as well as counterproductive from the perspective of a national policy to encourage the deployment of affordable advanced telecommunications services and broadband infrastructure. *Id.* at 3. ACA urged that if the Commission nonetheless adopts the reclassification approach, it should extend maximum forbearance of Title II regulatory obligations to small and medium-sized broadband ISPs, including those contained in Sections 201, 202 and 208, deem broadband Internet access to be an interstate telecommunications service and take action to prevent cable ISPs from paying the telecommunications rate for their pole attachments. *Id.* at 10. ACA also joined in an *ex parte* letter filed on behalf several trade associations representing smaller ISPs pointing out the inadequacy of the Commission's Initial Regulatory Flexibility Act analysis in this proceeding. *See Protecting and Promoting the Open Internet*, Letter of ACA, NCTA, and WISPA, to Marlene H. Dortch, Secretary, FCC, GN Docket Nos. 14-28, 10-127 (filed Jan. 9, 2015). In addition, ACA filed an *ex parte* letter highlighting the potential for reclassification of the broadband Internet access service provided by its cable operator members to result in increased pole attachment rates under the telecommunications rate formula in certain circumstances. *Protecting and Promoting the Open Internet*, Letter of Thomas Cohen, Kelley Drye & Warren, LLP, Counsel for ACA, to Marlene H. Dortch, Secretary, FCC, GN Docket Nos. 14-28, 10-127 (filed Jan. 20, 2015) ("ACA Jan. 20th Ex Parte") (addressing pole attachment issues). Most recently, ACA filed an *ex parte* letter urging the Commission not to burden small and medium-sized ISPs with additional – and utterly unwarranted – enhanced transparency rules. *Protecting and Promoting the Open Internet*, Letter of Barbara S. Esbin, Cinnamon Mueller, Counsel for ACA, to Marlene H. Dortch, Secretary, FCC, GN Docket Nos. 14-28, 10-127 (filed Jan. 27, 2015).

environment and has found that it is a good business decision to comply with the Commission's Open Internet principles as they are widely accepted by the public and all Internet providers. In affirmation of CFU's commitment to the Open Internet principles, Ms. Zeman confirmed that CFU has logged *zero* Open Internet service or disclosure complaints from consumers or traffic management inquiries from edge providers.[5] Mr. Lovins and Mr. Kyle confirmed that neither JEA nor Shentel throttles or prioritizes traffic on its network and that neither has received consumer or edge provider complaints about its network management practices or Open Internet disclosures. Mr. Lieberman stated that the views of Ms. Zeman, Mr. Lovins, and Mr. Kyle are consistent with those of all small and medium-sized ISPs.

Some Open Internet proponents assert that large ISPs that also offer video services have an incentive to thwart the availability of over-the-top ("OTT") video options; however, this is not true for smaller ISPs. CFU, JEA and Shentel have embraced facilitating over-the-top video viewing for their subscribers by entering into local caching arrangements with online video distributors such as Netflix and Amazon as well as by offering OTT video options as features on their set-top boxes, even though they recognize that embracing of OTT services may lead to an erosion of their subscription multichannel video programming distributor base.

These operators described how, rather than trying to congest their interconnection points for the purpose of demanding payments from edge providers, they have had to work hard to even get the attention of OTT video distributors for the purpose of enabling a better consumer experience. All three ACA member companies reported similar Internet interconnection experiences with large edge providers: getting the attention of an edge provider like Netflix to even discuss entering into mutually-beneficial settlement-free caching arrangements such as Netflix's Open Connect program is an effort for smaller ISPs. They confirmed that Netflix will not even begin to discuss these arrangements with them until the ISP's Internet traffic reached a certain traffic volume. Mr. Kyle stated that once Shentel had reached that level of traffic, it was able to enter into amicable settlement-free collocation arrangements with Netflix, Akamai, Google and others.[6] Ms. Zeman and Mr. Lovins described similar experiences at CFU and JEA. Ms. Zeman stated that CFU had to "beat down the door" to get the attention of Netflix. Mr. Lovins reported that JEA struggled to get Netflix to pay attention when the network was at 2 gigabits, and is still unsuccessfully trying to negotiate a Netflix app for its set-top boxes. Mr. Lieberman noted that these operators' experiences are consistent with the experiences of other ACA members, hundreds of whom would benefit from entering into settlement-free caching arrangements, but are too small to meet the minimum traffic levels required by edge providers.

Not only do small and medium-sized ISPs lack the incentive, but they lack the ability to harm the openness of the Internet as well. The lack of interest of edge providers to enter into a caching arrangements with hundreds of smaller ISPs demonstrates that a single member company has no ability to successfully demand payment for access to their subscribers or for priority delivery of traffic over their last-mile networks. Ms. Zeman summed the situation up by stating that, "Netflix would laugh us out of the room if we asked for money."

Title II Regulation Would Harm the Finances of Smaller ISPs and Hinder Their Ability to Deploy Broadband. ACA and its member companies next described the direct and indirect economic harms they anticipate should the Commission reclassify broadband Internet access service. They focused primarily on harms arising under Sections 201, 202 and 208 of the Act immediately apparent

[5] Ms. Zeman stated that if CFU received a call from an edge provider about its network management practices, it would put the caller directly in touch with its Chief Technical Officer for an answer.

[6] *See* ACA Comments, Declaration of Edward McKay, ¶ 12 (describing Shentel's efforts to enter into direct peering arrangements with large Internet content providers).

under a reclassification scheme, that, even assuming some forbearance, are provisions likely to be applied to ISPs.[7] These include rate regulation – either through *ex ante* rules or *ex post* enforcement through the complaint process – unbundling (open access), resale and mandatory collocation, types of obligations that the Commission has previously imposed on common carriers using its Section 201 and 202 authority.

Ms. Zeman stated that it would be extremely burdensome for CFU to have to defend its practices, rates, terms and conditions of service before the Commission in Washington, D.C. Mr. Lovins explained that JEA is defending against a complaint by a third-party ISP concerning open access to its network before the Tennessee Public Regulatory Authority, which is costly to defend. He too fears having to respond to such requests before the Commission, which would be even more costly and difficult.

Ms. Zeman and Mr. Lovins also related how CFU's and JEA's ability to raise funds for network investment through debt offerings would be adversely impacted if they were to lose control over their rates through either direct rate regulation or adjudication of complaints about rates, terms and conditions of service. Loss of control over pricing would also threaten their ability to repay current debt obligations. Ms. Zeman explained that CFU can raise money at favorable rates to pay for network investments today because the investor community sees that CFU has control over its rates. Rate regulation that impairs CFU's ability to control it rates and therefore its ability to repay its debt would likely lower its bond ratings for future borrowings. Mr. Lovins explained that JEA's bonds were taken years ago, but that JEA has to pay that debt and that it does so through revenues derived from subscriber rates. The imposition of open access mandates whereby a third-party ISP is able to ride over JEA's broadband network and compete for end-users would seriously threaten JEA's ability to repay its debt obligations by driving down subscriber revenues and therefore harm its ability to attract financing for continued upgrades and deployment in the future. Ms. Zeman agreed. CFU's network was neither built nor financed on the premise that it would be subject to open access conditions, and such an obligation would be detrimental to its future.

Classification of Services as Interstate and Preemption of State Regulation Are Necessary. ACA also discussed the need for the Commission, should it reclassify, to declare the reclassified broadband Internet access service to be a jurisdictionally interstate service and to preempt any state regulation of the service. In view of the heavy burden of new federal regulations, also permitting states to regulate could be suffocating for smaller ISPs.

Lack of Need for Enhanced Transparency Rules for Small ISPs. ACA also discussed the lack of record support for the imposition of *any* enhanced transparency requirements for small ISPs, particularly proposals to maintain a separate set of Open Internet disclosures tailored to the needs of edge providers and to disclose, on a real-time basis, information about network congestion and the

[7] ACA understands that the model contemplated currently by Commission staff is that of commercial mobile radio service ("CMRS") under Section 332, added to the Communications Act of 1934 by the Omnibus Budget Reconciliation Act of 1992, codified at 47 U.S.C. § 332. CMRS providers are classified as common carriers, subject to Sections 201, 202 and 208 of the Act, but are not rate regulated by the Commission. States that wished to continue to regulate cellular rates, for example, were required to petition the Commission for permission. *See* 47 C.F.R. § 20.13. Several states including California submitted such petitions in the mid - 1990s; none of these petitions were granted. *FCC Denies State Petitions to Regulate Rates for Commercial Mobile Radio Services*, Report No. WT 95-8 (May 11, 1995); *see also* Edmund L. Andrews, *FCC Rejects States' Efforts to Regulate Cellular Prices*, NEW YORK TIMES, May 12, 1995, at D6, available at: http://www.nytimes.com/1995/05/12/business/fcc-rejects-states-efforts-to-regulate-cellular-prices.html. For this reason, it focused the discussion at the meetings on the provisions most likely to be applied to its members, post-reclassification. ACA addressed the harms of other consequences of reclassification in its Comments and Reply Comments. See ACA Comments at 62-66.

lack of demonstrable benefits that would accrue from such reporting. Ms. Zeman confirmed that real-time network congestion disclosures would be highly burdensome for a small ISP. Placing an obligation on ISPs only in a competitive marketplace tips the balance in favor of other Internet players. As noted above, ACA member companies are complying with the current unitary disclosure requirements, which, although somewhat burdensome, strike the right balance between edge provider and consumer needs for pertinent information and the need to provide ISPs with some flexibility in how they disclose pertinent information. None have received complaints about the level of their current Open Internet disclosures and all post points of contacts for consumer and edge provider questions. In short, there is no need to impose *any* enhanced transparency requirements aimed at edge providers on small ISPs. Should the Commission nonetheless adopt such requirements, it must exempt small ISPs from their scope.

Adverse Consequences on Pole Attachment Rates Must be Avoided. Finally, ACA discussed the need for the Commission to avoid unintended adverse consequences of reclassification for its cable members who today pay the cable rate for pole attachments used for the provision of cable and Internet services. Upon reclassification, as ACA has previously explained, its cable members would be subject to assessments at the telecommunications rate for pole attachments, which can be significantly higher under certain circumstances.[8] Ms. Zeman explained that CFU uses some of the poles maintained by its electric utility affiliate and some poles under a joint use agreement with the incumbent local exchange carrier ("ILEC"). For attachments on poles owned by the ILEC, it currently pays the cable rate. Mr. Kyle explained that for Shentel, a rural operator which has a large number of pole attachments and fewer homes per square mile subscriber base over which to spread fixed costs, pole attachment rates are a significant issue. Shentel's pole attachment rates would rise considerably if assessed the telecommunications rate. These changes would affect broadband pricing for all of the affected ISPs. This price increase would be particularly difficult for Shentel, which serves many low-income communities and fights to increase penetration by keeping its broadband rates affordable. Actions by the Commission that would increase an ISP's cost of service would likely flow through to consumers in the form of higher prices, in part if not in whole, a result antithetical to the national policy of increasing broadband deployment and adoption.

* * *

Mr. Lieberman stated that the experiences of ACA's member companies demonstrate that the market is working today to bring broadband deployment and advanced services to small and hard-to-serve areas of the country, consistent with the goals of Section 706 of the Act and the National Broadband Plan. Providers like CFU, JEA and Shentel lack the market power or negotiating leverage to harm Internet edge providers like Netflix, Amazon or Hulu, even if those OTT video providers lessen their video subscriptions simply because they represent too few "eyeballs" to matter. This reality is confirmed by the fact these edge providers will not even return their calls until they reach certain Internet traffic volumes on their networks. Even small or new-entrant edge providers are unlikely to be concerned over these ISPs' network management practices; their make-or-break relations with ISPs are only with the very largest ISPs, who provide access to multiple millions of subscribers. The smaller ISPs simply lack the incentive or ability to harm Internet edge providers or their own subscribers through discrimination, throttling, blocking or seeking payment for priority delivery. In short, they present no problem to the open Internet for which Title II regulation is the solution.

As such, ACA maintains that should the Commission reclassify broadband Internet access as a Title II service, it must eschew imposing unwarranted and burdensome Title II regulatory obligations and allowing unintended adverse consequences such as higher pole attachment rates, and avoid

[8] ACA Jan. 20th Ex Parte at 2.

imposing unnecessary and burdensome enhanced transparency requirements. There is a significant risk that the consequences of reclassification will be far worse than the Commission believes, with absolutely no demonstrable corresponding benefit to either the Internet community as a whole or the residents of the communities served by smaller ISPs. The Commission may avoid risking such adverse outcomes by recognizing that smaller ISPs lack the incentive and ability to engage in unreasonable or discriminatory practices, much less, anticompetitive acts, which harm consumers and Internet edge providers and, on that basis (i) forbear from applying the regulatory obligations applicable to Title II telecommunications carriers, including those found in Sections 201, 202 and 208; (ii) declare broadband Internet to be an interstate service and preempt inconsistent state regulation; (iii) exempt smaller ISPs from any new and enhanced transparency obligations; and (iv) and protect cable ISPs from increases in their pole attachment rates under the telecommunications rate formula.

If you have any questions, or require further information, please do not hesitate to contact me directly. Pursuant to section 1.1206 of the Commission's rules, this letter is being filed electronically with the Commission.

Sincerely,

Barbara S. Esbin
Counsel for the American Cable Association

cc (*via email*): Matthew Del Nero
Claude Aiken
Andrew Erber
Marcus Maher
Scott Jordan
Gigi Sohn
Daniel Alvarez
Eric Feigenbaum
Nicholas Degani

http://www.huffingtonpost.com/david-balto/with-litigation-certain-c_b_6606828.html

David Balto
Antitrust attorney

With Litigation Certain, Congress Should Guide FCC on Internet Regulation

Posted: 02/03/2015 2:23 pm EST Updated: 02/03/2015 7:59 pm EST

For the high-tech crowd, 2015 started with a strong sense of déjà vu. Once again the focus is on net neutrality, an issue that rose in prominence in 2006 and was believed to be settled when the Federal Communications Commission (FCC) issued its Open Internet Order in 2010. That order was struck down, and the debate started again. However, a promising legislative solution floated this year could mark 2015 as the year the decade-long net-neutrality issue can be put to bed.

But the FCC -- at the direction of the White House -- has decided to move forward on a hasty plan to regulate the Internet as if it were limited to providing voice service. This is the wrong approach for many reasons, but one in particular is paramount: The Title II approach will ensure litigation for years to come. This litigation will perpetuate a regulatory overhang in the communications sector and take precious resources and attention away from other, critical policy issues facing the FCC.

Consider the fact that the Administrative Procedure Act (APA) requires that any rules ultimately adopted have sufficient notice. Courts frequently throw out agency orders that weren't properly foreshadowed. The FCC's proposed net neutrality rules, upon which more than 4 million comments were submitted, did not solicit comment on the FCC pursuing a Title II approach. The Title II approach didn't become part of the FCC's lexicon until after the White House pushed the agency to pursue this path late last year. Even more compelling for potential litigants is the fact that the FCC tentatively concluded it would stick with the "status quo" for wireless broadband back in 2014 but is now indicating that it is pursuing Title II for wireless broadband as well.

Issues in mobile broadband also point to endless litigation over Title II without a congressional solution. Section 332 of the Communications Act unambiguously exempts non-voice services like mobile broadband from common carriage regulation. It's a settled matter at the D.C. Circuit Court, which held in the last net-neutrality challenge that "mobile-data providers are statutorily immune, perhaps twice over, from treatment as common carriers." Any FCC attempt to apply Title II to mobile broadband will almost certainly be struck down.

The FCC chairman has publicly acknowledged that lengthy, and most likely messy, litigation will follow any action the agency takes to apply Title II to the Internet. This confirms fears among labor unions, consumers, investors, service providers and innovators that the communications sector will exist under a cloud of uncertainty indefinitely. Congress has an opportunity right now to resolve this uncertainty and put the country's focus back on the critical task of achieving the president's goals of getting more and faster broadband out to all Americans. The FCC has consistently failed in creating lasting net-neutrality rules for lack of authority. Since Congress gives the FCC its authority, the obvious answer is legislation that actually gives

the FCC the authority to legally preserve open-Internet principles rather than the risky and unnecessary pursuit of Title II regulation.

The FCC's change in tack has innovators and their investors very concerned. In a letter to the FCC just last week, Internet pioneers and investors expressed their concern that the commission appears poised to eviscerate the principle that information services are fundamentally different from and should not be regulated like telecommunications. They point out that "the contradiction of the desire to implement open Internet rules by ending the unregulated paradigm responsible for creating the vibrant Internet ecosystem continues to make imposing Title II on IP networks unthinkable." Put simply, Title II's heavy-handed regulation is the opposite of the conditions that allowed the Internet to thrive.

Indeed, Title II is a relic from a bygone era of rotary dial-tone phones, when voice calls were the only way to communicate outside the postal service and in-person conversation. Title II's age means it includes all sorts of regulations that do not or should not apply to modern Internet services. Given all the legal uncertainty, congressional Democrats should be jumping at the chance to enact a net-neutrality bill that protects consumers and gives clear direction to the FCC.

Today's communications market is a vibrant, complicated and interrelated marketplace that provides consumers with access to the Internet from any device, anywhere, anytime. Pretending that protecting consumers and spurring innovation is best accomplished through laws enacted before the Internet ever existed is absurd. Furthermore, pretending that one swipe of the forbearance wand will cure all the ills that come with archaic utility regulation is equally absurd and legally specious.

The question Democrats have to ask themselves is what they actually want. If they want the tough net-neutrality principles that FCC Chairman Tom Wheeler and President Obama have articulated, then legislation gives them the opportunity to enshrine open-Internet principles without incurring all the problems, legal and otherwise, created by Title II. Resolving the policy debate over net neutrality is an issue ripe for congressional action. FTC Chairwoman Ramirez echoed this very point just this month at the Consumer Electronics Show.

President Obama has openly pushed for Title II regulation, and Wheeler has repeated the call. But the reality is that Title II is not the right tool for the FCC to preserve an open Internet and unnecessarily risks rending the very fabric that has made the Internet such a successful growth engine for the country's digital economy. Now is the time to return Internet policymaking to its bipartisan congressional roots.

David Balto served as policy director at the Federal Trade Commission's Bureau of Competition, and attorney-advisor to the FTC chairman.

Follow David Balto on Twitter: www.twitter.com/DavidABalto

ROLL CALL

Congress -- Yes, Congress -- Can Take The Politics Out of Net Neutrality | Commentary

By Ev Ehrlich
Feb. 9, 2015, 5 a.m.

I have argued that President Barack Obama has won the net neutrality debate, but the most important question facing him and the Congress is how he wins.

If we're going to make net neutrality the law of the land, then the Congress should move quickly on a compromise legislative solution. The alternative is an endless meandering through the courts that would leave everyone who uses or provides the Internet uncertain of what the ground rules are for years to come.

Even Tim Lee of Vox, no friend of the Internet providers, has taken up the mantle, agreeing that new legislation is the best way to solve the problem for good. Apparently, support for the idea of measured, bipartisan legislation is gaining steam.

The reasons why are evident.

First, legislation would sweep aside jurisdictional arguments that bedevil the Federal Communications Commission. Reclassifying the Internet as a Title II service (the alternative to legislation if you want net neutrality) will have a hard time — and a long road — surviving a challenge in court. That's because reclassification means arguing that the broadband Internet ought to be regulated like the crank phone that Timmy's mom used in "Lassie."

But Congress can cut this Gordian knot with ease, using its obvious power to pass new rules that create strong net neutrality policy without the excess baggage and uncertainty caused by Title II. Why go through years of litigation and the risk we end up right back where we started if the court sees things differently than the FCC (which it has already done twice on this very issue) when a simpler, cleaner, more stable answer is ready at the hand?

Second, rules passed by the FCC pose a problem that net neutrality advocates and, specifically, their Democratic allies on the Hill, should fear — they could be changed when the composition of the FCC changes. A 2016 Republican president would likely appoint an FCC chairman who would jettison the rules. Not going to the Congress for authority to impose

neutrality is tantamount to an invitation — a double-dog dare — to do so. In contrast, a legislative fix would be far more enduring and stable, whatever direction the political winds should blow.

Finally, congressional action and compromise might bring some responsibility to the Internet policy debate. When you rail against "regulators" or try to put a black hat on one party or another, it's easy to say we should offer broadband as a public utility (forget what that costs), or that we should do away with the FCC (and throw consumer protection to the winds), or whatever other over-the-top idea pops into your head. But a bill requires a vote and that means going on the record. It's time for all parties in the Internet policy debate to take responsibility and make clear what they really want and what they're really for.

We've seen too much politics in the net neutrality debate already. It would be amazing to think that the Congress, of all places, could be the place where we rise above politics and enact a straightforward, responsible solution.

Republicans' Bill Aims to Head Off Obama Internet Plan

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Net neutrality: FCC should first do no wrong

By Larry Irving Special to the Mercury News
Updated: 11/11/2014 04:06:54 PM PST

MercuryNews.com

With the digital economy and digital innovation continuing to flourish, government regulators should continue to question the impact of regulation.

This week, President Barack Obama asked the FCC to reclassify consumer-based Internet service as a Title II service under the 1934 Communications Act, essentially equating broadband to old copper wire telephone service. Such a regulatory approach would mimic oversight designed for a 19th century monopoly service.

At issue, however, is how to best to preserve an "open Internet". No one opposes this vital concept. The battle is over how best to ensure the continuation of what has been deemed "net neutrality".

The Title II path presents several potential harms. First, and most dangerous, is the harm to innovation. A light-touch regulatory environment has advanced ideas birthed in the valley. Introducing outmoded regulations on entrepreneurial business models in the tech sector could hurt the pace at which we're seeing new start-ups, technologies, and products emerge.

A system of having to ask "Mother, may I?" of government would naturally introduce a chilling effect, as companies of all sizes would start wondering whether they or their product would be regulated. Would their products have to change to comply with regulation? Or would it be better to not introduce products to avoid regulation?

Second, Title II raises a panoply of requirements, such as for entry and exit, just as it did for monopoly telephone service. Section 251 of the Telecommunications Act, for instance, concerns telephone interconnection, but Netflix is trying to use this provision to assert a supposed violation of net neutrality regarding its broadband video traffic. The list of potential negative consequences is long. In a well-working, Internet Protocol-based world of private commercial negotiations, why would it be in our interests to superimpose a telephone model with layers of federal and state regulations?

That gets to a third point. Reclassification would lead to an alarming sense of uncertainty. Some contend that Title II can apply to certain companies but not to others, or to specific activities but not to others. Yet to whom would it apply, and how, and why? And who gets to decide that? Uncertainty in any marketplace means less investment, and Silicon Valley would be no exception.

Prompted by the dynamism of Silicon Valley, the United States has been a staunch proponent of promoting an open Internet, free from government controls, around the world. Reversing course now and switching to a government-based regulatory model for the Internet could undermine that goal and empower nations who most oppose a free and open Internet to attack our credibility. Reclassifying broadband Internet under Title II runs counter to our nation's, and the valley's, heritage of Internet innovation with minimal government intervention. We can and must preserve the open Internet without the regulatory and economic risks that Title II would bring.

First, do no harm. Our Internet-driven innovations remain the envy of the world. Why would we change course?

Larry Irving, a former U.S. Assistant Secretary of Commerce, is CEO of the Irving Group, a consulting firm that advices technology and telecommunications companies. He also is co-chairman of the Internet

Innovation Alliance (IIA), a non-profit advocacy group. He wrote this for this newspaper.

1300 Pennsylvania Ave NW, Suite 190-322, Washington DC 20004

January 23, 2015

VIA ELECTRONIC FILING

Tom Wheeler, Chairman
Federal Communications Commission
445 12th Street, SW
Washington, DC 20054

Re: *Protecting and Promoting the Open Internet,* GN Docket No. 14-28

Dear Chairman Wheeler:

We appreciate your recognition that the principle of "innovation without permission" remains fundamental to the success of the information technology sector in the United States.[1] The experience of participating in the remarkable expansion of products and services available to the communicating public over that past 20 years leaves us with a deep conviction that this principle must continue to apply to the Commission.

We believe the existence of new products and services associated with the Internet and IP networks owes to the long standing and mutually exclusive dichotomy – endorsed by the Commission for over 50 years – that information (or enhanced) services are fundamentally different from and should not be regulated like telecommunications services. That principle has been the bedrock of the computing and larger information technology industry as well as the Internet ecosystem for decades.

Now, at the urging of President Obama, the Commission appears poised to eviscerate both principles, ignoring the successes they have brought, by seeking to regulate broadband Internet access services under Title II of the Communications Act. The contradiction of the desire to implement open Internet rules by ending the unregulated paradigm responsible for creating the vibrant Internet ecosystem continues to make imposing Title II on IP networks "unthinkable."

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[1] Remarks of Tom Wheeler, Chairman, Federal Communications Commission, Mid-Atlantic Venture Association, Washington, D.C., at 5 (Nov. 4, 2014).

There exists nothing in the record or daily experience to suggest the need to question the long standing definitions that have left the computing sector, the information technology industry, and the Internet ecosystem beyond the reach of the Communications Act. The Title II framework – which predates the transistor and precursors of computing in the modern era – offers neither a track record suggesting confidence nor a basis for regulating 21st century communications. The plan to impose Title II obligations on IP networks reflects an improper attempt to short circuit the legislative process, with the challenges that this process entails, and to bypass enforcement of antitrust laws, without any case of market failure. Whatever the motivations, the Commission makes no attempt to quantify the uncertainty and risk inherent with ending a decades' long policy of leaving IP networks unregulated.

As a threshold matter, the change of policy comes without any advance notice of the theory upon which the Commission plans to rely in imposing Title II regulation on broadband. The Administrative Procedure Act ("APA") requires that a notice of proposed rulemaking include "reference to the legal authority under which the rule is proposed."[2] "The required specification of legal authority must be done with particularity,"[3] and courts have set aside agency action for failing to provide notice of the specific provision of the U.S. Code supplying legal authority for the proposed rules.[4] Put simply, an agency cannot "change[] its mind halfway through th[e] proceeding" about the source of its legal authority without issuing a new notice.[5]

Here, in its *2014 NPRM*, the Commission did not identify Title II as the source of its legal authority but rather "propose[d] to adopt rules to protect and promote the open Internet ... under section 706, consistent with the D.C. Circuit's opinion in *Verizon v. FCC*."[6] Although the Commission sought "comment on the nature and the extent of the Commission's authority

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2 5 U.S.C. § 553(b)(2).

3 Sen. Doc. No. 248, 79th Cong. 2d Sess. 258 (1946); *accord* Attorney General's Manual on the Administrative Procedure Act at 30 (1947) ("The reference [to the authority under which the rule is proposed] must be sufficiently precise to apprise interested persons of the agency's legal authority to issue the proposed rule.").

4 *See Global Van Lines, Inc. v. ICC*, 714 F.2d 1290, 1298 (5th Cir. 1983) (agency failed to cite 49 US.C. § 10923(d)(1) in the NPRM); *Nat'l Tour Brokers Ass'n v. United States*, 591 F.2d 896, 900 (D.C. Cir. 1978) (agency failed to cite 49 U.S.C. 302, 303, 304, 305, 311, and 320, and 5 U.S.C. 553 and 559 in the NPRM); *Georgetown Univ. Hosp. v. Bowen*, 821 F.2d 750, 759 (D.C. Cir. 1987) (agency failed to cite 42 U.S.C. § 1395x(v)(1)(A)(ii) in the NPRM), *aff'd*, 488 U.S. 204 (1988).

5 *Nat'l Tour Brokers Ass'n*, 591 F.2d at 899.

6 *Protecting and Promoting the Open Internet*, Notice of Proposed Rulemaking, GN Docket No. 14-28, FCC 14-61, ¶ 142 (rel. May 15, 2014) ("*2014 NPRM*"); *see also id.* ¶ 4 ("Per the blueprint offered by the D.C. Circuit in its decision in *Verizon v. FCC*, the Commission proposes to rely on section 706 of the Telecommunications Act of 1996"); *id.* ¶¶ 143-47.

to adopt open Internet rules relying on Title II,"[7] the Commission never proposed adopting rules under any specific provision of Title II and failed to cite a single Title II provision in the ordering clause of the *2014 NPRM*.[8] Under the circumstances, the Commission "effectively deprived the [public] of any opportunity to present comments" on the "'precise'" source of Title II authority for its proposed Open Internet rules, when statutory authority "was one of the principal issues"—if not the critical issue—"raised in the[se] proceedings."[9]

Beyond these APA problems, regulation of broadband under Title II destroys the telecommunications and information service dichotomy. This dichotomy, which evolved through the *Computer Inquiry* proceedings before being enshrined in the Telecommunications Act of 1996, reflects an operational and physical separation of the networks supporting computing capabilities and traditional telephone services.

The arrival of the commercial Internet and Voice over Internet Protocol (VoIP) services put the heavily regulated telephone network and lightly regulated IP networks into direct competition. The migration of communications capabilities from the PSTN to IP networks reflects the collective preference of entrepreneurs, investors, and the communicating public for unregulated services as opposed to regulated services. What rationale does the

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[7] *Id.* ¶ 142; *see also id.* ¶¶ 4, 148-55.

[8] *Id.* ¶ 183 (citing 47 U.S.C. §§ 151, 152, 154(i)-(j), 303, 316, 1302); *see also Nat'l Tour Brokers Ass'n*, 591 F.2d at 900 (explaining that "[s]uch a reference would have included something along the lines of" an ordering clause in the final order). Although Title II advocates have proposed various theories to regulate broadband under Title II and suggested certain Title II provisions for new Open Internet rules, "notice necessarily must come—if at all—from the Agency." *Small Refiner Lead Phase–Down Task Force v. EPA*, 705 F.2d 506, 549 (D.C. Cir. 1983); *see also Shell Oil Co. v. EPA*, 950 F.2d 741, 751 (D.C. Cir. 1991); *Nat'l Min. Ass'n v. Mine Safety & Health Admin.*, 116 F.3d 520, 531 (D.C. Cir. 1997); *Fertilizer Inst. v. EPA*, 935 F.2d 1303, 1312 (D.C. Cir. 1991); *Am. Fed'n of Labor & Cong. of Indus. Organizations v. Donovan*, 757 F.2d 330, 340 (D.C. Cir. 1985).

[9] *Global Van Lines*, 714 F.2d at 1298 (the APA "necessarily requires that interested parties be given a fair chance to 'comment.' None was provided here, and on that ground alone the Commission [will] be reversed."). To the extent the Commission seeks to rely upon its 2010 Notice of Inquiry to comply with APA notice requirements, *2014 NPRM* ¶ 149 n.302, such reliance is misplaced. In light of the Commission's 2010 *Open Internet Order*, the D.C. Circuit's vacatur in *Verizon v. FCC*, and the Commission's initiation of a new proceeding with a new docket number to "respond directly to that remand," the proceeding initiated in 2010 is irrelevant for APA purposes. *Id.* ¶ 24; *see AFL-CIO v. Chao*, 496 F. Supp. 2d 76, 86-87 (D.D.C. 2007) (holding that an earlier NPRM could not give notice of a new rule where a court vacated the earlier rule (following *Mobil Oil Corp. v. EPA*, 35 F.3d 579, 584-85 (D.C. Cir. 1994), and *Action on Smoking & Health v. CAB*, 713 F.2d 795, 800 (D.C. Cir. 1983)). "If one rulemaking proceeding has culminated and another has begun, then new notice and comment procedures are required." *Action on Smoking & Health*, 713 F.2d at 800. Thus, having the Bureau refresh the record in the earlier proceeding is not an adequate substitute for a new Commission-level NPRM containing a precise legal theory for regulating broadband under Title II. *See, e.g., Sprint Corp. v. FCC*, 315 F.3d 369, 376 (D.C. Cir. 2003) (holding that the Common Carrier Bureau could not provide notice of a proposed rule).

Commission offer for vetoing this choice by regulating previously unregulated services, thereby punishing success and rewarding failure?

From the standpoint of an entrepreneur, there exists an entirely different risk profile for investments in regulated and unregulated networks and services. **It is imperative for innovators and investors to understand clearly where that regulatory line is drawn.** Since the AT&T Consent Decree in 1956, the Commission has recognized a line distinguishing unregulated information services from regulated telecommunications services through definitions that are mutually exclusive. The Commission's belated embrace of Title II fails to give entrepreneurs and investors any basis for judging the regulated/unregulated line going forward and ignores the self-evident and consistent track record of entrepreneur and investor antipathy for regulated spheres.

For IP-based services, the Commission historically has focused on whether such services rely upon the PSTN in determining their regulatory treatment.[10] For example, when it found pulver.com's Free World Dialup (FWD) offering to be an unregulated information service, the Commission found persuasive that FWD members "must have an existing broadband Internet access service," "must acquire and appropriately configure Session Initiation Protocol (SIP) phones or download software that enables their personal computers to function as 'soft phones,'" and must utilize a Pulver-assigned FWD number rather than a NANP number to make free VoIP or other types of peer-to-peer communications to other FWD members. [11]

Likewise, in establishing its interconnected VoIP regime, the Commission was persuaded that the ability of users to connect to the PSTN was a critical factor in imposing Title II-like regulation.[12] Indeed, the definition of interconnected VoIP requires offering a means for users to receive calls from and terminate calls to the PSTN. 47 C.F.R. § 9.3.

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[10] *See, e.g.*, *Federal-State Joint Board on Universal Service*, CC Docket No. 96-45, Report to Congress, 13 FCC Rcd 11501, ¶ 39 (1998).

[11] *Petition for Declaratory Ruling That Pulver.com's Free World Dialup Is Neither Telecommunications Nor a Telecommunications Service*, Memorandum Opinion and Order, 19 FCC Rcd 3307, ¶ 5 (2004) ("*Free World Dialup Order*"). Indeed, the Commission specifically declined "to extend our classification holdings to the legal status of FWD to the extent it is involved in any way in communications that originate or terminate on the public switched telephone network, or that may be made via dial-up access." *Id.* ¶ 2, n.3.

[12] *See generally IP-Enabled Services; E911 Requirements for IP-Enabled Service Providers*, First Report and Order and Notice of Proposed Rulemaking, 20 FCC Rcd 10245, ¶ 24 n.78 (2005); *Universal Service Contribution Methodology*, Report and Order and Notice of Proposed Rulemaking, 21 FCC Rcd 7518, ¶ 80 (2006) (concluding that the "origination or termination of a communication via the PSTN is 'telecommunications,' and over-the-top interconnected VoIP providers, like other resellers, are providing telecommunications when they provide their users with the ability to originate or terminate a communication via the PSTN, regardless of whether they do so via their own facilities or obtain transmission from third parties").

When Congress intended for the Commission to regulate IP-based services that do not connect to the PSTN, it expressly granted the Commission such authority. For example, in the Twenty-First Century Communications and Video Accessibility Act of 2010 (CVAA), Congress required non-interconnected VoIP providers to participate in and contribute to the Telecommunications Relay Service Fund. 47 U.S.C. § 715. Non-interconnected VoIP service enables real-time voice communications that originate from or terminate to the user's location using IP or any successor protocol, requires IP compatible customer premises equipment, and does not include any service that is an interconnected VoIP service. 47 U.S.C. § 153(36). Had Congress intended for the Commission to regulate broadband or to treat broadband as regulated "telecommunications services" under Title II, Congress plainly would have said so.

In the absence of specific Congressional authority, IP-based services without a connection to the PSTN are appropriately classified as unregulated information services. This deregulatory approach is consistent with the Commission's refusal to allow states to impose "public-utility type regulation" on IP-based offerings because doing so would be inconsistent with the "preeminent" federal authority "in the area of the Internet and other interactive computer services, which Congress has explicitly stated should remain free of regulation."[13] The Commission appears poised to impose that very "public-utility type regulation" on the IP networks that comprise the Internet, which Congress directed and the Commission concurred should be free from such regulation.

To be sure, the Commission may try to ameliorate the impacts of "public-utility type regulation" of broadband by forbearing from some or all of the substantive provisions of Title II. But again, the Commission has not provided the notice required under the APA to inform the public of its specific forbearance proposals and allow the public to comment on such proposals. The D.C. Circuit recently clarified that granting forbearance requires the Commission to comply with the APA's notice and comment rulemaking procedures.[14] If the Commission seeks to regulate broadband under Title II but simultaneously forbear from specific Title II requirements, the Commission is required to issue an NPRM giving notice of the proposed scope of forbearance from Title II. Instead, the multi-trillion dollar information and communication technology industry must speculate about the nature of the Commission's forbearance plans.

Furthermore, regardless of the specific Title II provisions from which the Commission may decide to forbear, regulating broadband services as a Title II "telecommunications services" will have two immediate consequences.

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13 *Free World Dialup Order*, ¶ 16.

14 *Verizon & AT&T v. FCC*, 770 F.3d 961, 966-67 (D.C. Cir. 2014).

First, distinguishing between regulated and unregulated services will become impossible. In contrast to a bright-line test that relies upon use of the PSTN as the basis for regulation, treating broadband as a "telecommunications service" will make it impossible for entrepreneurs to know whether their IP-based offering will be subject to Title II regulation. This concern is particularly acute in an era where the all new consumer electronics and information technologies include a component the Commission could conceivably view as a "telecommunications service."

The powers of interpretation and knowledge of the future the Commission must assert to sweep away the long-standing treatment of IP networks as unregulated mocks decades of work toward operational and mutually exclusive definitions of telecommunications and information services. If the Commission proceeds down the Title II path, for the first time, we will live in a world where the combination of two or more "information services" yields a "telecommunications service." The resulting need to bring all classification questions to the Commission for case-by-case analysis promises regulatory gridlock, open ended litigation, and certain injury to one of the most robust sectors of the economy.

Second, even assuming the Commission could concoct a cognizable theory by which regulation of IP-based services is cabined only to broadband Internet access, other IP-based services will not be immune from Title II regulation in the future. Once the demarcation between information services and telecommunications services has been breached, whether any particular IP-based service will be subject to future regulation will depend upon the political composition of the Commission and the partisan goals of the President. Introducing an explicitly political dimension to the distinction between regulated and unregulated services transforms and scrambles the landscape for an entrepreneur deciding whether to invest in a new communications offering.

We assure you by long and direct experience that no substitute exists for the present regime by which IP networks are presumed to be unregulated. A change in that regime resulting from Title II regulation of broadband will undermine the very innovation and investment that the Commission purportedly seeks to protect.

For the foregoing reasons, we respectfully urge the Commission to continue to treat broadband Internet access as an unregulated information service consistent with the longstanding and critical distinctions separating unregulated information services and regulated telecommunications services.

Sincerely,

/s/ Daniel Berninger
Daniel Berninger, founder, VCXC

/s/ Mark Cuban
Mark Cuban, founder, AXS TV

/s/ Charlie Giancarlo
Charlie Giancarlo, Sr. Advisor, Silver Lake

/s/ George Gilder
George Gilder, author

/s/ Bryan Martin
Bryan Martin, Chairman and CTO, 8x8

/s/ Jeff Pulver
Jeff Pulver, co-founder, Zula

cc: Commissioner Mignon Clyburn
Commissioner Jessica Rosenworcel
Commissioner Ajit Pai
Commissioner Michael O'Rielly

2/25/2015

The Honorable Greg Walden
Chairman
Subcommittee on Communications & Technology
2125 Rayburn House Office Building
Washington, DC 20515

The Honorable Anna Eshoo
Ranking Member
Subcommittee on Communications & Technology
2322A Rayburn House Office Building
Washington, DC 20515

Dear Chairman Walden and Ranking Member Eshoo:

I have been informed that The House Subcommittee on Communications and Technology is holding a hearing entitled "The Uncertain Future of the Internet."

I write to you today as entrepreneur, I have created, built and invested in more than 100 companies and have evaluated more than a thousand. My strength as an entrepreneur has always been my ability to identify trends in technology that will create unique opportunities for consumers and/or businesses.

As the founder of CyberDust.com, we are on the forefront on integrating privacy into communications, community networking and community based commerce.

As Chairman of AXS TV and before that founder of HDNet, and prior to that, a co-founder of the first commercial streaming company Broadcast.com and the co-owner of Magnolia Pictures and 2929 Productions, the first companies to offer films digitally, on demand, prior to their release in theaters, I have seen firsthand how the evolution of broadband and the resultant video revolution now offers consumers more and more choices with each passing day.

Prior to Broadcast.com, I founded a company MicroSolutions that was one of the very first companies in the country to act as a system integrator for local area networks. While other companies were trying to figure out what was happening with personal computers we were connecting computers and developing network based software that incorporated video integration, X.12 and any number of protocols starting in 1983.

A lot has happened with technology since I installed my first local area network in 1983. Change is constant. This change has been dependent on several laws that have served as the foundation for much of the change

Moore's Law - Which states generally that the number of transistors in an integrated circuit will double every 2 years, increasing computing power.

The competition between companies to meet and exceed Moore's law within their products has lead through break through after break through that have changed the dynamics of our society

Metcalfe's Law – which suggests that the more devices that are connected together, the greater the network effect. Metcalfe's law essentially predicted and confirms the impact

of extending the number of devices, users and connections on and independent of the Internet

Every technology company, whether startup or established has understood at some level that these 2 laws were what mattered.

As a result technology in all its forms have thrived. There has never been a better time to start a technology business. The cost to start a tech company is a fraction of what it was just 10 years ago. That is not due to any regulations. That advancement is purely the result of technologists continually striving to push the laws that matter to new limits and implement them in businesses in unexpected ways.

What is even more exciting is that the cost tomorrow will be less than it is today.

I get that the tech industry, particularly in Silicon Valley, does have a Zeitgest that includes picking on the big guy until they are a candidate to buy your company. We saw it with IBM and Microsoft and now see it with Amazon, Google and Facebook.

We choose to demonize companies that have reached levels of ubiquity in their businesses, with Apple being the exception that appears to prove the rule.

But demonization should not be a justification for introducing rules that could impact the chase to implement Moore's law and to leverage Metcalfe's law in new and imaginative ways that we never anticipated.

Proponents of Net Neutrality seem to want to engage the FCC to pass rules (I apologize if my terminology is not on point) that keep the Internet the way it is.

That is shocking to me. Why in the world would we want to keep the Internet the way it is? We have not yet come close to seeing the best of the Internet.

The best the Internet has to offer is not movies or over the top streaming of TV. We did that 20 years ago.

The best the Internet has to offer is not 25 mbps or 100 mbps wired broadband. Wireless technologies will become a viable alternative to wired broadband sooner than we expect. "Cut the cord" won't refer to watching TV online. It will refer to cutting your wired broadband and going exclusively with wireless data in home and out of home.

Net Neutrality proponents talk about the risks of Paid Prioritization. We need paid prioritization for applications and apps that require hundreds of megabits or even gigabits of data throughput. When Virtual Reality applications like Oculus Rift desire to go online, do we want them grabbing every bit of bandwidth on the open Internet? Do users want the ability to pay up so that they minimal levels of latency when they use Virtual Reality? Everyone's speed and capacity of the Internet will continue to increase, but it doesn't make sense to preemptively prohibit paid prioritization. Paid Prioritization may create the foundation that new and exciting applications and apps need to launch.

What about self-driving cars? Do we want delivery of data to a self-driving car buffering because someone in the neighborhood is running an app that consumes every bit of bandwidth it can find? And of course there are the applications we haven't even thought of yet. Who knows how much or what qualitative needs they will have

A lot has been said about the uncertainty in the market and who is causing it. The FCC stated that the uncertainty is being caused by the threats of lawsuits by corporations, which could take years to settle. The uncertainty is being caused by the FCC trying to create a new set of rules by re- classification and stating they wont take certain action but yet expressly want to reserve the right to take that action. The FCC proposals under the current Chairman may pass by a 3-2 vote, which will be delayed do to questionable legal grounds and previous court rulings. In the next two years we will have a new FCC Commission and its highly possible they will vote to recall this broad re-classification language and other questionable legal issues. The market is aware of the uncertainly the FCC is creating and will respond accordingly by creating volatility.

This is not a new position for me. It is the exact same position I have had for more than 10 years. My allegiance on this issue is to simply unlock the full potential of what the Internet can be.

If any Member of this Committee wishes to communicate in detail about issues related to this matter, I am available to you.

Thank you for considering my opinion and appreciate your work on this issue.

Sincerely,

Mark Cuban

cc: The Honorable Fred Upton
Chairman, Committee on Energy and Commerce

The Honorable Frank Pallone, Jr.
Ranking Member, Committee on Energy and Commerce

Members of the Subcommittee on Communications and Technology

THE WALL STREET JOURNAL.

http://www.wsj.com/articles/robert-m-mcdowell-and-gordon-goldstein-dictators-love-the-fccs-plan-to-regulate-the-internet-1424219652

OPINION

Dictators Love the FCC's Plan to Regulate the Internet

The Obama administration's efforts to treat the Web like a utility has fans from Saudi Arabia to Putin's Kremlin.

By **ROBERT M. MCDOWELL** And **GORDON M. GOLDSTEIN**
Feb. 17, 2015 7:34 p.m. ET

On Thursday the Federal Communications Commission will stop accepting public comments on the divisive plan to regulate the Internet as a public utility before bringing the matter to vote on Feb. 26. The latest lunge at more Web regulation puts global Internet freedom and prosperity in jeopardy and fatally undermines decades of bipartisan consensus on America's foreign policy for the Internet.

Some proponents of more Internet regulation—for instance, President Obama —maintain that "the strongest possible" laws are needed to prevent Internet service providers, such as cable and phone companies, from acting in anticompetitive ways and harming consumers by, say, blocking selected Web destinations. They argue that the FCC must declare the Internet a public utility under Title II of the Communications Act of 1934, which was designed for the Ma Bell phone monopoly. FCC Chairman Tom Wheeler announced last month that he would align his proposals with the White House.

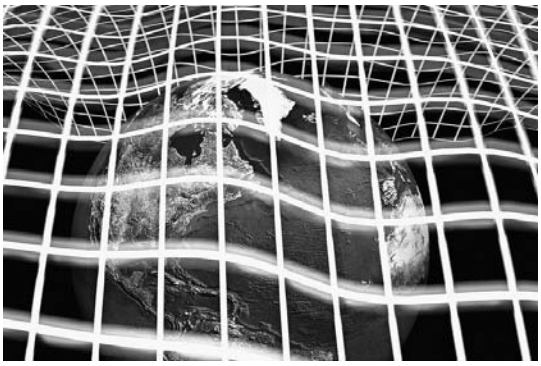
PHOTO: CORBIS

This represents a stunning reversal of the policies of the Clinton and Bush administrations. Both presidencies pursued a highly successful "hands-off" approach toward the Internet and argued that the dynamic network should not be regulated like a public utility domestically or internationally. The result: The Internet is the greatest global deregulation success story of all time.

President Obama equates 1934 telephone services with the 21st-century Internet. In an unprecedented directive in November to the supposedly independent FCC, he proclaimed that it is "common sense" to apply old-fashioned utility rules to "the transmission of information—whether a phone call, or a packet of data."

The more than 1,000 regulations in Title II include the power to set "rates, terms and conditions." Even though the agency promises to refrain, or "forbear," from much of Title II, the agency has recently expanded its agenda to heap even more parts of the law onto the Web. No matter how much the FCC vows to restrain itself, crossing into telephone-style regulation will legitimize international efforts to do the same, a trap the U.S. has tried to avoid.

The FCC's new definition of the Internet as a phone network could trigger expanded jurisdiction over the Web through existing treaties of the International Telecommunication Union, a regulatory arm of the United Nations. In reaction to similar proposals in 1998, President Clinton's FCC chairman, William Kennard, presciently said "classifying Internet access services as telecommunications services could have significant consequences for the global development of the Internet."

Similarly, when in 2010 the FCC last examined—and rejected—the Title II idea, Mr. Obama's own State Department telecom policy ambassador, Philip Verveer, now a top FCC adviser, expressed deep concern. He cautioned that FCC regulation could provide other nations with a justification for "preventing unwelcome political, social or cultural information from being disseminated to their citizens."

In 2012 at the World Conference on International Telecommunications, which we both attended as members of the American delegation, the U.S. led a coalition of 55 nations that refused to sign a global treaty that would presume new authority to regulate disparate aspects of the Internet. Now, however, the Obama administration is signaling to the world that more government regulation of the Internet should be the norm.

The FCC's plan could revive a ruinous 2012 proposal by a handful of European phone companies and many member states of the International Telecommunication Union. The plan was to sanction "sending party pays" fees for international Internet traffic that terminates on networks owned by foreign phone companies. This would increase costs for consumers as Internet companies would have to pay fees, as a matter of international law, that would be passed on to all Internet users.

China is advancing a proposal to make a special committee of the U.N. General Assembly the dominant body to determine global Internet governance. Does anyone think that's a good idea? Meanwhile, Russia has joined China in sponsoring an "international code of conduct for information security" at the U.N. that would authorize Internet censorship and enshrine multilateral state control of the global network.

Many countries, including Iran, Saudi Arabia, the United Arab Emirates and Brazil, will be advocating their vision of the Internet's future at a major international conference at U.N. headquarters in New York at the end of 2015. Global multilateral oversight and regulation of the Internet is their goal.

The Obama administration and its FCC have chosen a perilous moment to reverse decades of bipartisan agreement to limit Internet regulation. They can't have it both ways. By creating an irreconcilable contradiction between America's domestic and foreign policies, the cause of an open and freedom-enhancing global Internet will suffer.

Mr. McDowell, a former Republican commissioner of the Federal Communications Commission, is a partner in the communications practice at Wiley Rein LLP in Washington, D.C. Mr. Goldstein, a Democrat, is managing director at the global technology investment firm Silver Lake Partners.

Outdated Regulations Will Make Consumers Pay More for Broadband

progressive policy institute
ppi

BY ROBERT LITAN AND HAL SINGER

DECEMBER 2014

Self-styled consumer advocates are pressuring federal regulators to "reclassify" access to the Internet as a public utility. If they get their way, U.S. consumers will have to dig deeper into their pockets to pay for both residential fixed and wireless broadband services.

How deep? We have calculated that the average annual increase in state and local fees levied on U.S. wireline and wireless broadband subscribers will be $67 and $72, respectively. And the annual increase in federal fees per household will be roughly $17. When you add it all up, reclassification could add a whopping $15 billion in new user fees on top of the planned $1.5 billion extra to fund the E-Rate program. The higher fees would come on top of the adverse impact on consumers of less investment and slower innovation that would result from reclassification.[1]

How did we reach this precipice? In early November, FCC Chairman Tom Wheeler floated a "hybrid" compromise that would have deemed Internet service providers (ISPs)—telcos and cable companies—as public utilities under Title II of the Communications Act of 1934 for purposes of their dealings with websites, such as Netflix. But when it came to the rates and download speeds offered to broadband customers, ISPs would continue to be subject to "light touch" regulation under Section 706 of the Telecommunications Act of 1996, which directs the Commission to promote broadband deployment. This would allow them to give their customers choices: those who were willing to pay more for higher speeds could. Think of it as being willing to pay more to take the faster Acela train as opposed to the regular Amtrak line.

President Obama was not satisfied with this approach, and urged in an unusual video released on November 10 that the Commission embrace a full-throated version of Title II for broadband access as well.[2] What this means is that the Internet would be treated and regulated as a public utility, like your local electricity or gas-distribution company, which is a monopoly. The president and some other net neutrality advocates want this "reclassification" to prohibit ISPs from charging content providers for priority delivery for fear that ISPs could shake down vulnerable websites with excessive charges. Yet Title II is not needed to protect against

such harms. A simple prohibition of, or a strong presumption against, two types of conduct would protect edge providers: (1) special deals for priority delivery, and (2) degrading a website's performance for refusing to take a priority offering. Both of these remedies are available under Section 706.

We and others have pointed out that classifying broadband services as telecom services will not achieve the president's objective. Under Title II, ISPs are merely prohibited from engaging in "unreasonable discrimination." This means that the FCC cannot ban pay-for-priority under Title II. The only thing the agency could do under Title II is to require ISPs to make any paid priority offers available to all comers at the same terms. This does not appear to be what the president is calling for. Some argue that Title II could be used to ban conduct that the FCC deems to be "inherently unjust." While there are some remote circumstances (decades ago) in which the FCC made such a determination, those cases involved monopoly providers seeking to extend their power into closely related markets—a far cry from what a competitive broadband provider would be trying to accomplish by charging a handful of real-time application providers for priority delivery.

But what about the American consumer? Until now the debate around whether or not to use Title II as the basis for net neutrality rules has included zero analysis of what if any impact the outcome will actually have on consumers. We looked into the issue and discovered there is nothing but bad news on this front: Once ISPs are labeled "telecommunications providers" under Title II, their services become subject to both federal and state fees that apply to those services. The two main federal charges are an excise tax and a fee for "universal service." (We ignore the federal excise tax for the purposes of our calculation.) States and local municipalities impose similar fees and taxes—from franchise fees to high-cost funds to utility user fees to state-based universal service funds—which vary from state to state, and within states by locality. (We ignore any state and local fees that apply to businesses.) Although the state and federal governments collect these fees from broadband providers, history shows—and economic models of competitive markets predict—that the fees are passed along to customers, just as they are now on telecommunication services. So consumers' Internet bills will soon have all those random charges tacked on at the end, much like they see on their phone bills. And these new reclassification-induced fees will be *on top of* the FCC's planned 16-cent-per-month (or $1.92 per year) increase in wireless and wireline fees to add $1.5 billion to the fund that finances Internet connections in schools.[3]

New State and Local Fees

To calculate the new state and local fees that consumers can expect from reclassification, we have used the average prices for wireless residential broadband across U.S. cities ($44.75 per month for 15-20 Mbps) estimated in a recent study[4] by the Open Technology Institute (which are roughly $5 higher per month than the U.S. average estimated in 2012 by the European Commission for 12-30 Mbps)[5], and figures for average consumer mobile service bills from the CTIA.[6] We then used data from Vertex and CCH Clearinghouse for the non-business state and local

fees, keeping a low and a high figure because the local tax rate often varies within a state.

The bottom line: Annual residential wireline broadband costs would likely go up by $8 in Delaware to almost $148 in certain parts of Alaska. The average fee for wireline households would range from $51 (the average of the low end of the range within a state) to $83 per year (the average of the high end of the range within a state). Because the assumed monthly price of a mobile plan is not much different from the price of a wireline broadband plan, and because wireless broadband services would also be reclassified under the plan touted by the president, mobile broadband customers would experience a fee increase of similar magnitude.

When the average annual fee increase for wireline ($67) and wireless ($72) broadband plans is multiplied across U.S. residential wireline (84 million) and wireless (131 million) broadband connections, respectively, the aggregate expenditures on the new fees could reach $15 billion per year.[7]

New Federal Fees

Estimation of the new federal fees from the universal service fund ("USF") is slightly more complicated for two reasons. *First*, the federal rate of 16.1 percent for the USF will adjust downward as the rate base expands. The FCC has a strict process by which USF fees get calculated. In contrast, there is no process at the state level to target a specified amount of revenue. Thus, the state and local tax rates simply can be applied to the larger base of revenues. We assume that broadband access fees for both fixed[8] and mobile[9] would be included in a carrier's revenue base for USF purposes. And if demand for services financed by USF increased by $1.5 billion, as the FCC envisions, the USF contribution rate would decline from 16.1 percent to 5.8 percent. Consumers would pay more, however, because a larger share of their telco bills (for both telephone and Internet service) would be subjected to the universal service fees.

Second, the federal fee is assessed on only interstate revenues. We assume that all broadband is interstate. In contrast, the state and local fees get applied across the board, and can be thought of as a per-connection charge.

To estimate the consumer burden per month under any funding mechanism, one must divide the consumer share of the federal USF program demand (equal to $8.72 billion[10]) by the product of the number of U.S. households and 12 months. Assuming a consumer share of 50 percent under the current funding mechanism, we first calculate the consumer burden per household per month under the current classification regime (equal to $2.98). Next, assuming a consumer share of 62.3 percent with broadband revenues added to the contribution base, we calculate the consumer burden per household per month, assuming the current funding mechanism plus the assessable broadband revenue with the additional program demand of $1.5 billion (equal to $4.36). Accordingly, the annual increase in

spending per household attributable to the federal USF program is $2.014 billion (equal to $1.38 per month increase x 12 months x 121.7 million households).

Moving Forward

The federal charges imposed on broadband providers under a Title II reclassification go into effect unless Congress were to explicitly exempt them. Likewise, it would take state or local legislative action to repeal the state and local charges. So not only will Title II regulation of Internet prices discourage ISPs from investing in broadband infrastructure—leading to more congestion and higher access prices—but it will also mean higher fees for U.S. broadband consumers.

It doesn't need to come to this. A less financially punitive solution is available to preserve an Open Internet: The FCC could employ its powers under its Section 706 authority to prevent ISPs from blocking access, throttling traffic, or engaging in harmful paid priority. This course gives federal regulators all the power they need to protect upstart websites and consumers—without subjecting the Internet to archaic telephone rules that would undermine investment, slow innovation and hit U.S. consumers with stiff new broadband fees.

Endnotes

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About the Authors

Robert Litan is a Non-Resident Senior Fellow at Brookings, a Special Consultant at Economists Incorporated, and a regular contributor to the Wall Street Journal's "Think Tank" blog. Hal Singer is a Principal at Economists Incorporated, a Senior Fellow at Progressive Policy Institute, and an Adjunct Professor at Georgetown University's McDonough School of Business. They are the co-authors of the e-book The Need for Speed: A New Framework for Telecommunications Policy for the 21st Century (Brookings Press 2013). They have written extensively on net neutrality, including a chapter on the subject in The Economists' Voice 2.0: The Financial Crisis, Healthcare Reform, and More (Columbia University Press 2012).

Appendix

Fixed

State	Wireline Broadband Cost	Low %	Low Fee	Annual Increase (Low)	High %	High Fee	Annual Increase (High)
Alabama	44.75	6.00	1.90	55.02	6.00	1.90	55.02
Alaska	44.75	4.42	6.00	95.76	11.42	7.25	148.34
Arizona	44.75	9.25	0.20	52.07	17.00	0.20	93.69
Arkansas	44.75	7.00	0.05	38.20	22.00	0.05	118.74
California	44.75	5.21	0.00	27.98	24.21	3.09	167.09
Colorado	44.75	3.85	0.60	27.88	9.35	5.50	116.21
Connecticut	44.75	6.41	0.70	42.82	6.41	0.70	42.82
Delaware	44.75	N/A	0.68	8.16	N/A	0.68	8.16
Florida	44.75	2.37	1.55	31.33	9.49	1.55	69.56
Georgia	44.75	11.00	0.93	70.23	15.10	1.50	99.09
Hawaii	44.75	11.35	0.66	68.87	11.35	0.66	68.87
Idaho	44.75	N/A	1.03	N/A	N/A	1.28	N/A
Illinois	44.75	7.60	0.48	46.58	13.60	5.48	138.79
Indiana	44.75	8.40	0.93	56.27	8.40	0.93	56.27
Iowa	44.75	6.00	1.00	44.23	7.00	1.00	49.59
Kansas	44.75	6.40	0.53	40.73	9.15	0.53	55.50
Kentucky	44.75	8.83	0.44	52.70	11.83	4.62	118.97
Louisiana	44.75	20.00	0.43	112.57	24.00	1.05	141.49
Maine	44.75	5.70	0.45	36.01	5.70	0.45	36.01
Maryland	44.75	12.41	3.20	105.04	12.41	5.40	131.44
Massachusetts	44.75	6.25	0.83	43.52	6.25	0.83	43.52
Michigan	44.75	6.68	0.36	40.19	6.68	4.06	84.59
Minnesota	44.75	7.03	1.54	56.20	7.88	1.54	60.77
Mississippi	44.75	9.25	0.95	61.07	9.25	1.15	63.47
Missouri	44.75	4.23	0.08	23.66	16.43	0.83	98.16
Montana	44.75	4.05	1.10	34.95	4.05	1.10	34.95
Nebraska	44.75	7.50	0.02	40.52	13.75	1.02	86.08
Nevada	44.75	0.00	2.78	33.37	5.00	2.78	60.21
New Hampshire	44.75	7.00	0.63	45.15	7.00	0.63	45.15
New Jersey	44.75	7.00	0.90	48.39	7.00	0.90	48.39
New Mexico	44.75	10.76	0.51	63.90	17.26	0.51	98.81
New York	44.75	13.30	0.30	75.01	19.17	1.00	114.96
North Carolina	44.75	6.75	0.74	45.13	7.00	0.74	46.47
North Dakota	44.75	10.65	0.04	57.67	13.40	1.54	90.44
Ohio	44.75	6.25	0.52	39.80	8.00	0.52	49.20

Oklahoma	44.75	4.75	0.53	31.87	24.50	0.53	137.93
Oregon	44.75	5.25	0.86	38.51	7.25	0.86	49.25
Pennsylvania	44.75	19.10	1.25	117.57	20.10	3.08	144.90
Rhode Island	44.75	9.69	1.39	68.72	9.69	1.39	68.72
South Carolina	44.75	9.68	0.55	58.59	14.90	2.25	107.02
South Dakota	44.75	5.00	4.40	79.65	10.00	4.40	106.50
Tennessee	44.75	13.03	1.97	93.61	13.03	4.50	123.97
Texas	44.75	7.12	0.06	38.94	9.12	4.53	103.32
Utah	44.75	5.85	0.78	40.80	10.70	0.78	66.84
Vermont	44.75	7.00	N/A	N/A	7.00	N/A	N/A
Virginia	44.75	5.45	1.72	49.91	5.45	1.95	52.67
Washington	44.75	7.00	0.95	49.00	21.51	0.95	126.91
West Virginia	44.75	1.00	1.03	17.73	2.00	5.00	70.74
Wisconsin	44.75	5.10	0.91	38.31	5.60	1.75	51.07
Wyoming	44.75	5.00	0.52	33.09	6.00	0.77	41.46

Wireless

State	Mobile Broadband Cost	Low %	Low Fee	Annual Increase (Low)	High %	High Fee	Annual Increase (High)
Alabama	48.79	6.00	1.90	57.93	6.00	1.90	57.93
Alaska	48.79	4.42	6.00	97.90	11.42	7.25	153.88
Arizona	48.79	9.25	0.20	56.56	17.00	0.20	101.93
Arkansas	48.79	7.00	0.05	41.59	22.00	0.05	129.41
California	48.79	5.21	0.00	30.51	24.21	3.09	178.82
Colorado	48.79	3.85	0.60	29.75	9.35	5.50	120.74
Connecticut	48.79	6.41	0.70	45.93	6.41	0.70	45.93
Delaware	48.79	N/A	0.68	8.16	N/A	0.68	8.16
Florida	48.79	2.37	1.55	32.48	9.49	1.55	74.16
Georgia	48.79	11.00	0.93	75.56	15.10	1.50	106.41
Hawaii	48.79	11.35	0.66	74.38	11.35	0.66	74.38
Idaho	48.79	N/A	1.03	N/A	N/A	1.28	N/A
Illinois	48.79	7.60	0.48	50.26	13.60	5.48	145.39
Indiana	48.79	8.40	0.93	60.34	8.40	0.93	60.34
Iowa	48.79	6.00	1.00	47.13	7.00	1.00	52.98
Kansas	48.79	6.40	0.53	43.83	9.15	0.53	59.93
Kentucky	48.79	8.83	0.44	56.98	11.83	4.62	124.70
Louisiana	48.79	20.00	0.43	122.26	24.00	1.05	153.12
Maine	48.79	5.70	0.45	38.77	5.70	0.45	38.77
Maryland	48.79	12.41	3.20	111.06	12.41	5.40	137.46

Massachusetts	48.79	6.25	0.83	46.55	6.25	0.83	46.55
Michigan	48.79	6.68	0.36	43.43	6.68	4.06	87.83
Minnesota	48.79	7.03	1.54	59.61	7.88	1.54	64.59
Mississippi	48.79	9.25	0.95	65.56	9.25	1.15	67.96
Missouri	48.79	4.23	0.08	25.71	16.43	0.83	106.13
Montana	48.79	4.05	1.10	36.91	4.05	1.10	36.91
Nebraska	48.79	7.50	0.02	44.15	13.75	1.02	92.74
Nevada	48.79	0.00	2.78	33.37	5.00	2.78	62.63
New Hampshire	48.79	7.00	0.63	48.54	7.00	0.63	48.54
New Jersey	48.79	7.00	0.90	51.78	7.00	0.90	51.78
New Mexico	48.79	10.76	0.51	69.12	17.26	0.51	107.17
New York	48.79	13.30	0.30	81.46	19.17	1.00	124.25
North Carolina	48.79	6.75	0.74	48.40	7.00	0.74	49.86
North Dakota	48.79	10.65	0.04	62.83	13.40	1.54	96.93
Ohio	48.79	6.25	0.52	42.83	8.00	0.52	53.08
Oklahoma	48.79	4.75	0.53	34.18	24.50	0.53	149.80
Oregon	48.79	5.25	0.86	41.06	7.25	0.86	52.77
Pennsylvania	48.79	19.10	1.25	126.83	20.10	3.08	154.64
Rhode Island	48.79	9.69	1.39	73.41	9.69	1.39	73.41
South Carolina	48.79	9.68	0.55	63.28	14.90	2.25	114.24
South Dakota	48.79	5.00	4.40	82.07	10.00	4.40	111.35
Tennessee	48.79	13.03	1.97	99.93	13.03	4.50	130.29
Texas	48.79	7.12	0.06	42.39	9.12	4.53	107.74
Utah	48.79	5.85	0.78	43.63	10.70	0.78	72.02
Vermont	48.79	7.00	N/A	N/A	7.00	N/A	N/A
Virginia	48.79	5.45	1.72	52.55	5.45	1.95	55.31
Washington	48.79	7.00	0.95	52.39	21.51	0.95	137.34
West Virginia	48.79	1.00	1.03	18.21	2.00	5.00	71.71
Wisconsin	48.79	5.10	0.91	40.78	5.60	1.75	53.79
Wyoming	48.79	5.00	0.52	35.51	6.00	0.77	44.37

The Washington Post

The Post's View

Settle the net-neutrality debate with legislation

By Editorial Board February 11

IN THE war over net neutrality, it's clear where the country should end up. Americans should pay for the bandwidth they consume, and they should consume any legal content they want, without interference from the network operators that transport the packets of information into their homes. That's not just the way to maintain the free flow of information and services on which the Internet thrives; it's also the way to encourage service providers to improve their networks rather than just manage traffic on their existing wires.

But government efforts to create a policy environment in which that aim is achieved have been erratic and, lately, the subject of intense controversy. That has led the Federal Communications Commission toward approving a net-neutrality plan that carries some serious collateral risks. It would be better if Congress finally did its job and agreed on a legislated plan that avoids more bureaucratic wrangling.

The FCC has been trying to impose net-neutrality regulations for half a decade, only to be stymied by skeptical judges and counterproductive political pressures. The U.S. Court of Appeals for the District of Columbia Circuit slapped down the agency's approach last year. At first, it appeared the FCC would redraft largely identical rules that judges might find legally acceptable. Then Chairman Tom Wheeler contemplated a "hybrid" compromise plan more to the liking of net-neutrality advocates. But after President Obama pressed

him to go further, Mr. Wheeler proposed a more radical overhaul of broadband regulations.

Now Mr. Wheeler's plan is to reclassify broadband providers as common carriers under Title II of the Communications Act — a legal designation that currently applies to firms such as old-school telephone companies. That would expose broadband providers to a new world of federal regulation. Under the plan, the agency would choose not to enforce many of the most onerous Title II regulations, such as forcing cable companies to let any would-be Internet service provider use the wires they installed to sell its own Internet-access service. But the industry worries that future FCC commissioners would expand their regulatory scope, given the opportunity.

But in some respects, reclassification would limit regulators as well as the cable companies. It's very likely that the Federal Trade Commission would be unable to conduct investigations and enforce actions in the broadband business, as it has done on issues such as broadband "throttling" — limiting customers' connections — and consumer privacy. Consumer advocates should be wary of forcing the FTC to surrender its authority.

For years, the FCC has attempted to use old law to regulate broadband. The best way out of this mess is to create new law. That would settle the jurisdictional question between the FCC and the FTC, and it would make net-neutrality rules legally unassailable. Sen. John Thune (R-S.D.) and Rep. Fred Upton (R-Mich.) have proposed a net-neutrality bill, but it has little chance of becoming law because it strips the FCC of some useful regulatory authorities. That shouldn't be the end of the legislative discussion.

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TECHNOLOGY

GOP Lawmakers Propose Net-Neutrality Legislation

Bill Avoids Utility-Like Rules That Obama Proposes

By **GAUTHAM NAGESH**

Updated Jan. 16, 2015 3:03 p.m. ET

Congressional Republicans unveiled draft legislation on Friday that would ban broadband providers from blocking, slowing down or speeding up access to specific websites but avoid using utility-like regulations to do so.

The bill from Senate Commerce Chairman John Thune of South Dakota and the leaders of the House Energy and Commerce Committee is designed to protect net neutrality—the principle that all Internet traffic should be treated equally—without applying the part of telecommunications law that regulates common carriers.

"By turning the FCC away from a heavy-handed and messy approach to regulating the Internet, this draft protects both consumers who rely on Internet services and innovators who create jobs," Mr. Thune said in a statement.

President Barack Obama has called for the utility-like regulations, and many expect the Federal Communications Commission to go that route when it circulates proposed net-neutrality rules next month. Net neutrality supporters said the draft shows Republicans are now seeking a compromise after fiercely opposing any net neutrality rules for many years.

"This is a huge political shift. We now have bipartisan consensus around the key points," Public Knowledge Vice President Harold Feld said in an interview. "This is clearly a direct result of the enormous political pressure that has come not just from the president, but from small business and the grass-roots, constituencies that Republicans care about."

However, he and other net-neutrality supporters said the plan doesn't go far enough.

The bill would explicitly ban broadband providers from blocking or slowing down websites or applications. The providers would also be banned from taking money to make some websites load faster than others, known as paid prioritization, and must publicly disclose data about the performance of their networks.

The FCC has been grappling with how to regulate broadband providers since a federal court threw out the agency's last set of net neutrality rules last January. In November, President Obama called for the agency to implement the strongest possible rules by regulating broadband as a telecommunications service under Title II of the Communications Act.

The broadband industry believes such a change would stifle investment and saddle them with outdated regulations designed for the landline phone network. The draft bill would require that broadband remain a lightly regulated information service and would prevent the FCC from expanding its existing legal authority over providers beyond what is needed to police net neutrality.

The latter provision could prevent the FCC from overturning state laws that ban cities and towns from building their own broadband networks, as President Obama urged the agency to do on Wednesday during a speech in Iowa.

Democratic Senator Edward Markey of Massachusetts criticized the bill, calling it "a legislative wolf in sheep's clothing" that would help the broadband providers more than consumers.

"Rather than pursuing this damaging legislative proposal, the FCC should use the clear authority granted them by Congress to vote on strong net neutrality rules in February and reclassify broadband under Title II. The future of the Internet as we know it depends on it," Sen. Markey said in a statement.

Many congressional Republicans had been staunchly opposed to any net-neutrality rules, so the new measure is seen as a compromise in that it would include such regulations without applying the utility regulations. It is unclear

whether the measure would get enough support to pass Congress, or whether President Obama would sign it.

Net-neutrality supporters are already concerned that while the draft bill would ban sites from paying for faster speeds, it could also tie the FCC's hands when it comes to preventing other types of anticompetitive conduct that could arise in the future. Mr. Feld argued the bill doesn't go as far as the previous net neutrality rules thrown out by the court.

"This would be a step backward," Mr. Feld said. "I recognize that these guys are trying to put something out there. But we are nowhere near close enough at this stage to be able to say this is acceptable."

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