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Testimony of

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before the

United States House of Representatives
Committee on Energy and Commerce
Subcommittee on Communications, Technology and the Internet

Regarding

H.J. Res 37
Disapproving the Rule Submitted by the Federal Communications Commission
With Respect to Regulating the Internet and Broadband Industry Practices
March 9, 2011

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SUMMARY OF TESTIMONY OF S. DEREK TURNER, RESEARCH DIRECTOR, FREE PRESS

Last December, after much discussion and public comment, the FCC passed the open Internet rules that are the subject of House Joint Resolution 37. The FCC's rule builds on a long bipartisan history of requiring infrastructure owners to abide by nondiscrimination principles and attempts to achieve a goal supported by nearly everyone who participates in the Internet economy — preserving the Internet as an open platform for speech, commerce, and innovation. While aspects of the rule may be flawed, any attempt to repeal it leaves Internet users fundamentally unprotected.

The principle of nondiscrimination at the heart of the FCC's rule has a long history of bipartisan support. It was the Nixon administration who first put in place strong rules of non-discrimination governing our nation's communications infrastructure in order to ensure abuses of market power would not stifle the growth of an infant network computing industry. This successful framework, later modified by the Carter and Reagan Administrations, fostered America's early leadership in the Internet space.

Nowhere is the bipartisan effort to preserve non-discriminatory networks displayed more prominently than the Telecommunications Act of 1996. Congress was nearly unanimous in recognizing that in order to foster new industries that used the information superhighway, everyone should have open access to that highway, and there must be a cop on the beat to guard against the predictable abuses of market power that the owners the access networks would likely leverage. This rational bipartisan approach also animated the Act's implementation. FCC Chairman Michael Powell first articulated the "four Internet freedoms," which were later embodied in the FCC's Internet Policy Statement and subsequently served as the basis for the open Internet provisions in the COPE Act, adopted by the House in 2006. This framework was then used in 2007 by Chairman Martin to stop Comcast's secret, discriminatory behavior against the Bit Torrent application.

Even in 2011, there is universal agreement that the Internet should be preserved as an open platform. Nearly everyone agrees that public policy ought to prevent gatekeepers from using market power to erect artificial barriers to speech and commerce. If we can agree that ensuring consumers and innovators maintain access to an open platform is a worthy policy goal, then we have a duty to confront the reality that network owners have strong incentives to close the platform and erect barriers to speech and commerce in order to increase short-term gains. The FCC's order attempts to do just that.

Members of this body may be uncomfortable with the precise contours of the FCC's rules. Free Press, too, ultimately opposed the FCC's final order because we felt that it failed to adequately preserve and protect the open Internet. But the passage of this Resolution of Disapproval will leave consumers completely unprotected. It will remove the FCC's current weak and industry-blessed rules and prevent the FCC from addressing the most blatant forms of discrimination and anti-competitive activities at any point in the future. This resolution is an unnecessary and dangerous over-reaction to a policy framework that is at its core almost identical to the one in the COPE Act, approved in a bipartisan fashion by Congress just a few years ago.

Adoption of this resolution will actually increase market uncertainty and harm economic growth. Most ISPs have told Wall Street the truth — that these rules are no burden. Upending the structure created by the rules will create uncertainty for that sector and the Internet content and applications sector, where jobs are actually being created. These innovators believe now they have a certain, albeit imperfect framework to live under, and this resolution, if enacted, will remove that certainty and subject them to the discriminatory whims of the ISPs for a period of years.

In the end, we cannot simply set up a false choice between what the FCC did and no policy at all. We can't wish away the concentrated market structure and assume that broadband providers will always act in the best interests of consumers and innovators. Internet users cannot afford to have Congress to eliminate the FCC's oversight over our nation's critical communications infrastructure.

To borrow a very tired old phrase, the Resolution of Disapproval is a solution in search of a problem. Instead of pursuing this perilous path, we strongly urge this body to remember its long commitment to preserving the principle of non-discrimination and work on constructive solutions that will benefit all Americans.

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Introduction

Though the debate around network neutrality is heated and contentious, all sides agree that the abstract quality of “openness” is the defining characteristic of the Internet, and is why the Internet has risen from its original status as an obscure technology to become an essential infrastructure in a matter of years, not decades. Where the sides diverge is how to preserve this abstract quality of openness. Here, we believe the path is clear, and traces its way through decades of regulatory history -- history that teaches us a very important lesson: two-way communications networks are so critical to the basic functioning of our society that they must be operated in a non-discriminatory fashion, one that preserves open and efficient interconnection. Indeed, this lesson is at the heart of the Communications Act, and to deviate from it is to invite a peril that is so great and so costly, that it is nearly unfathomable. To abandon this principle now through the use of the Congressional Review Act is to invite market uncertainty and abuses of market power that will harm American innovation and jeopardize the vibrant “edge” Internet economy, *the* sector of our economy that can ensure this nation retains its position as a global economic powerhouse.

Network Neutrality embodies the basic principle of open nondiscriminatory interconnection that the Communications Act seeks to promote. Thus, Network Neutrality unquestionably should be the cornerstone of America’s broadband policy. Network Neutrality makes it possible to have an open market for speech and commerce on the Internet, and it is Congress’ and the FCC’s fundamental duty to protect this openness for consumers, citizens and businesses alike. Ultimately, the FCC has the responsibility to ensure that the content market that sits adjacent to the access market retains maximum competitiveness, as it always has, by precluding market power in network ownership from distorting the market for Internet content. This is the successful legacy of the *Computer Inquiries* that the FCC must uphold.

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This economic space at the “edge” of the network architecture has been a remarkable engine of economic growth in the last decade. In addition, this is the space where network technologies meet democratic discourse and open cultural expression. Because of the open marketplace at the edge of the network, an open sphere for public speech has developed that rivals the printing press as the most important development in modern political communication. Policies aimed at the application layer should recognize its centrality to the economic and democratic health of the nation.

Simply stated, there is a reason millions of citizens have told Congress to preserve Net Neutrality.

The importance of the Internet ecosystem exceeds the sum of its parts; its basic DNA of openness must not be destroyed in the shortsighted pursuit of monopoly profits on the part of the private companies who have made billions by selling access to this common good resource.

In this testimony I offer evidence that these rules will promote efficient investment, promote innovation, create jobs, and promote competition. I also offer evidence rebutting the major claims of hypothetical harms that openness policy might cause. I demonstrate how Network Neutrality will not deter ISP investment, and will promote edge economy Investment. This in turn will feed the virtuous cycle where ISPs will continue to Invest in network infrastructure as the Internet economy grows.

ISPs major stated opposition to Network Neutrality is that without the right to earn new discriminatory-based revenues they will not invest in their networks. However, I explore the likely shape of these hypothetical business models, and find that the true motive beneath ISPs desire to discriminate is not primarily the possibility of earning new third-party revenues, but the protection of legacy voice and video services from the disruptive competition enabled by the open Internet.

Specifically, I discuss the so-called “paid-prioritization” business model, one frowned-upon (but not banned) by the FCC’s December 2010 Order. In this model, third-party content and applications providers would compensate ISPs for prioritizing their traffic over all other traffic flowing across the ISP’s network. But this model is faced with an immovable barrier: the routing of Internet packets is a zero-sum-game; during times of congestion, prioritizing one packet deprioritizes all others. This practical reality firmly bounds the possibilities of the pay-for-priority business model. In practice, this means that in order for this model to work, congestion will have to be widespread. It also means that ISPs will only be able to form a small number of paid-priority business relationships, causing great harm to the normal operation of free market choice online. Further, this market creates the perverse incentive for ISPs to make congestion the normal state of affairs, suggesting that the notion that paid-priority business models will prove superior to the status quo at stimulating ISP investment is highly dubious.

I then discuss “vertical prioritization,” a business model is one where an ISP simply prioritizes its own vertical content and services over all other content. This prioritization can be achieved either by flagging their traffic for priority, or by more subtle ways, such as de-prioritizing applications that are used to deliver classes of content that compete with the ISPs vertical content; or by the outright blocking of an IP application that competes with the ISPs own adjacent market services. Unlike the pay-for-play or pay-for-priority models, this business model involves no new income streams, only the insulation of old streams from network-facilitated competition. But allowing ISPs to insulate their legacy vertical voice and video industries from the natural forces of competition is no recipe for investment -- with reduced competition comes reduced investment incentives.

Therefore, abandoning network neutrality would enable ISPs to reduce investment in the core market, and leverage power into the edge markets, further reducing investment there as well. Abandoning Network Neutrality is certain to stifle growth in the U.S. information economy at a time when this sector serves as our best hope for a productive future.

I then discuss historical financial data that strongly suggests that network neutrality rules will not deter ISP investment. At the end of 2006, AT&T, as a condition of its acquisition of BellSouth, was required by the FCC to operate a neutral network for two years. During this period, while operating under network neutrality rules, AT&T's overall gross investment increased by \$1.8 billion -- more than any other ISP's in America. Without Network Neutrality, ISPs will have a strong incentive to reduce investment and make congestion commonplace in order to extract revenues from content providers willing to pay to avoid traffic delays.

I also demonstrate how Network Neutrality will not harm ISP employment. ISPs have for years been earning higher revenues and simultaneously slashing jobs. Since 1996, AT&T, Qwest and Verizon have collectively seen a 32 percent increase in revenues while jobs have dropped 25 percent. In short, the ISPs pro-consolidation era pattern of destroying good jobs while reaping higher profits will likely continue with or without the existence of Network Neutrality rules.

I also discuss that without open Internet rules, ISPs will be granted license to abuse their positions as terminating access monopolies, which is in direct conflict with the Act's goals for nondiscriminatory interconnection. This abuse will lead to even more complicated regulatory issues than are currently faced by the FCC in the Intercarrier Compensation (ICC) debate.

I then address the long Congressional and FCC history of promoting the principle of non-discrimination in our nation's communications networks. I discuss how economic theory and market experience indicate that nondiscriminatory rules are necessary even in access markets with robust

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competition, and how in recognition of this basic fact, Congress structured the Communications Act such that the FCC was granted the authority to forbear from applying much of the regulations in Title-II to wired and wireless telecommunications providers, but was expressly forbidden from removing nondiscriminatory interconnection obligations.

I devote the last portion of my testimony to discussing the unfortunate and unnecessary shortcomings in the FCC's open Internet policy framework, adopted last December. I note how the FCC's framework for wired networks is riddled with loopholes that could advantage established ISPs over consumers and innovators in any enforcement proceedings. I also discuss the harms to competition and innovation that will result from the FCC's tacit approval of economic-motivated blocking and discrimination on mobile networks. And I discuss the unnecessary risk associated with the FCC's decision to rely on Title I ancillary authority, instead of restoring its undisputed authority under Title II of the Communications Act.

I conclude with a reminder of a basic truth: that nondiscriminatory protections are essential to promoting innovation and investment, as well as facilitating more informed citizenry and greater democratic participation. The Commission's rules may have failed to adequately preserve and protect these principles, but there should be no doubt that removing the FCC's ability to improve upon this framework through the adoption of H.J. Res 37 will bring tremendous uncertainty to the marketplace, harm consumers, cost jobs and jeopardize future growth of the Internet economy.

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The Historical, Bipartisan Commitment to the Principle of Non-Discrimination, And The True Relationship Between Network Neutrality and Investment

At the turn of the century, high-speed Internet access service was present in about 2 percent of American homes. Today, that figure stands at nearly 60 percent. No other technology even comes close to competing with this pace of adoption -- not the telephone, television, the automobile, cable TV, cellphone, or even the computer itself.

This technology's meteoric rise illustrates the immense value that it brings to users. This value is made possible, in large part, because the Internet is an open platform for innovation, speech and commerce. The Internet's openness brings with it the potential to eradicate the barriers to entry present in traditional communications markets. Content producers no longer need to negotiate with powerful cable providers, newspaper publishers or broadcasters to get their work out to the masses; the Internet has an unlimited number of "channels." A citizen wishing to express an opinion about a pressing issue no longer needs to write a letter to the editor; they can reach far more readers online. And politicians no longer need to rely on the short-attention-span mainstream media to get out their message; they can use the Internet to speak directly to voters. We are only beginning to see the vast potential of the Internet as a medium for civic engagement.

The Internet's openness is also responsible for fostering unprecedented economic growth. It is conduit for near "perfect competition" -- the Holy Grail model for free-market economics. Barriers to entry are reduced. Buyers are empowered by almost unlimited information and unlimited choice. Sellers are empowered by the ability to cut out middlemen and interact directly with the customer. And innovators and entrepreneurs have a platform for launching new ideas globally. What makes all this so remarkable is that the explosion in communications and economic activity took

root and grew out of an infrastructure controlled in important ways by monopolists which had every incentive to use their market power to control and monetize these innovations.

The Internet is a common good that will continue to play a critical role in America's economic and social prosperity. But no one single person, government or corporation owns the Internet. Much of the Internet's early development was carried out using public funds, and much of its private development was and continues to be funded by consumers who participate in markets with little meaningful competition. Private companies like AT&T and Comcast build and deploy infrastructure that provide end-users with access to this common good, and they make substantial profits doing so. But consumers don't hand over money to companies like Comcast because they value the connection itself; they are willing to pay \$50 per month for the things that connection enables them to do. It's the applications, services and content that give the connection value. ISPs provide access to the Internet, and when they engage in behavior such as blocking, they alter the fundamental nature of how the Internet is expected to work. This threat is why all four of the FCC's original *Internet Policy Statement* principles contain the phrase "promote the open and interconnected nature of the public Internet."

But those protections were at best tenuous. The lack of policy clarity following the Powell and Martin Commission's abandonment of the pro-competition framework in the 1996 Telecom Act had the ultimate impact of inviting carriers looking to implement discriminatory practices to push the envelope. The lack of firm nondiscrimination rules created market uncertainty and sent a signal to carriers that it might one day be permissible to profit from artificial scarcity.

The Internet was born in an environment where innovation and ingenuity were set free. This environment was made possible because prior FCCs, starting with the Nixon administration, were proactive in ensuring that owners of critical communications facilities behaved properly and stayed

out of the way of innovators making use of this general-purpose infrastructure. Discrimination was not an option, and that was never a point of controversy. It is frustrating that there is today even a debate over Network Neutrality, because neutrality is the very lifeblood of the network; it is what made the Internet into a service that companies like AT&T and Comcast could get rich selling. The only reason the fight over Network Neutrality exists is because the FCC, in a series of decisions beginning in 2002, left consumers without the basic protections guaranteed in the Communications Act that have been part of the Internet since its inception.

Below we offer evidence that strong, enforceable Net Neutrality rules will promote efficient investment, promote innovation, create jobs, and promote competition. We also offer evidence rebutting the major claims of hypothetical harms that openness policy might cause. We then provide extensive discussion on exactly how the Commission should structure these rules in order to effectively preserve and promote the open Internet.

Factors That Influence Investment

The high-speed Internet Service Provider (ISP) sector is one of the most capital-intensive sectors in our economy. Building networks requires substantial upfront investments, and decisions regarding these investments are driven primarily by factors that influence the value of the return on investment (ROI). These factors are themselves in turn driven by other considerations -- some interrelated -- making overall investment decision-making a complex process that depends on the specifics of a given market. Unfortunately, in the network neutrality debate, investment decisions have been painted as binary -- some ISPs claim that non-discrimination rules will automatically deter, even decimate investment. But this simplistic view ignores other business realities and flies in the face of historical evidence and common sense.

When weighing the potential impact of open Internet rules on investment (both in the ISP sector and within the “edge” sectors that use the Internet as a production input) policymakers must consider all factors that influence investment decisions. In general, these factors are: expectations about demand, supply costs, competition, interest rates, corporate taxes, and general economic confidence.

If a market is expected to grow, businesses have a strong incentive to invest in capacity to meet increased demand, in order to increase revenues. The overall high-speed Internet market is growing, with the wireless data sector poised for substantial future growth. However, even within the wireline sector, there is considerable potential for growth in “next-generation” high-speed Internet services -- those that can deliver speeds well above 10 megabits per second (Mbps). Companies deploying higher-end service tiers are seeing substantial growth in these faster (and more expensive) offerings.¹

If the cost to serve a customer declines, the potential return on investment increases, giving a firm the incentive to increase investment. In the ISP sector, overall capital equipment costs and operating costs continue to decline. In particular, for cable operators, the relatively inexpensive cost of DOCSIS 3.0 upgrades, coupled with the strong potential growth for faster services, creates an incentive to invest. For Incumbent Local Exchange Carriers (ILECs), deploying faster fiber-to-the-home (ftth) or short-loop DSL services does require a relatively higher level of upfront investment (compared to cable’s upgrade path), but the potential cost savings from copper retirement, coupled with new revenue streams from Internet-delivered TV, also creates a strong incentive to invest.

¹ See e.g., Comments of Free Press, *In the Matter of Inquiry Concerning the Deployment of Advanced Telecommunications Capability to All Americans in a Reasonable and Timely Fashion, and Possible Steps to Accelerate Such Deployment Pursuant to Section 706 of the Telecommunications Act of 1996, as Amended by the Broadband Data Improvement Act, A National Broadband Plan for Our Future*, WC Docket Nos. 09-137, 09-51, pp. 48-51; See also John Horrigan, “Home Broadband Adoption 2009,” Pew Internet & American Life Project, June 2009, p. 23.

In markets where technological change is relatively swift and competition is healthy, firms have a strong incentive to invest in order to keep up with or get ahead of their competitors. The current high-speed ISP market is characterized by swift technological change, but the overall level of competition is sub-optimal. The latter factor means that regulators must be vigilant to ensure that the lack of competition and presence of market power do not spill over from the ISP market into the adjacent content and applications markets. If ISPs are allowed to discriminate against content and applications, it will create incentives for them to profit from artificial scarcity by delaying or avoiding network investments -- and it will reduce investment in the content and applications sector.

Interest rates directly impact the cost of borrowing money, and they also impact the opportunity cost of using profits to finance investment. As interest rates decline, firms view capital investment more favorably.

Firms pay taxes based on their profits. If the corporate tax rate is reduced, or if investment tax-allowances are increased, then firms have a greater incentive to invest. In recent years, the federal government has made changes to tax law, such as accelerated depreciation, which reduce ISPs' overall tax burden.

Business confidence in the overall economy directly impacts investment. Strong GDP growth and constrained inflation usually result in strong overall capital investment. Conversely, an economic downturn, even if it disproportionately impacts certain sectors, can lead to uncertainty about growth and demand and thus deter investment. In the overall communications sector, where services are increasingly viewed as necessities, firms may indeed be "recession-proof," but still limit investment during periods of overall economic turmoil. Investment in the communications sector declined sharply following the 2001 recession, and has marginally declined during the current recession (see below). Some scholars actually believe that one of the consequences of the bursting of

the housing bubble will be increased institutional investment in the telecom sector, as investors look for proven smart long-term investments, like fiber optic residential products.²

ISPs Motivation to Discriminate Are Driven Primarily By Their Desire to Insulate Legacy Voice and Video Business Segments from Disruptive Competition.

Some incumbent ISPs claim network neutrality rules will deter investment. But in order for this to be true, the rules will have to substantially impact an ISP's potential return on investment. Yet no ISP has provided a concrete example of how network neutrality will lower ROI. Further analysis seems to indicate that large ISP opposition to preservation of the *de facto* status quo net neutrality regime is caused by concerns about insulating their legacy voice, SMS and video revenues from the forces of competition enabled by the Internet. Such concerns were at the root of the Commission's *Computer Inquiry* regulatory framework, and thus it should come as no surprise that the same anticompetitive behavior underpins the current debate. As the Congress knows well from its work leading up to the enactment of the 1996 Act, carriers protecting supra-competitive profits in legacy business segments from the forces of competition is the exact type of classic abuse of market power that on the whole reduces total investment and consumer surplus.

For the purpose of analyzing possible market reactions in a world where ISPs are free to violate the long-standing principle of non-discrimination, I examine two basic types of potential discriminatory business models that ISPs could theoretically explore. The first is a "pay-for-priority" model, where the ISP will offer traffic prioritization for a fee to any content provider who wishes to contract for such treatment -- or to an exclusive subset of content providers who are given the

² See Andrew Odlyzko, "Network Neutrality, Search Neutrality, and the Never-Ending Conflict Between Efficiency and Fairness in Markets," January 19, 2009. "One possible outcome of the financial crash might paradoxically be that it will encourage greater investment in telecommunications infrastructure. Even aside from government funding for economic stimulus, the crash might, after main turbulence subsides, lead to more realistic expectations of investment returns, which will make long-term investments in projects such as fiber to the home more attractive."

opportunity to pay for such preferential treatment. The second model is the “vertical” model, where the ISP prioritizes all of its own affiliated content over content.

Pay-for-priority is the hypothetical business model that has occupied much of the network neutrality debate, and is frowned-upon, but not prohibited in the FCC’s December 2010 Open Internet Order. Under this scheme, third-party content and applications providers would compensate ISPs for prioritizing their traffic over all other traffic flowing across the ISP’s network. But unlike paid-prioritization in other markets like parcels,³ the routing of IP data is a zero-sum game: If a router speeds up one set of bits, by definition, all other bits are slowed down.⁴ This practical reality firmly bounds the possibilities of the pay-for-priority business model.

Because packet-switching is a zero sum game, there is a theoretical upper limit to how many prioritized relationships an ISP can establish. This is because as the number of prioritized relationships grows, the degradation to all non-prioritized content becomes unacceptably high; and because the total pool of time is finite, the time advantage given to each priority customer declines as more prioritized relationships are created. This places an upper bound of the number of paid-priority relationships a given ISP can enter. Thus, if ISPs are allowed to established fee-for-priority relationships with individual firms, they will strike deals with a handful of firms who have the highest willingness to pay for prioritized treatment. In practice, this means both exclusive deals and preferential treatment for vertically integrated content. This will thus deliver the undesirable

³ The fact that parcel delivery is not a zero-sum game but packet delivery is has not stopped anti-openness proponents from pushing this incorrect analogy. See Comments of the United States Internet Industry Association (USIIA), *In the Matter of Broadband Industry Practices*, WC Docket No. 07-52, p. 6 (June 15, 2007). “Tiered services are a part of nearly every industry, where they serve an important role in both speeding some customers through their desired tasks and permitting the normal flow of commerce in the basic or non-tiered services. The existence of business class does not slow the flight for those who buy airline or train seats in coach. Overnight delivery of letters by UPS or FedEx does not slow the deliveries by the US Postal Service.”

⁴ See M. Chris Riley and Robb Topolski, “The Hidden Harms of Application Bias” (Nov. 2009), available at http://www.freepress.net/files/The_Hidden_Harms_of_Application_Bias.pdf (“*Hidden Harms of Application Bias*”) at 2, “[W]ith congestion, prioritization forwards higher priority packets ahead of other traffic, and lower priority packets are negatively affected until there are no higher priority packets to send. Prioritization operates by degrading and harming lower priority traffic, because (by definition) more low priority packets are delayed or dropped.”

consequence of Internet balkanization, where ISPs (who already eschew price competition in favor of product differentiation) will establish exclusive content arrangements as a method of product differentiation -- Comcast's exclusive video partner might be Hulu, while AT&T's might be YouTube. Users trying to use the non-affiliated (and non-prioritized) services will likely find them unacceptable slow, and the market will fragment.

The implications of this engineering reality blow a huge hole in the ISP argument that network investments will only take place if they are freed to price discriminate via pay-for-priority. Content providers only have an incentive to pay for ISP-prioritization if it makes a substantial difference in the quality of their product as delivered to the end-user. This incentive only becomes *real when network congestion is the norm*. Under this economic model, a network owner actually has every incentive not to upgrade their network -- for if they did, they would undermine the entire rationale for prioritization. In other words, once an ISP establishes a system of prioritizing certain content in exchange for payment (and thereby degrading for non-payment all other content), the ISP would have every incentive *not* to invest in increased capacity, for fear of reducing congestion and eliminating the very feature that made content providers willing to pony up for prioritized delivery. Thus Net Neutrality actually encourages deployment, because without it, network operators would have substantial incentive to delay upgrades in order to profit from artificial scarcity.

The second, related prioritization model is one where an ISP simply prioritizes its own vertical content and services over all other content. This prioritization can be achieved either by flagging their traffic for priority, or by more subtle ways, such as de-prioritizing applications that are used to deliver classes of content that compete with the ISPs vertical content⁵; or by the outright

⁵ For example, an ISP could designate BitTorrent as a low-priority application, and delaying it, or disrupting how the application works by blocking users ability to originate such content.

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blocking of an IP application that competes with the ISPs own adjacent market services.⁶ Unlike the pay-for-priority models, this business model involves no new income streams, only the insulation of old streams from network-facilitated competition. Any business should of course be concerned about competition eroding margins; but policymakers must recognize that these concerns have more to do with reducing competition than they do with investment. Congress gave the FCC a statutory duty to promote competition; it also has gave it a statutory duty to ensure interconnection. Allowing ISPs to break the open interconnected nature of the Internet in the name of protecting current ISPs adjacent businesses from competition cannot be a path our nation follows. If investment is a core national goal, then we must recognize the basic fact that with reduced competition comes reduced investment incentives. This is certainly true in the core network market and in the broader edge markets -- abandoning network neutrality would enable ISPs to reduce investment in the core market, and leverage power into the edge markets, further reducing investment there as well.

Fortunately, policymakers do not need to rely solely on theoretical arguments about how network neutrality will impact investment, as we have the results from a natural experiment implementing these rules on the largest ISP in America.

Historical Data Suggests that ISPs' Investment Decisions are Not Negatively Impacted by Network Neutrality

In the final days of 2006, the FCC approved the merger of AT&T and BellSouth only after the company agreed to operate a neutral network (by adhering to the four principles of the FCC's *Internet Policy Statement* as well as an explicit fifth principle of nondiscrimination) for two

⁶ For example, a mobile wireless ISP could bar the use of VoIP applications on its 3G data network in order to guard against cannibalization of mobile voice revenues.

years following the transaction.⁷ A review of AT&T's investments over those two years shows quite clearly that a strict network neutrality rule did not result in the company reducing capital investment.

In 2006 -- prior to agreeing to the five network neutrality principles -- AT&T and all its then-current and future subsidiaries (i.e., the full post-2006 company, which includes SBC, BellSouth, Cingular -- or AT&T Mobility -- and ATTC) made \$18.2 billion in gross capital expenditure investments. After two years of operating under a strict network neutrality regime, the company's gross capital expenditures rose to \$20.34 billion. In terms of capital expenditures as a percentage of revenues, AT&T's investment increased from 14.9 percent in 2006 to 16.4 percent in 2008.

These data represent all of AT&T's business segments; however, the fifth principle of nondiscrimination applied specifically to AT&T's wireline network. But in this segment, the company's investment growth under the network neutrality framework was even stronger than the overall company's growth before the framework was implemented. In 2006, the combined company's wireline capital expenditure was 13.5 percent of wireline revenues. By the end of 2008, this had increased to 20.2 percent.

Not only did AT&T's investment increase under network neutrality rules, but the company's gross investment also increased more than any other ISP's in America during this period. In the two years following the imposition of network neutrality rules, AT&T's gross capital expenditures

⁷ In addition to agreeing to conduct business in a manner that comports with the *Policy Statement*, AT&T/BellSouth agreed "not to provide or to sell to Internet content, application, or service providers, including those affiliated with AT&T/BellSouth, any service that privileges, degrades or prioritizes any packet transmitted over AT&T/BellSouth's wireline broadband Internet access service based on its source, ownership or destination." This commitment ended on December 29, 2008, two years from the merger consummation date (the commitment to the *Policy Statement* continues until May 29, 2008). See Letter from Robert W. Quinn, Senior Vice President, Federal Regulatory, AT&T, In the Matter of *AT&T Inc. and BellSouth Corporation Application for Transfer of Control*, WC Docket No. 06-74 (filed Dec. 28, 2006) (*AT&T Dec. 28 Ex Parte Letter*).

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increased by \$1.8 billion, or 10.2 percent. In contrast, the other two Regional Bell Operating Companies (RBOCs) had a lower percentage increase in gross capex spending, with Verizon showing a 0.8 percent increase from 2006 to 2008 and Qwest increasing its gross capex by 8.9 percent during this period.

While gross capital expenditures are an obvious investment metric, these absolute figures can be somewhat misleading depending on the overall size of a business. Hearing that a company spent \$100 million on capex certainly sounds impressive, unless you then consider that the company also took in \$100 billion in revenue. This is why it is also useful to measure capital investment as a percentage of revenues. Looking at all the major U.S. ISPs' investments during the 2006-2008 period, we see that AT&T under network neutrality rules had higher levels of relative investment growth than many other companies, with relative investment levels by Verizon, Comcast and Time Warner Cable actually declining during this period.

Now, let me be clear -- I am not making a claim of causality about this one single case of the imposition of a strict principle of non-discrimination and its impact on investment. There's simply not enough data and too many other intervening factors particular to this transaction. It is merely suggestive of what might take place. What I am suggesting is the "net neutrality will destroy investment" rhetoric coming from the ISPs is on its face dubious. Having the AT&T experience as a data point is indeed interesting; but it alone is not as convincing as the common sense reasoning as to what the discriminatory business models will likely be. As I showed above, the ISPs are bound by factors beyond their control, and there is plenty of reason to believe that once free to discriminate, ISPs will focus on vertical prioritization and using discrimination to reduce the need for investment.

The rhetoric about network neutrality discouraging investment is just a general reflection of the common but misguided belief that any and all regulation discourages investment. According to

this theory, regulation will perpetuate uncertainty and will reduce potential return on investment, thereby reducing the incentive to invest. But all regulation is not created equal. Some regulation is heavy-handed, designed to control retail prices in a monopoly market, while other regulation can be much lighter, providing basic rules of the road that ensure healthier competition in an otherwise concentrated market.

So what should we make of the theory that regulation reduces investment? Evidence from the past 13 years from the Incumbent Local Exchange Carrier sector suggests little support for this theory. In fact, during this period, which saw the imposition of substantial regulation followed by equally substantial deregulation, we see that regulation may have actually encouraged investment -- and that deregulation and consolidation may have decreased investment.

In 1994, two years before the 1996 Telecom Act was passed, the combined gross capital investment of the RBOCs was 20 percent of revenues. Immediately following the passage of the 1996 Act, RBOC investment as a percentage of revenues grew, despite substantial regulations at the wholesale and retail levels. By 2001, RBOC investment as a percentage of revenues reached 28 percent. Investment continued to rise throughout the year 2000, despite the bursting of the dot-com bubble in March of that year. In 2001, despite a six-month recession, RBOC investment held steady. It wasn't until 2002, when the FCC began dismantling the 1996 Act's regulations that relative investment declined sharply, to a low of 15.7 percent in 2003. Investment rose slightly in 2004 and 2005, but then declined and held flat following the FCC's subsequent complete deregulation of broadband and approval of a series of massive mergers.

In short, these data suggest that ISP investment decisions are not driven simply by regulation or the lack thereof. In fact, it appears that regulation, especially if designed to promote competition, can stimulate investment.

While no one can say for certain what precise outcome network neutrality, or this FCC's open Internet framework will have on ISP sector investment, we should take stock in what is going on behind the scenes in the networking equipment market. The so-called deep-packet inspection (DPI) technology that enabled Comcast to secretly block the BitTorrent application is now being marketed to ISPs as a technology that can be used to avoid investing in new capacity. For example, one DPI vendor states that "by shaping traffic at the subscriber-level [using DPI], bandwidth is made available for new revenue generating services. Rate limiting traffic allows network infrastructure build-out to be deferred, *thereby reducing capital expenditures.*"⁸

Without Open Internet Rules, ISPs Will Be Granted License to Abuse Their Positions as Terminating Access Monopolies, Which is In Direct Conflict with the Act's Goals for Nondiscriminatory Interconnection

Congress has long been concerned with the potential abuses of terminating access monopoly power. Therefore, policymakers should now be very concerned with some ISP's stated desires to abuse their position as a terminating access monopoly by price discriminating against certain streams of traffic based on their source, or by degrading otherwise seamless and efficient interconnection.

It is the stated purpose of the Communications Act "to promote nondiscriminatory accessibility by the broadest number of users and vendors of communications products and services to public telecommunications networks,"⁹ and to "to ensure the ability of users and information providers to seamlessly and transparently transmit and receive information between and across telecommunications networks."¹⁰ What ISPs want free reign to do -- be it pay-for-priority, or vertical-prioritization -- is violate the Act's stated purposes regarding interconnection. Ending the

⁸ See M. Chris Riley and Ben Scott, "Deep Packet Inspection: The End of the Internet as We Know It?" March 2009, at n. 51 (*emphasis added*).

⁹ 47 U.S.C. 256(a)(1).

¹⁰ 47 U.S.C. 256(a)(2).

current system of default network neutrality enables the abuse of terminating access monopoly power in a manner that is far worse than any the FCC has ever faced. One of the thorniest issues the FCC is currently wrestling with is how to set the “right” price for intercarrier compensation (ICC). In this area, the Commission need not even worry about price discrimination -- it has the task of regulating rates for efficiency non-discriminatory interconnection. Yet it still struggles. This struggle exists because of the presence of terminating access monopolies, and is one that is not in any way solved by the presence of multiple competitive service providers -- even carriers without market power are prone to abusing their position as terminating access monopolies.¹¹

In the ICC arena, the policy solution most often highlighted as being the most efficient and least regulatory is “Bill-and-Keep.”¹² Bill-and-Keep gets around the classic ICC problems by moving the regulatory paradigm away from the “calling party pays” economic principle, to one that recognizes the benefits to both the called and calling parties. And while the telephony industry matured under the calling party pays economic principle, the IP telecommunications market has essentially existed under a *de facto* efficient Bill-and-Keep regime.

Examining last mile IP communications through the lens of Bill-and-Keep is instructive, as it highlights problems ahead if Congress, through the Resolution of Disapproval, takes away the FCC’s ability to preserve open and nondiscriminatory interconnection. The Bill-and-Keep model has two basic components: 1) the calling party pays transit costs to termination point at last handoff and 2) the called party cannot charge a termination fee. In IP communications, the end-user “calls” a

¹¹ See, e.g., *In the Matter of Access Charge Reform*, CC Docket No. 96-262, Fifth Report and Order and Further Notice of Proposed Rulemaking, 14 FCC Rcd 14221, 14328-30, paras. 211-16 (1999) (*Pricing Flexibility Order and NPRM*).

¹² See “Bill and Keep at the Central Office As the Efficient Interconnection Regime,” Federal Communications Commission Office of Plans and Policy, OPP Working Paper Series #33, December 2000.

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server, server answers.¹³ Bill and Keep theory suggests that the most efficient way to allocate network costs is for the calling party (and the called party) to recover costs from end-users. This means essentially the status quo in the ISP industry, where ISPs charge end-users a monthly fee, and they have transit arrangements that range from transport to peering. However, ISPs want to charge the "called party" a discriminatory termination fee, based on the type of traffic. That fee will likely be zero for some traffic, but those with a willingness to pay for prioritization (assuming blocking is prohibited or kept to a minimum) the fee would be non-zero. Therefore, a move away from the status quo replaces the efficient Bill-and-Keep system with one that reinstates the inefficiencies associated with terminating access monopolies. With a prohibition on outright blocking, this takes the form of the access monopoly degrading the quality of the "call." The current system is more efficient because the prioritization charge will most certainly not be based on cost, but on the highest willingness to pay for prioritization, which in turn is reflective of the practical quality of the prioritization (which itself is directly related to the amount of congestion, demonstrating again that in order for the pay-for-priority model to work at all, congestion has to be the normal state of affairs).

Under no circumstances is a carrier abusing its terminating access monopoly efficient, and using that monopoly to price discriminate against specific sources of content compounds the problem, especially if the provider faces little effective competition. If the ICC debate has taught us anything, it is that reigning in terminating access monopoly power once it has been exercised is a very difficult task.

¹³ This complicates the analogy, because the traditional called party is now being treated like the traditional calling party. For the sake of cohesion with the old model, consider that the server is the calling party.

Preserving the Open Internet is Essential to Continue the Unprecedented Level of Investment and Innovation in Content and Applications Markets, as Well as Other Markets that Use the Internet as a Basic Underlying Infrastructure

Much of the rhetoric directed against network neutrality policy centers on the claim that this basic rule of the road will somehow deter network operators from making future investments in their core business. As the above discussion shows, these claims are completely unsupported by all available data. Likewise, common sense judgment about the likely nature of the discrimination business indicates that the hysterical rhetoric about net neutrality is nothing but a smokescreen designed to scare policymakers from continuing the 75-plus year history of protecting the open and non-discriminatory facets of our nation's two-way communications networks. The simple fact is even the *real* version of Network Neutrality policy pushed by my organization (as opposed to the pale comparison embodied in the FCC's December Order) would merely act as a very light regulatory firewall ensuring that ISPs do not abuse their market power. Network neutrality will also ensure that the right market signals are present, encouraging ISPs to make efficient and profitable network investments and discouraging them from profiting from artificial scarcity.

So while the impact of Network Neutrality obligations on last-mile network investment is likely negligible -- or positive -- the absence of nondiscrimination protections will have a large impact on investments made in the application and content markets. Currently, the Internet is an open platform, governed by a universally accepted and agreed upon set of technical standards. This open platform provides online innovators with a high degree of predictability about a major segment of their business. An innovator knows that she can develop a new idea or application, and that it will

work on any end user's Internet-connected device. The innovator does not need to go to every ISP and ask for "permission to innovate."¹⁴

But without Network Neutrality, this certainty is destroyed. A particular network provider might already have an exclusive deal with the innovator's competitor -- a deal stipulating that the ISP block or degrade all competitive traffic. Or the ISP may treat the innovator's underlying network protocol differently than other ISPs, making it almost impossible to design an application that is guaranteed to work properly. This potential for discriminatory treatment and nonstandard network management could destroy investor confidence in the applications market, stifling growth in the one segment that drives the information economy. The Internet would become balkanized, whereby applications that work on one network would not work on another. The entire premise of a globally interconnected system of communications that is fully interoperable with all content and applications would be undermined.

Network Neutrality Will Impart No Harm on ISP Employment And Will Ensure Edge Innovators Have the Certainty to Invest and Continue Creating Jobs

Some opponents of Network Neutrality charge that this light-touch regulatory regime will somehow result in ISPs reducing their work force.¹⁵ The reasoning behind this argument, say these

¹⁴ See Prepared Statement of Vinton G. Cerf, Vice President and Chief Internet Evangelist Google Inc., before the U.S. Senate Committee on Commerce, Science, and Transportation, on the matter of Network Neutrality, Feb. 7, 2006. "In the zone of governmental noninterference surrounding the Internet, one crucial exception had been the nondiscrimination requirements for the so-called last mile. Developed by the FCC over a decade before the commercial advent of the Internet, these 'Computer Inquiry' safeguards required that the underlying providers of last-mile network facilities -- the incumbent local telephone companies -- allow end-users to choose any ISP, and utilize any device, they desired. In turn, ISPs were allowed to purchase retail telecommunications services from the local carriers on nondiscriminatory rates, terms, and conditions. The end result was, paradoxically, a regulatory safeguard applied to last-mile facilities that allowed the Internet itself to remain open and 'unregulated' as originally designed. Indeed, it is hard to imagine the innovation and creativity of the commercial Internet in the 1990s ever occurring without those minimal but necessary safeguards already in place. By removing any possibility of ILEC barriers to entry, the FCC paved the way for an explosion in what some have called 'innovation without permission.' A generation of innovators ... [was] able to offer new applications and services to the world, without needing permission from network operators or paying exorbitant carrier rents to ensure that their services were seen online. And we all have benefited enormously from their inventions."

¹⁵ See Alex Chasick, "AT&T Asks Employees To Oppose Net Neutrality," *The Consumerist*, Oct. 20, 2009. (Quoting AT&T Chief Lobbyist Jim Cicconi as stating, "Let your voice be heard: Internet regulation is bad for consumers, jobs, investment and universal broadband").

opponents, is that Net Neutrality will reduce ISP investments, causing them to hire less and fire more. This assertion is plainly unsupported by the facts, and actually contradicts what unfortunately has become the ISP industry's default behavior -- as revenues rise, jobs are cut.

As I illustrated above, the ISP arguments about network investment are without merit. But we need not rely on theory to see what the likely outcome of higher revenues. As I discussed above, ISP industry revenues have been consistently increasing, yet investment is flat or declining. The same is true for employment, in an even more dramatic fashion.

During the era of competition (1996-2002), the revenues of the BOCs (and their then CLEC units) rose along with employment levels. As the tech bubble burst and 2001 economic recession set in (along side the new era of deregulation and consolidation), revenues decline from a high of near \$260 billion in 2001, to a low of \$223 billion in 2004. Beyond this point, telco revenues rebounded sharply, rising to an estimated \$243 billion for 2009, or where they were prior to the bubble-years of 2000-2001. But while telco revenues are on the rise, employment levels in the pro-consolidation era have continued to fall precipitously. BOC Revenues are up about 10 percent from the bottom, while jobs are down 14 percent since the revenues began to recover. From 1996 through 2009 revenues for the industry are up 32 percent while jobs have dropped 25 percent. In short, the pro-competition era created jobs, and the pro-consolidation era destroyed them.

In summary, there is no reason, either theoretical or practical, to assume any connection between ISP hiring practices and the phantom revenues they might earn in a world without network neutrality. ISPs have shown that their top priorities are reducing capex, increasing revenues, and getting rid of jobs at every turn. Some of the leading opponents of network neutrality have in the past made promises about creating jobs if allowed to merge; these promises were not surprisingly broken. There is simply no plausible reason why network neutrality policy will reduce ISP

employment. In fact, with network neutrality, content innovation will prosper, furthering demand for high-capacity, ubiquitous Internet access, which in turn will stimulate ISP investment. Without network neutrality, ISPs will be incentivized to reduce network investments, in order to make congestion the norm. This is not a recipe for job creation.

Network Neutrality is A Light-Touch Embodiment of the Principle of Non-Discrimination That Has Successfully Governed Our Nation's Communications Infrastructure for Decades

As discussed above two-way communications networks are so essential to the basic functioning of society that efficient nondiscriminatory interconnection must be preserved, and the fundamental nature of end-user communications providers as terminating access monopolies means the threat to interconnections will remain regardless of the level of last-mile competition, which due to the fundamentals of network industries, will always be sub-optimal. Indeed, the principle of nondiscrimination is so important that Congress intended for it to apply even in markets where effective competition exists. This is because the outcome that nondiscrimination produces -- openness -- is so essential to maintain.

Congress recognized that once competition developed in the advanced communications markets, certain regulations (such as Section 251 unbundling) would no longer be necessary or productive. So it gave the FCC explicit power to decide when to lift certain regulations. But because Congress was not convinced that competition alone would be enough to preserve the open nature of communications platforms, it put a structure in place that would always require carriers to abide by the principle of nondiscrimination. In Section 10 of Title I (47 U.S.C. 160) of the 1996 Act, Congress gave the Commission the authority to forbear from applying regulations on telecom carriers if a determination is made that "enforcement of such regulation or provision is not necessary to ensure that the charges, practices, classifications, or regulations by, for, or in connection

with that telecommunications carrier or telecommunications service are just and reasonable and are not unjustly or unreasonably discriminatory, [or] enforcement of such regulation or provision is not necessary for the protection of consumers.”

Thus, Congress allowed the discontinuance of regulations so long as they were not needed to ensure a specific desired outcome -- *just, reasonable and non-discriminatory treatment*. But the outcome itself remained paramount. Indeed, this is made quite clear in Section 332(c)(1)(A) of the Act (and in Section 10 itself, which refers to this specific passage), which gives the FCC the authority to selectively apply Title II regulations to commercial mobile service (CMRS) carriers, but specifically forbids the FCC from removing CMRS providers from an obligation to adhere to Sections 201, 202 and 208 of the Act.

The FCC’s entire history of intervention in communications and information services markets up until 2002 was based upon a deep understanding of network operators’ natural incentive to control content. Keeping this incentive in check is what motivated the *Computer II* structural separation rules¹⁶, and it is why to this day the Commission has yet to grant any telecom carrier forbearance from Section 201 (a requirement to provide reasonable access) and Section 202 (a requirement to not unreasonably discriminate in offering that access).¹⁷ Sections 201 and 202 are built around the principle of nondiscrimination and are intended to protect the public interest

¹⁶ In general, structural separation in the Internet context is a regulatory regime in which the owner of the network infrastructure is required to form a structurally separate corporate entity for selling Internet access. This separate entity must purchase the network access from the parent company at the same rates and terms that are made available to other ISPs

¹⁷ While it is true that no carrier has received forbearance from Sections 201 and 202, the Commission’s complete removal of broadband Internet access service from Title II accomplished the same outcome. See *Petition of SBC Communications Inc. for Forbearance from the Application of Title II Common Carrier Regulation to IP Platform Services*, WC Docket No. 04-29, Memorandum Opinion and Order, 20 FCC Rcd 9361 (2005), at para. 17, stating, “The Commission has never forborne from applying sections 201 and 202 of the Act. In a 1998 order denying a petition for forbearance from sections 201 and 202 of the Act (among other sections), the Commission described those sections as the cornerstone of the Act. The Commission explained *that even in substantially competitive markets, there remains a risk of unjust or discriminatory treatment of consumers*, and sections 201 and 202 therefore continue to afford important consumer protections. Because the language of section 10(a) essentially mirrors the language of sections 201 and 202, the Commission expressed skepticism that it would ever be appropriate to forbear from applying those sections. Since then, the Commission has never granted a petition for forbearance from sections 201 and 202. If we were to grant such a petition now, we would have to provide a rationale for abandoning our own precedent” (emphasis added, internal footnotes omitted).

regardless of technology or the level of market competition. Indeed, in a 1998 denial of a forbearance petition, the Commission stated:

“Assuming all relevant product and geographic markets become substantially competitive, moreover, carriers may still be able to treat some customers in an unjust, unreasonable, or discriminatory manner. Competitive markets increase the number of service options available to consumers, but they do not necessarily protect all consumers from all unfair practices. The market may fail to deter providers from unreasonably denying service to, or discriminating against, customers whom they may view as less desirable... providers may, in the absence of sections 201 and 202, have the opportunity and incentive to treat some of their existing customers in an unjust, unreasonable, and discriminatory manner, as compared with similarly situated potential new customers.”¹⁸

The Commission’s recognition of the importance of nondiscrimination rules in preventing carriers from exercising control over content extends into other areas of law such as pole-attachment rights.¹⁹ And concern about control over content is even present in Commission rules that govern cable leased-access regulations and program-access rules.²⁰

So even if the implementation of the 1996 Act was not flawed, and today’s communications marketplace were sufficiently competitive to no longer require unbundling regulations, tariffs, or structural separation -- nondiscrimination protections would still be needed to ensure consumer access to open platforms. This is necessary because network operators have strong incentives to

¹⁸ See *Personal Communications Industry Association’s Broadband Personal Communications Services Alliance’s Petition for Forbearance for Broadband Personal Communications Services*, WT Docket No. 98-100, Memorandum Opinion and Order and Notice of Proposed Rulemaking, 13 FCC Rcd 16857 (1998) at 16868-69, para. 23. This view of the central importance of Sections 201 and 202 was affirmed by the Commission in 2005. See *Petition of SBC Communications Inc. for Forbearance from the Application of Title II Common Carrier Regulation to IP Platform Services*, WC Docket No. 04-29, Memorandum Opinion and Order, 20 FCC Rcd 9361 (2005) at 9368, para. 17.

¹⁹ See e.g., *AT&T Enterprise Forbearance Order* (*supra* note 158 at paras. 67-68) where the commission stated, “For example, the protections provided by sections 201 and 202(a), coupled with our ability to enforce those provisions in a complaint proceeding pursuant to section 208, provide essential safeguards that ensure that relieving AT&T of tariffing obligations in relation to its specified broadband services will not result in unjust, unreasonable, or unreasonably discriminatory rates, terms, and conditions in connection with those services. ... In particular, many of the obligations that Title II imposes on carriers or LECs generally, including interconnection obligations under section 251(a)(1) and pole attachment obligations under sections 224 and 251(b)(4), *foster the open and interconnected nature of our communications system*, and thus promote competitive market conditions within the meaning of section 10(b)” (emphasis added).

²⁰ See e.g., 47 U.S.C. 536, “Regulation of Carriage Agreements” (establishing rules preventing cable operators from unfair treatment of programming vendors); 47 U.S.C. 548, “Development of Competition and Diversity in Video Programming Distribution” (establishing general non-discriminatory program access provision); and 47 U.S.C. 532, “Cable Channels for Commercial Use” (providing conditions for leased access).

exert power and control in adjacent markets. In the case of the Internet, this obviously includes the ISP access and device markets, but it also includes the applications and content markets -- all of which were the “enhanced services” at the core of the *Computer Inquiries*.

Thus, as a result a of its very nature, two-way communications networks must always be protected by the principle of nondiscrimination, regardless of the level of marketplace competition. Nonetheless, the need for such a rule becomes even starker when one considers the lack of broadband competition that *currently* exists in the United States. We have offered evidence of broadband duopoly in numerous comments before the Commission, while extensively and repeatedly rebutting the competition claims made by incumbents.²¹ The National Telecommunications and Information Administration,²² Department of Justice,²³ Federal Trade Commission,²⁴ Chairman Genachowski,²⁵ and the National Broadband Plan team have all

²¹ See e.g. Reply Comments of Free Press, In the Matter of *A National Broadband Plan for Our Future*, GN Docket No. 09-51, pp. 37, n. 89, 35-53 (July 21, 2009) (“NBP Reply Comments”); Comments of Free Press, In the Matter of *Inquiry Concerning the Deployment of Advanced Telecommunications Capability to All Americans in a Reasonable and Timely Fashion, and Possible Steps to Accelerate Such Deployment Pursuant to Section 706 of the Telecommunications Act of 1996, as Amended by the Broadband Data Improvement Act, A National Broadband Plan for Our Future*, GN Docket Nos. 09-137, 09-51, pp. 17-54 (Sept. 4, 2009) (“706 Comments”); Reply Comments of Free Press, In the Matter of *Inquiry Concerning the Deployment of Advanced Telecommunications Capability to All Americans in a Reasonable and Timely Fashion, and Possible Steps to Accelerate Such Deployment Pursuant to Section 706 of the Telecommunications Act of 1996, as Amended by the Broadband Data Improvement Act, A National Broadband Plan for Our Future*, GN Docket Nos. 09-137, 09-51, pp. 9-11 (Oct. 2, 2009); Comments of Free Press, In the Matter of *Inquiry Concerning the Deployment of Advanced Telecommunications Capability to All Americans in a Reasonable and Timely Fashion, and Possible Steps to Accelerate Such Deployment Pursuant to Section 706 of the Telecommunications Act of 1996, as Amended by the Broadband Data Improvement Act, A National Broadband Plan for Our Future, International Comparison and Survey Requirements in the Broadband Data Improvement Act*, GN Docket Nos. 09-137, 09-51, 09-47, pp. 4-6 (Dec. 4, 2009).

²² Comments of the National Telecommunications and Information Administration, In the Matter of *A National Broadband Plan for Our Future*, GN Docket No. 09-51, p. 6 (Jan. 4, 2010). (“We urge the Commission to examine what in many areas of the country is at best a duopoly market and to consider what, if any, level of regulation may be appropriate to govern the behavior of duopolists.”)

²³ Ex Parte of the United States Department of Justice, In the Matter *A National Broadband Plan for Our Future*, GN Docket No. 09-51, p. 14 (Jan. 4, 2010). (“Unfortunately, even in areas where two wireline networks are deployed, consumers seeking to use the most bandwidth-intensive applications may not have more than a single viable choice.”)

²⁴ Comments of the Federal Trade Commission, In the Matter of *A National Broadband Plan for Our Future*, GN Docket No. 09-51, p. 4 (Sept. 4, 2009). (“Currently, relatively large market shares for fixed, wireline broadband services are typically held by a single incumbent cable operator and a single incumbent telephone company in each geographic area.”)

²⁵ Prepared Remarks of Chairman Julius Genachowski, The Brookings Institution, Sept. 21, 2009. (“One reason has to do with limited competition among service providers. As American consumers make the shift from dial-up to broadband, their choice of providers has narrowed substantially.”)

recognized this lack of broadband competition.²⁶ The indisputable fact is that the substantial majority of consumers currently have at best two choices for broadband Internet access service.

The FCC's December 2010 Order Fails to Adequately Preserve the Open Internet, but the Right Response is to Strengthen the Framework, Not Remove the Agency's Ability to Protect Consumers

The entire Net Neutrality debate grew out of concerns about gatekeeper behavior following the FCC's radical removal of mass-market broadband networks from Title II. Net Neutrality was default behavior, not because it was found anywhere in the law before that point, but because Title II along with the Computer Inquiries rules meant that gatekeeper control was kept in check, without any explicit obligations that ISPs not block, degrade, interfere or favor content based on source, ownership or destination. The public, and supporters of a more competitive broadband market were asked to give up quite a bit in the FCC's 2005 Wireline Order. Net Neutrality was simply a response to one concern among many arising from this radical deregulation.

And from the start, Net Neutrality was very simple: A bright line rule of non-discrimination that governs all broadband providers. The December 2010 FCC Open Internet order is a long way from that original concept.

Will the FCC's order provide some baseline protections? Perhaps so, perhaps not. No one knows, because the order is by design ambiguous. And history teaches us that such ambiguity favors powerful industry incumbents over the public and new innovators.

But one thing is certain: with this order, for the first time in the history of the Internet we have the federal government blessing discrimination online. The FCC in effect just told powerful wireless carriers like AT&T and Verizon that they are not "carriers" at all, that they are free to block

²⁶ See e.g. Commission Open Meeting, Presentation on the Status of the Commission's Processes for Development of a National Broadband Plan, p. 135 (Sept. 29, 2009). ("At most 2 providers of fixed broadband services will pass most homes")

communications between end users, and that blocking need not be motivated even by faux-engineering concerns. In short the FCC refused to adopt rules that would prevent the blocking of free speech and innovative economic activity on the mobile Internet.

Free Press opposed the final FCC Order for five basic reasons.

First, we are deeply concerned that the proposal's treatment of mobile networks will split the Internet into two, harming both the future development of the open Internet and the prospects for wireline-wireless competition. We strongly feel that there is no legitimate economic reason for mobile carriers to block, degrade, prioritize or otherwise discriminate against online content and applications, and that any engineering concerns could be dealt with through the reasonable network management exception.

Second, we are deeply concerned that the proposal's use of the "unjust and unreasonable discrimination" standard represents an ambiguity that carriers have decades of experience in exploiting, and is unnecessarily redundant in light of the broad reasonable network management exception.

Third, we are concerned that the Order's definition of Broadband Internet Access Service will invite ISPs to evade the rule by "defining" their services as lying outside the rule.

Fourth, we are very concerned about the Order's specialized services loophole. While we were pleased the final order didn't explicitly authorize this yet-undefined and unnecessary category of services, we remain concerned that without some bounding of these non-Internet access services, that the Order invites ISPs to harm the market by exploiting this loophole. We would have preferred the Commission to state clearly in the Order that any such services should be offered separately from Internet services; that they should not replicate the functionality of services already available on the open Internet; that they should not interfere with the bandwidth allocated for Internet access

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or degrade other applications or services; and that they should not retard the growth of broadband Internet access service capacity.

Fifth, we feel that the FCC's failure to restore its authority over two-way Internet connectivity networks under Title II of the represents an unnecessary risk to the Open Internet framework as well as the Commission's entire broadband policy platform.

However, despite these very serious concerns about the shortcomings of the FCC's Order, we strongly believe the agency should not be stripped of *any* and all ability to fix these rules, or act in any way to protect consumers from the most egregious blocking and discriminatory practices, and that is the ultimate consequence of invoking the Congressional Review Act. We recognize that some members may have problems with the FCC's framework, but the consequences associated with adopting H.J. Res 37 are so severe, that we would urge those members to work on constructive alternatives to this nuclear option.

Conclusion:

We too do not like what the FCC adopted. In terms of both policy and authority, it is as if America's broadband policy car got a flat tire, and the FCC has decided to keep the temporary spare on instead of fixing the tire. But we should all want them to fix the tire; to pursue the Resolution of Disapproval is to take all the tires off our broadband policy vehicle, and put it up on blocks. That frankly is no recipe for investment, innovation, or job growth, and is completely inconsistent with the long-standing bipartisan commitment to competition and non-discrimination in our nation's two-way communications markets.