

**Before the
FEDERAL COMMUNICATIONS COMMISSION
Washington, DC 20554**

In the Matter of

Broadband Industry Practices

WC Docket No. 07-52

**REPLY COMMENTS OF VERIZON AND VERIZON WIRELESS
ON THE NOTICE OF INQUIRY**

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INTRODUCTION AND SUMMARY

The record here confirms the success of the Commission’s policies in promoting broadband competition, investment, and deployment. More than 50 percent of United States households now subscribe to broadband; the vast majority of United States consumers now have access to at least three competitive broadband platforms; and consumers’ broadband options – particularly next-generation broadband – are quickly increasing.

The record also demonstrates the demand – among both consumers and providers of Internet content and applications – for innovative and differentiated broadband services. For example, physicians’ groups have filed comments emphasizing that the advanced Internet technologies that they use to save lives depend on the ability to avoid transmission delays inherent in a “best efforts” network. Providers of Internet content and services explain that they seek to offer content, applications, and services that require an enhanced quality of service to function properly. And groups of manufacturers and small businesses seek to take advantage of all that advanced broadband networks have to offer them. Proposals for so-called “net

¹ In addition to Verizon Wireless, the Verizon companies participating in this filing (“Verizon”) are the regulated, wholly owned subsidiaries of Verizon Communications Inc.

neutrality” regulations threaten to preclude – or, at a minimum, chill the offering of – these and other services.

At the same time, even the major proponents of broadband regulation appear to concede that the Commission should impose new economic regulations *only* to correct identified instances of market failure. Although these commenters claim to have identified such instances, and propose various regulations in furtherance of their narrow policy agendas, the record evidence demonstrates that broadband competition, innovation, and investment is robust and growing. In 2002, broadband providers charged, on average, more than \$26 per month per megabit per second (“Mbps”); by last year, that price had dropped to \$7.² And Verizon, for example, plans to invest nearly \$23 billion to deploy its fiber-to-the-premises (FiOS) network to 18 million homes and businesses by the end of 2010. Moreover, and consistent with the Commission’s own determinations, the Federal Trade Commission (“FTC”) recently recognized that “the broadband industry is relatively young and dynamic, and . . . there are indications that it is moving in the direction of more competition”; the FTC therefore found that there is no “significant market failure or demonstrated consumer harm from conduct by broadband providers.”³

In contrast to the successes achieved under the Commission’s pro-competitive policies, many of the proposed regulations have already been tried and failed. For example, Professor Thomas W. Hazlett has shown that unbundling and network-sharing obligations suppressed the

² Arik Hesseldahl, *More Bandwidth Than You Can Use?*, Business Week (May 29, 2007), available at http://www.businessweek.com/technology/content/may2007/tc20070529_569646.htm.

³ FTC Staff Report, *Broadband Connectivity Competition Policy* at 11 (June 2007) (“*Broadband Connectivity Competition Policy*”); see also Verizon *Ex Parte*, WC Docket No. 07-52 (FCC filed July 11, 2007) (attaching *Broadband Connectivity Competition Policy*), http://gullfoss2.fcc.gov/prod/ecfs/retrieve.cgi?native_or_pdf=pdf&id_document=6519554541.

competitiveness of DSL and that the Commission’s decisions to remove those obligations were followed by a 65 percent increase in subscribership, as well as increases of \$800 million in investment; more than \$2 billion in annual consumer surplus; more than \$1.2 billion in annual GDP; and nearly 7,900 jobs from 2003 to 2006.

The commenters are therefore left to argue that these regulations have proven successful in other parts of the world. But the record of intrusive broadband regulation in other countries is mixed at best, and in no case should this international experience be permitted to trump the experience here at home. The United States broadband marketplace has made huge progress since the inception of the Commission’s pro-competitive policies and compares favorably to other major countries. Indeed, the United States has become a world leader in broadband competition. It “is simply the largest broadband market in the world with over 58 million subscribers . . . – more than twice the number of America’s closest competitor.”⁴

Despite these deregulatory successes, commenters proposing new regulations have no shortage of suggestions, and their proposals are all over the map. The wide diversity of those proposals shows, among other things, that the vague slogan “net neutrality” is an empty one and fails meaningfully to inform the broadband-policy debate. The Commission should reject each of those submissions and, in particular, should reject calls to adopt a vague and undefined “nondiscrimination” principle. Its proponents have failed to demonstrate that it is necessary, and such a principle in any event would do much more harm than good by discouraging investment in broadband infrastructure and restricting the development of advanced Internet content, applications, and services. As the FTC has recognized, “[i]ndustry-wide regulatory schemes –

⁴ Commissioner Robert M. McDowell, Address at Broadband Policy Summit III, at 5 (June 7, 2007), *available at* http://hraunfoss.fcc.gov/edocs_public/attachmatch/DOC-273742A1.pdf (“McDowell Address”).

particularly those imposing one-size-fits-all restraints on business conduct – may well have adverse effects on consumer welfare, despite the good intentions of their proponents,” and, “[e]ven if regulation does not have adverse effects on consumer welfare in the short term, it may nonetheless be welfare-reducing in the long term, particularly in terms of product and service innovation.”⁵

I. THE RECORD DEMONSTRATES THE DEMAND FOR INNOVATIVE AND DIFFERENTIATED BROADBAND SERVICES

Verizon’s initial comments demonstrated the significant benefits that differentiation in the Internet industry has created and will create – if the Commission continues its procompetitive broadband policies. *First*, allowing providers of Internet applications to receive innovative and differentiated broadband services enables the development of applications and services that otherwise might not function properly because of latency or insufficient bandwidth. *Second*, permitting broadband access providers to experiment with innovative business models frees the consumer from always having to bear the entire cost of network investments. *Third*, the current procompetitive regulatory structure enables network operators to manage congestion and harmful traffic in ways that enhances the user’s broadband experience. Thus, those differentiation practices will stimulate innovation by providers of Internet content and applications; open entire new markets for content and applications, lower the consumer price of broadband access, and limit users’ exposure to congestion and viruses. The end result will be to stimulate greater demand for broadband access services and, ultimately, to encourage network operators to

⁵ *Broadband Connectivity Competition Policy* at 11.

continue (and to increase) their massive investments in network infrastructure. *See* Verizon Comments at 42-47.⁶

The record in this proceeding confirms the existence of substantial demand for advanced broadband services offered by network providers. A variety of stakeholders other than broadband network operators have filed comments attesting both to their need for such services and to the fact that so-called “net neutrality” proposals would prohibit or deter the offering of those services and, therefore, represent bad public policy. For example, several providers of advanced telemedicine services have filed comments in opposition to regulatory proposals that would restrict broadband providers’ ability to offer advanced network services. The University of Arkansas Medical School explains the importance of “advanced [broadband] services” to its Antenatal and Neonatal Guidelines, Education, and Learning System (“ANGELS”) – “an innovative consultative service . . . [that] allows . . . prenatal specialists” “to make long-distance patient consultations” and “to connect with rural hospitals in [Arkansas] using real-time videoconferencing.” UAMS Comments at 1. Like other telemedicine services, ANGELS has “very specific [service] requirements” that “differ significantly from the requirements of the average residential user of broadband.” *Id.* Thus, “transmission delays that degrade the quality of medical images would greatly compromise the effectiveness” of such services. *Id.* The Medical School urges the Commission not to impose regulations that would “restrict the ability of network managers to provide advanced services,” but instead to “create incentives that expand

⁶ *See also* Robert Crandall et al., *The Effects of Broadband Deployment on Output and Employment: A Cross-Sectional Analysis of U.S. Data* 16 (June 2007) (“Regulatory rules which unduly restrain provider pricing and service offerings threaten carriers’ ability to recover their costs and hence the viability of on-going investment in infrastructure. For example, certain states and members of Congress have proposed so-called ‘net neutrality’ rules that would overly restrict carriers ability to offer differentiated services to address the needs of handling multimedia traffic and recovering the costs from meeting the diverse requirements of broadband consumers.”), *available at* <http://www3.brookings.edu/views/papers/crandall/200706litan.pdf>.

broadband deployment, enhance reliability and security, and stimulate network operators to provide a greater range of choices that can be tailored to meet the needs of telemedicine providers.” *Id.*

Others echo these sentiments. The Telehealth Alliance of Oregon explains that “[t]elemedicine services are among the applications that *need* specialized and priority treatment” and that, “[f]rankly, intelligent networks should be able to distinguish between a life-saving telemedicine communication[] and a teenager’s instant message.” Telehealth Alliance of Oregon Comments at 2 (emphasis added). Providea likewise reports that “high-speed Internet connections are enabling more people every year to benefit from a higher-quality, often life-saving, health care delivery system that allows physician[is], health care institutions and patients to overcome geography” by using “videoconferencing technology to perform medical exams on a sick child, a fragile elderly adult or a cancer patient thousands of miles away in the most remote parts of America.” Providea Comments at 1. It argues that patients “should not be deprived of reliable telemedicine services,” which “require secure networks that are managed to deliver images and information at the blink of an eye,” because “[t]aking away the ability to secure and manage this data would put patients at risk.” *Id.* at 2. Providea further notes that, in addition to telemedicine services, services that manage electronic medical records “need robust, secure, intelligent and reliable networks to reach their full potential.” *Id.* at 1; *see also* Ass’n of Wash. Pub. Hosp. Dists. Comments at 2 (explaining that the Commission “should take no action to discourage network developers, application providers or others from creative, innovative solutions that enable telemedicine services [that are] vital to the needs of our citizens and communities”).

Content providers remind the Commission that the Internet content industry “is not unified in support of” attempts to regulate “packet delivery contracts between network operators and Internet content companies” because many content providers “believe that the risks [of such regulation] outweigh the theoretical benefits.” Internet Content and Service Provider Coalition (“ICSPP”) Comments at 1. Those providers explain that “there is growing evidence that [net regulation] could slow the deployment of the super-fast local broadband networks that are crucial to continued growth of [the Internet content] industry.” *Id.* at 2; *see id.* nn.4-7 (citing evidence). They add that, “[e]ven if it were not clear that net neutrality regulation would slow deployment of new local broadband infrastructure, we still would be reluctant to support such regulation because we believe that it could harm those parts of the Internet content/application industry (and their customers) that will be the primary beneficiaries of packet prioritization services – such as health monitoring services, network security services, high speed video services, VoIP services, and interactive games to name a few.” *Id.* at 3. In particular, the content providers observe, proposals for regulation would be most likely to harm “small content/services companies of all types” – which explains why big content providers like Google have been the lead voice advocating net regulation. Echoing those views, the FTC recently noted that, “[f]rom the perspective of providers of [Internet] content and applications, the value of their product may be substantially enhanced by mechanisms to avoid congestion problems, which could include prioritization. The availability of prioritization also could enhance innovation with respect to new applications that require higher [quality of service] for successful use.”⁷

Business associations also oppose net regulation. The Small Business and Entrepreneurship Council observes that, “[n]ot only would [net neutrality] restrictions make it

⁷ *Broadband Connectivity Competition Policy* at 85.

difficult to cover the cost of increased investment [by network operators], but they also limit service options and quality guarantees [offered] to meet the needs of small businesses.” SBE Council Comments at 2. Small businesses “want more choices, not fewer, so they can choose the broadband options and services that best suit their needs.” *Id.* Likewise, the U.S. Chamber of Commerce explains that, “the continued ability to offer different pricing models will help consumers and small businesses avoid paying an unnecessarily large percentage of the costs associated with the broadband buildout.” U.S. Chamber of Commerce Comments at 5. And the National Black Chamber of Commerce writes (at 1) that “[t]he regulations being pushed on the Commission by net-neutrality lobbyists are designed for one purpose – to transfer power away from Internet consumers to certain types of Internet companies” and that the growing number “of minority-targeted Internet content producers . . . will be left behind if regulations hand Internet delivery over to an elite group of well-connected companies.” Similarly, the Hispanic Chamber of Commerce opposes (at 1) net regulation, citing “the stifling effect it could have on the development and introduction of innovative products that would help small businesses grow in the digital age.” Finally, the National Association of Manufacturers (“NAM”) – “the nation’s largest industrial trade association” – expresses its members’ concerns that “unnecessary regulation in the advanced telecommunications market would harm American consumers and impose burdens on American manufacturers.” NAM Comments at 1.

In sum, the comments establish that a variety of stakeholders have considered the alleged benefits of net regulation yet oppose restrictions on network providers’ ability to offer advanced broadband services that enable the next generation of Internet content, applications, and services to function properly.

II. THE COMMISSION’S PROCOMPETITIVE POLICIES HAVE FOSTERED TREMENDOUS AND GROWING COMPETITION IN THE BROADBAND MARKETPLACE

Despite the overwhelming evidence of the potential benefits of innovative broadband services, some commenters in this proceeding urge the Commission to adopt one form or another of new broadband regulation – lumping their divergent, vague, and sometimes contradictory proposals under the heading of “net neutrality.” But their proposals falter at the first hurdle: they fail to demonstrate any need for such regulation. Significantly, the major proponents of broadband regulation concede that regulators should avoid restricting competitive behavior unless there exists a demonstrated market failure. Google, for example, represents that it “is a confirmed believer in the free market,” except “[w]here the market demonstrably has failed.” Google Comments at 8; *see also* Open Internet Coalition Comments at 5-6. But the commenters have not – indeed cannot – show failures in the market warranting regulatory intervention; on the contrary, the record reveals a vibrant and increasingly competitive broadband marketplace.

A. The Record Confirms That Broadband Competition and Investment Are Significant and Increasing

Professor Hazlett’s recent paper (Appendix A to Verizon’s Comments) demonstrates the tremendous benefits of the Commission’s procompetitive broadband policies. In the early days of broadband, cable operators enjoyed significant regulatory advantages over their telephone-company competitors because a host of unbundling and network-sharing regulations applied to DSL providers but not to cable providers. *See* Verizon Comments App. A at 6-7. Consequently, “unregulated cable companies expanded the availability and penetration of their services much more quickly than regulated telephone companies.” *Id.* at 11. But, when the Commission removed line-sharing obligations on DSL providers, the rate of DSL subscribership increased sharply – growing 65 percent faster than the historical trend – and DSL providers increased

investment by more than \$800 million. *See id.* at 2, 14, 21. Subsequently, the Commission decided to classify wireline broadband Internet access as an information service and to permit the sale of such services, as well as the broadband transmission input to those services, on a private carriage basis. *See id.* at 15-17. After that decision, the number of DSL households increased 12 percent faster than the historical trend, while cable modem services grew only 1 percent faster. *See id.* at 16. In contrast to those initial regulatory disparities, the Commission has long taken a deregulatory approach to the market for wireless broadband services, and that market has flourished as carriers have developed and deployed new and innovative technologies. *See Verizon Comments* at 24-26; *see also id.* at 11-14.

The Commission's procompetitive broadband policies have borne fruit. Today, approximately 53 percent of all United States households subscribe to broadband.⁸ Even greater shares of online households (70 percent) and "active Internet users" (80 percent) have a broadband connection at home. *See Verizon Comments* at 4. Many Americans also have a broadband connection (often their second) at work. *See id.* at 8. The Telecommunications Industry Association ("TIA") observes (at 2 n.2) that the "number of broadband subscribers increased from fewer than 5 million in 2000 to nearly 57 million in 2006." Much of that progress has been made since the Commission took deregulatory steps such as eliminating common-carrier and unbundling obligations for all broadband providers. *See Verizon Comments* at 20-26. Between March 2005 and March 2006, "the number of Americans with broadband

⁸ Press Release, Leichtman Research Group, *Over Half of U.S. Households Subscribe to Broadband Internet* (June 7, 2007), <http://www.leichtmanresearch.com/press/060707release.html>.

access at home increased by 40 percent.”⁹ As the FTC recently found, “there is evidence at least on a national scale that: (1) consumer demand for broadband is growing quickly; (2) access speeds are increasing; (3) prices (particularly speed-adjusted or quality-adjusted prices) are falling; and (4) new entrants, deploying Wi-Fi, Wi MAX, and other broadband technologies, are poised to challenge the incumbent cable and telephone companies.”¹⁰

Moreover, the dramatic increase in broadband subscribership has demonstrable, positive economic effects. For example, Professor Hazlett’s analysis demonstrates that the Commission’s decisions to remove unbundling and other networks-sharing obligations on DSL were followed by increases of more than \$2 billion in annual consumer surplus; more than \$1.2 billion in annual GDP; and nearly 7,900 jobs from 2003 to 2006. Verizon Comments App. A at 2, 22.

The comments show that, while transmission speeds are increasing, prices generally are not. For example, the Fiber-to-the-Home (“FTTH”) Council reports (at 10-12) that “increasingly, customers are demanding and being offered data speeds of between 5-10 Mbps,” while “Verizon, over its FTTH (‘FiOS’) network, offers much greater speeds, up to 30 Mbps/5 Mbps in many areas and even 50 Mbps/10 Mbps in select locations.” An organization that represents small and medium-sized cable companies reports significant decreases in its members’ prices per Mbps. *See* American Cable Ass’n (“ACA”) Comments at 2. One of its member’s price per Mbps fell from a high of \$78.02 per month in 1999 to \$5.74 per month in 2007. *Id.* And another of its members charged \$45 per month for 1.5 Mbps/128 Kbps four to five years ago; today, “that same \$45 buys a 7 Mbps/768 Kbps product” – “a 467% increase in

⁹ Scott Wallsten & Seth Sacher, AEI-Brookings Joint Center, *What US Broadband Problem?*, No.06-18 (July 2006), available at <http://www.aei-brookings.org/policy/page.php?id=259>.

¹⁰ *Broadband Connectivity Competition Policy* at 155-56.

downstream speed and 600% increase in upstream speed for the same price.” *Id.* (emphasis omitted).

Furthermore, the comments confirm that, unlike in most of the rest of the world, including those countries where broadband penetration is supposedly greater, the copper telephone network is not the only (or even principal) option for broadband, and there is massive private investment in developing and deploying next-generation wireline and wireless broadband networks. Multiple broadband alternatives are available to nearly 90 percent of the population. *See Verizon Comments at 4, 7; CTIA Comments at 4.* Verizon is spending nearly \$23 billion to deploy FiOS to 18 million customer premises by the end of 2010. *Verizon Comments at 10.* The cable industry’s trade association, National Cable & Telecommunications Association (“NCTA”), reports (at 1) that cable modem service is available to 94 percent of households and that the cable industry has invested \$110 billion in the last decade to roll out a two-way interactive network with fiber optic technology. NCTA has recently informed Congress that cable operators will “soon deploy a new architecture (DOCSIS 3.0) which will allow speeds above 100 Mbps.”¹¹ Furthermore, cable companies, which were major license winners in the recent auction, plan to deploy next-generation wireless services to complement their current broadband offerings.¹²

¹¹ Kyle McSlarrow, President and CEO, NCTA, *Broadband Letter to the Hill* (Apr. 23, 2007), <http://www.ncta.com/DocumentBinary.aspx?id=578>.

¹² *See, e.g., Comcast Corporation at Goldman Sachs Communacopia XV Conference – Final*, FD (Fair Disclosure) Wire, Transcript 092006an.775 (Sept. 20, 2006) (Comcast COO Steve Burke: “[E]ven though 10, 20, 30 years, we think people are still going to use a wire into the home for the majority of their video viewing or their high-speed data consumption that takes place at home. And maybe for their telephone usage inside the home, there will be a major portion of video, voice and data that is consumed wirelessly. We want to be in a position where we can offer that.”); *see also* Richard Klugman & Abdulmalik D. Ismaila, Prudential Equity Group, LLC Research, *FCC AWS Auction 66 Ends Raising \$13.7B, the Top Four Major US Wireless Carriers Represented 78% of Total Bids and 7% of MHz-Pops Sold at 2-3* (Sept. 18,

A large and rapidly increasing share of the population is using wireless broadband (among other platforms) as a competitive alternative. *See* Verizon Comments at 11-14. As the wireless industry's trade association (CTIA) observes (at 5), "almost 60 percent of all new high-speed lines [added from December 2005 to June 2006] were mobile wireless broadband lines, outpacing the additions for traditional telephone companies and cable companies combined." Verizon Wireless, for one, has deployed EV-DO to the vast majority of the population and has invested heavily to complete an upgrade to that network by deploying EV-DO Revision A. *See* Verizon Comments at 12.¹³ CTIA reports (at 6-7) that many other wireless carriers likewise are deploying high-speed offerings, including Sprint (EV-DO covering more than 200 million people now and rising to 280 million by the end of next year); Alltel (EV-DO to more than 44 million people in more than 100 cities); AT&T (HSDPA to 73 of the top 100 markets); T-Mobile (deploying HSDPA). In addition to the explosive growth of mobile wireless broadband, Sprint reports (at 2) that it is constructing a next-generation fixed wireless broadband network (WiMAX) "that will reach 100 million consumers by the end of 2008."

The comments also show that satellite and WiFi offer broadband alternatives for many customers. Companies such as T-Mobile, Earthlink, Google, and even AT&T are investing in the deployment of WiFi. *See* AT&T Comments at 61. It is therefore no surprise that WiFi is more prevalent in the United States than anywhere else in the world, with the United States

2006) ("Sprint in partnership with major cable providers, (SpectrumCo consortium) spent \$2.4 bil for 93%" coverage of the U.S. population; "we believe the spectrum will be used by the cable companies to expand data capabilities and have a wireless adjunct to their cable modem services.").

¹³ *See also Wireless*, Communications Daily (June 20, 2007) ("Sprint Nextel and Verizon Wireless both said Tuesday their EV-DO Rev. A coverage footprints are growing rapidly. Verizon said that as of Monday it covers 208 million people across the U.S. Sprint lags, but just slightly, covering 203 million, based on its latest review.").

accounting for approximately one-third of all WiFi hot spots worldwide.¹⁴ In addition, the Satellite Industry Association (“SIA”) reports (at 2) that its members currently serve more than “500,000 satellite broadband consumers throughout the United States” and that that “number grows substantially each year, especially as the cost of subscriber devices continues to decline.” The SIA further explains (at 2-3) that the “unique characteristics” of satellite broadband service make satellite companies “the ideal provider[s] of broadband in rural and hard-to-serve areas of the country” because they are “largely immune from the factors that drive up service costs in rural areas, such as rough topography and low population density.”

Despite all that evidence of increasing broadband competition and investment, the Consumer Federation claims that levels of broadband availability and usage are inadequate. *See* Consumer Federation Comments *passim*. To be sure, there are still some areas of the country with limited access to broadband, largely as a result of factors such as topography and population density. But that does not indicate any failure in the market for broadband.

In addition, the record shows that, to the extent there is a broadband “divide,” the best way to close it is not by imposing burdensome regulations, but instead by ensuring that incentives exist for providers to invest in broadband infrastructure. *See* Verizon Comments at 44-45.¹⁵ And, as Verizon discussed in its comments, the private-public partnership model – like

¹⁴ *See* JiWire, *Wi-Fi Hotspot Directory*, <http://www.jiwire.com/hotspot-hot-spot-directory-browse-by-country.htm> (as of July 11, 2007, there were 150,958 WiFi locations worldwide, including 53,866 in the United States).

¹⁵ Google identifies (at 30) a working paper that supposedly shows that broadband providers are more likely to invest in infrastructure if regulators prohibit them from offering advanced broadband services, but that paper bases its analysis on the fatally flawed assumption that the market for local broadband access is a monopoly. *See* Hsing Kenneth Cheng & Hong Guo, *The Debate on Net Neutrality: A Policy Perspective* at 6-7, 18 (2007), <http://www.hearusnow.org/fileadmin/sitecontent/TheDebateonNetNeutrality.pdf>. The realities of the United States broadband marketplace contradict that assumption. *See* Verizon Comments Part I.

the one used by ConnectKentucky – also has proved to be a successful method of exploring and addressing the full range of supply- and demand-side factors that influence broadband availability and adoption, and of developing market-based solutions to address any broadband gaps. ConnectKentucky structured its initiative to ensure that broadband providers had strong incentives to participate – their data were kept confidential, they received valuable information on consumer demand, and were provided with a business case and other resources that facilitating their deployment of broadband to underserved areas. In addition, because of the localized nature of the initiative, ConnectKentucky identified local factors, such as low computer usage, that help explain low interest in broadband, as well as local resources, such as water towers, to which wireless broadband facilities could be attached, that could contribute to meaningful solutions for expanding broadband availability in the particular local area. The ConnectKentucky initiative has resulted in wireline or other fixed broadband services being available to more than 90 percent of households in Kentucky (a heavily rural state), with the expectation that coverage will be virtually 100 percent by the end of 2007.¹⁶

A number of commenters also rehash the timeworn claim that broadband is a “duopoly.”¹⁷ As an initial matter, that claim fails to consider the nascent characteristics of the still-developing broadband market. Even with recent increases in broadband subscriptions, more than 45 percent of homes do not yet have a broadband connection, and surveys show that a majority of the remaining potential users are interested in subscribing to broadband services.¹⁸

¹⁶ See ConnectKentucky, *2007 Progress Report 4*, http://www.connectkentucky.org/NR/rdonlyres/40D6C8B8-DD46-4D14-9BAF-6A85A81F2FA9/99233/connectkentucky_2007.pdf (last visited July 9, 2007).

¹⁷ E.g., Google Comments at 10; Consumer Federation Comments at 69; Computer & Communications Indus. Ass’n (“CCIA”) Comments at 2-3.

¹⁸ See Press Release, Leichtman Research Group, *Over Half of U.S. Households Subscribe to Broadband Internet*, *supra* note 8; Nicole Klein, Yankee Group, *As Broadband*

Thus, no provider or group of providers has a dominant market share in any economically meaningful sense because many consumers have yet to be captured by *any* provider or platform – wireline, cable, mobile wireless, fixed wireless, WiMAX, WiFi, BPL, or satellite. *See* Verizon Comments at 53-55.

In addition, the duopoly claim ignores the enormous investment that is occurring to deliver faster and more economical broadband alternatives to all segments of the population over multiple, competing platforms. The vast majority of United States households have a choice *today* between at least two facilities-based wireline providers (cable and DSL), up to three facilities-based satellite providers (HughesNet, StarBand, and WildBlue), and multiple wireless alternatives – a situation that is already far from a duopoly. Moreover, as demonstrated above and in Verizon’s comments, regardless of what conclusions one draws from the broadband alternatives available today, there is no question that massive investment is taking place to bring next-generation broadband to consumers.¹⁹ Verizon alone is investing \$23 billion in FiOS, Verizon Wireless is investing billions more in wireless broadband, and other companies are responding with investments of their own in a wide range of technologies and in geographic areas throughout the country. *See* Verizon Comments at 9-16. There is accordingly every indication that the “market” – thanks in large part to this Commission’s pro-competitive and deregulatory policies – is working. As the Commission has explained previously, “[t]he broadband market is still an emerging and changing market, where . . . the preconditions for

Moves Into the Mass Market BSPs Will Be Challenged by Late Adopters 3 (Jan. 2007) (According to a Yankee Group customer survey, “nearly 60% of those who do not have broadband are interested in subscribing to broadband.”).

¹⁹ *See* Memorandum Opinion and Order, *Petition for Forbearance of the Verizon Telephone Companies Pursuant to 47 U.S.C. § 160(c)*, 19 FCC Rcd 21496, ¶ 22 (2004) (“271 Broadband Forbearance Order”) (recognizing “the existence of numerous emerging broadband competitors”); *Broadband Connectivity Competition Policy* at 105 (“[T]here are national trends that appear to show an increasing number of competitive alternatives across all markets.”).

monopoly are not present.”²⁰ Indeed, some large content providers – like Google – have responded to the FCC’s deregulatory decisions by investing heavily in competing access technologies, such as broadband over powerline.²¹

The “cozy” duopoly claim also disregards the market facts, which demonstrate that telecommunications and cable companies compete vigorously on price and quality. *See Verizon Comments 55-56.*²² That should be no surprise given that the existence of *intermodal* competition, like that between DSL and cable-modem technologies, makes anticompetitive coordination exceedingly unlikely. As the D.C. Circuit has recognized in affirming the Commission’s decision to forbear from enforcing unbundling obligations under 47 U.S.C. § 271 to the extent that those obligations applied to facilities used to provide broadband, “[t]he facts that different companies are using different technologies to bring broadband to residential consumers and that each existing broadband technology has advantages and disadvantages as a means of delivery to millions of customers opens the possibility of intermodal competition, like that between trucks, trains, and planes in transportation. . . . Anti-competitive coordination among competitors is difficult in such markets.’” *Earthlink, Inc. v. FCC*, 462 F.3d 1, 11-12

²⁰ 271 *Broadband Forbearance Order* ¶ 22.

²¹ Tim Wu & Christopher S. Yoo, *Keeping the Internet Neutral?: Tim Wu and Christopher Yoo Debate*, 59 *Fed. Communications L.J.* 575, 584 (2007) (“[I]mposing network neutrality threatens to reduce investment in new last-mile technologies. After the Supreme Court’s June 2005 *Brand X* decision made clear that content and applications providers could no longer count on regulation to guarantee access to cable modem and DSL systems, companies such as Google, Microsoft, Earthlink, and Intel began pouring money into wireless broadband and broadband over powerline (‘BPL’), demonstrated most dramatically by Google’s agreement to build a wireless broadband network in San Francisco for free.”).

²² *See also* Howard A. Shelanski, *Adjusting Regulation to Competition: Toward a New Model For U.S. Telecommunications Policy*, 24 *Yale J. Reg.* 55, 89-93 (2007) (explaining that the characteristics of telecommunications markets, which include the high fixed costs of network infrastructure and the low marginal costs of adding new subscribers, make it so that, even when there are a limited number of competitors, “regulation . . . is unlikely to improve pricing and may well interfere with competition”) (*Verizon Comments App. B, Exh. 7*).

(D.C. Cir. 2006) (quoting *Inquiry Concerning the Deployment of Advanced Telecomms. Capability*, 14 FCC Rcd 2398, 2423-24 (1999) (alteration in original)).

It is no answer to rely on numbers generated using the Herfindahl-Hirschman Index (“HHI”), which some commenters claim means that the market for broadband access is too concentrated and therefore insufficiently competitive. *See* Google Comments at 11-12. As an initial matter, applying the HHI methodology to the Commission’s most recent data (which Google conveniently ignores in relying on HHI numbers calculated using 2002 data, which is an eternity ago in this rapidly developing area) shows that market concentration in residential broadband is in decline.²³ Moreover, the HHI figures Google cites do not reflect the rapid emergence of intermodal competitors, which the Commission has recognized in the past in similarly rapidly changing markets. As the Commission has explained in an analogous context, “[f]or many markets where the facts of a high subscriber-based HHI and a high change in HHI might seem to suggest a potential competitive problem, there is in fact little likelihood of harm” because “the presence and capacity of other firms matter more for future competitive conditions than do current subscriber-based market shares.”²⁴ More fundamentally, as Professor Hazlett explains, regulation cannot be justified merely on the basis of “levels of market concentration”; rather, proponents of regulation must establish that “regulation – accounting for its costs, including incentive effects altering network investments – increases efficiency.”²⁵ As Professor Hazlett’s analysis demonstrates, in the broadband context, the *removal* of regulation has

²³ *See* Verizon Comments App. A at 6 (citing FCC, Indus. Analysis & Tech. Div., Wireline Competition Bureau, *High Speed Services for Internet Access: Status as of June 30, 2006* (Jan. 2007), Tables 1, 2).

²⁴ Memorandum Opinion and Order, *Applications of AT&T Wireless Services, Inc. and Cingular Wireless Corporation For Consent to Transfer Control of Licenses and Authorizations*, 19 FCC Rcd 21522, ¶ 148 (2004).

²⁵ *Supra* note 23.

increased efficiency and fostered competition, innovation, and investment. Verizon Comments at 20-22; *see id.* at 22-26 (showing that deregulation in the wireless industry also has fostered competition, innovation, and investment). Regulation advocates therefore must do more than point to HHI numbers, which do not support their claims in any event, to justify intrusive new broadband regulation.

B. The United States Broadband Marketplace Compares Favorably With Other Countries

Some commenters assert that the Commission should adopt the regulatory policies of other countries, which they claim have achieved greater broadband success than the United States according to the Organisation for Economic Co-Operation and Development (“OECD”).²⁶ In general, it is difficult to draw meaningful conclusions about the relative levels of broadband penetration among different countries because of the different ways of measuring such penetration and the various supply-side and demand-side factors that could influence such penetration. But the competitive availability of broadband services in the United States compares favorably to the state of broadband in other major countries. And, in a number of key respects, the United States broadband market leads the rest of the industrialized world or is at the top of a very small list of countries.

First, despite a slow start attributable to burdensome regulations on DSL providers, the United States “is simply the largest broadband market in the world with over 58 million subscribers . . . – more than twice the number of America’s closest competitor.”²⁷ The household broadband-adoption rate in 43 states exceeds the rate in all but five European Union

²⁶ *See* Consumer Federation Comments at 69-78; Google Comments at 4.

²⁷ McDowell Address at 5.

countries.²⁸ Indeed, “[e]ven large rural western states such as Montana, Wyoming, Colorado, Oklahoma, both Dakotas, Kansas, Oregon, New Mexico and others exhibit much stronger household broadband adoption rates than France or the U.K.”²⁹

Further, wireless broadband is more widely deployed in the United States than most other countries. All major United States wireless carriers are now in the process of deploying next-generation (or 3G) wireless networks to consumers. *See supra* p. 13. As the Commission has indicated, even though 3G licensing occurred earlier in Europe, wireless broadband networks in the United States now offer faster speeds.³⁰ The Commission’s data also show that wireless broadband is adding subscribers at a very rapid rate. In addition, as the State Department has recently noted, “[t]he United States has more Internet and broadband users and more Wi-Fi hot spots than any other country in the world despite larger land mass and more rural areas than most.”³¹ And many of those hot spots sit “on college campuses, reflecting the fact that college communities around the United States are enjoying unbounded and unprecedented access to broadband services.”³²

²⁸ *See id.* at 6.

²⁹ *Id.*

³⁰ Eleventh Report, *Implementation of Section 6002(B) of the Omnibus Reconciliation Act of 1993 – Annual Report and Analyses of Competitive Market Conditions With Respect to Commercial Mobile Services*, 21 FCC Rcd 10947, ¶ 202 (2006) (“Although early 3G licensing gave European operators a head start in the deployment of WCDMA networks, *Wall Street Journal* personal technology columnist Walt Mossberg argues that the superior next-generation technologies deployed by U.S. wireless carriers have given the United States an edge over Europe in wireless data networks for the first time in years.”) (citing Walter S. Mossberg, *Cingular Joins Rivals with Fast, Reliable Wireless Broadband*, Wall St. J., Jan. 19, 2006, at A9).

³¹ Letter from Ambassador David A. Gross, U.S. Coordinator for Int’l Communications & Info. Policy, to OECD Secretary General Angel Gurría (Apr. 24, 2007), *available at* <http://www.state.gov/documents/organization/86519.pdf>.

³² *See id.* at 1.

Second, the United States remains one of the few countries in the world where *two* wireline broadband platforms and *multiple* wireless broadband alternatives are available to the vast majority of households, and where satellite broadband service also is ubiquitously available. In most of the rest of the world, broadband is provided predominantly via DSL over the incumbent telephone company's network.³³ Most other countries have limited cable availability, less robust wireless broadband capabilities, and no satellite availability, and thus only a single broadband network.³⁴ The United States and Canada are the only two countries in the OECD where cable modem subscribers exceed DSL subscribers.³⁵ In terms of facilities-based competition to the legacy telephone infrastructure, the United States ranks near the very top. Although DSL is just as widely available in the United States as in most other countries (which is to say, it is pervasive), the United States is one of only a few countries where other broadband platforms have captured a majority of broadband subscribers.

The existence of robust intermodal competition in the United States – compared to the largely intramodal competition that exists elsewhere – is particularly significant given the greater benefits that intermodal competition creates. Intermodal forms of competition offer consumers different packages of price, quality, and functionality that provide more meaningful competition than services that merely duplicate an incumbent's offerings or share a single network. As the Commission has recognized, only where competitors have “direct control of their networks” can

³³ OECD, *OECD Broadband Statistics to December 2006* (“*OECD Broadband Statistics*”), <http://www.oecd.org/sti/ict/broadband>.

³⁴ See *id.*; Joanne Taaffe, *Split Decisions*, Total Telecom Magazine (May 1, 2007) (according to EU Commissioner for Information Society and Media Viviane Reding, “[T]he cost of laying new local loop infrastructure . . . means there will be no fixed infrastructure competition in much of Europe. . . . Currently, only 20% of Europe has infrastructure competition, largely in the form of cable.”).

³⁵ See *OECD Broadband Statistics*.

they “ensure the quality of their service and . . . offer products and pricing packages that differentiate their services from the perspective of end users.”³⁶

Third, the United States is one of only a handful of countries in the world – and the only large country – where private companies are investing to deploy next-generation fiber broadband networks on a large scale. Verizon alone has deployed more fiber to mass-market premises than all carriers in Europe combined.³⁷ Of the 14 countries that the OECD ranks ahead of the United States in broadband subscribers per capita, only six report any fiber deployment whatsoever.³⁸

According to the OECD, Japan and Korea are far ahead of the pack in terms of fiber connections

³⁶ *Implementation of the Local Competition Provisions of the Telecommunications Act of 1996*, Third Report and Order and Fourth Further Notice of Proposed Rulemaking, 15 FCC Rcd 3696, ¶ 112 (1999); *see also AT&T Corp. v. Iowa Utils. Bd.*, 525 U.S. 366, 429 (1999) (Breyer, J., concurring in part and dissenting in part) (“It is in the *unshared*, not in the *shared*, portions of the enterprise that meaningful competition would likely emerge.”); *Verizon Communications Inc. v. FCC*, 535 U.S. 467, 510 n.27 (2002).

³⁷ Compare John ‘CZ’ Czwartacki, Verizon, PolicyBlog, *FiOS Fact Sheet* (May 3, 2007), <http://policyblog.verizon.com/policyblog/blogs/policyblog/czblogger1/290/fios-fact-sheet.aspx> (As of the end of March 2007, Verizon had installed more than 417 million feet of fiber, passing 6.8 million premises, in parts of 16 states), *with* IDATE Consulting & Research, Press Release, *FTTH Situation in Europe* (Feb. 7, 2007), http://www.europeftthcouncil.com/extra/Press_Release/Idate/PR_IDATE_FTTH_CONF_2007.pdf (As of June 2006, there were a total of 2.74 million homes and buildings passed by the 139 FTTx projects in Europe). *See also* Ken Wieland, *Europe’s FTTH Challenge*, Telecommunications Online (Jan. 5, 2007), http://www.telecommagazine.com/search/article.asp?HH_ID=AR_2685 (“Verizon in the US . . . is embarking on one of the biggest FTTH projects in the world. . . . [I]t is not only uncertainty about the extent of future bandwidth demand that is holding back FTTH investment in Europe. The regulatory environment is still unclear as the European Commission reviews the current EU Regulatory Framework.”); Dave Bailey, *UK Starved of High-Fibre Networks*, IT Week (Apr. 30, 2007), <http://www.itweek.co.uk/itweek/analysis/2188952/uk-starved-fibre-networks> (“Without fibre, Europe will rapidly become the digital slowcoach on the information super highway,” said Point Topic analyst Vince Chook); Tim McElligott, *FTTH Connections Double in the Last Four Quarters*, Telephony Online (Apr. 17, 2007), <http://telephonyonline.com/fttp/news/ftth-household-connections-041707/index.html> (The U.S. is “the fastest growing market for FTTH connectivity with a 99% growth rate. Japan’s connectivity is growing by 60% and Europe’s by 13%.”).

³⁸ *See OECD Broadband Statistics*.

per inhabitants, but in both countries the government heavily subsidized such deployment.³⁹ The other countries with fiber deployment – Denmark, Netherlands, Iceland, and Norway – represent municipal or utility fiber deployment in small, dense countries that are relatively easy to wire. Despite that, none of the four is significantly ahead of the United States in terms of fiber deployment.⁴⁰

Those facts demonstrate that, regardless of how the levels of broadband penetration in the United States compare to the rest of the world, there is not a supply-side problem. To the

³⁹ Thomas Bleha, *Down to the Wire*, Foreign Affairs (May/June 2005) (To encourage the deployment of fiber, the Japanese government used tax breaks, debt guaranties, and partial subsidies. Companies that were willing to lay fiber were allowed to depreciate about one-third of the cost on first-year taxes, and their debt liabilities were guaranteed by the government. To encourage the deployment of fiber in rural areas, towns and villages willing to establish their own fiber networks received a government subsidy covering approximately one-third of their costs.), available at <http://www.foreignaffairs.org/20050501faessay84311/thomas-bleha/down-to-the-wire.html>; Stephen McClelland, *21CN: Japan's 21st Century Network (Part 3)*, Telecommunications Online (Mar. 27, 2006), http://www.telecommagazine.com/newsglobe/article.asp?HH_ID=AR_1901 (NTT is “subsidizing each competitor and each subscriber”); Normitsu Onishi, *In a Wired South Korea, Robots Will Feel Right at Home*, N.Y. Times, Apr. 2, 2006 (“The [South Korean] government deregulated the telecommunications and Internet service industries and made investments as companies laid out cables in cities and into the countryside. The government offered information technology courses to homemakers, subsidized computers for low-income families and made the country the first in the world to have high-speed Internet in every primary, junior and high school.”), available at <http://www.nytimes.com/2006/04/02/world/asia/02robot.html?ex=1301634000&en=7d5fcdf014309078&ei=5088&partner=rssnyt&emc=rss>.

⁴⁰ See IDATE Consulting & Research, *FTTH Council Europe: Understanding the Digital World* at 9 (Feb. 7-8, 2007), http://www.europeftthcouncil.com/extra/Press_Release/Idate/IDATE_FTTH_Content_2007.pdf (“In Europe, most ultra-broadband projects thus far have been instigated either by municipalities or utilities, while fibre network operators, such as FastWeb in Italy or B2 in Sweden, are tending to expand their footprint using DSL.”); *Evaluate the Use & Development of Telecommunication Services in Denmark, Finland, Iceland, Norway & Sweden*, Business Wire (Nov. 2, 2006) (“Scandinavia shares with The Netherlands a progressive municipal approach to fibre deployments for the benefit of citizens and regional economic welfare, leading to one of the widespread fibre footprints in Europe”); *By 2007 Bandwidth Averages in the Netherlands Are Expected To Reach 10 Mbps*, Business Wire (June 22, 2006) (The Netherlands’ “concentrated demography and economic prosperity has lent itself to investment in advanced networks.”).

contrary, in terms of the availability of facilities-based competitive broadband, the United States ranks at the top of the world. This is all the more significant given that the United States faces far greater supply-side challenges than most every country that supposedly ranks higher given its vast geography and population size and its relatively low population density.⁴¹ With just a few exceptions, the countries that the OECD ranks ahead of the United States are both very small and very dense.⁴²

Although the United States is leading the world, not trailing, in terms of broadband deployment, OECD data ranks the United States fifteenth in the world in terms of broadband subscribers per 100 inhabitants. As an initial matter, the OECD does not reveal its methodology, and many commentators – including the State Department – have pointed out various apparent flaws.⁴³ For example, as the State Department has explained, the OECD fails to account for differences in household size, ignores use of non-subscriber broadband services like connections in the workplace and technologies like WiFi, and relies on numbers that are generally self-

⁴¹ See, e.g., McDowell Address at 5 (“Population density puts a country as large as ours – with sizable rural areas – at a disadvantage [when measuring broadband deployment]. Only one country above the U.S. on the OECD list stretches from one end of a continent to another like we do. Only one country above us on this list is at least 75 percent rural, like the U.S. is. In fact, thirteen of the fourteen countries that the OECD ranks higher are significantly smaller than the U.S. . . . In Iceland, number three on the list, 93 percent of its total population of 300,000 lives in urban areas. . . . Iceland has about 88,000 broadband households today. In contrast, that’s about how many households were connected to a broadband service in the U.S. in the last 36 hours.); Scott Wallsten, *Everything You Hear About Broadband in the U.S. Is Wrong* 21 (June 2007), <http://pff.org/issues-pubs/pops/pop14.13wallstenOECDbroadband.pdf> (United States is the least urban country in the OECD rankings).

⁴² See OECD, *Chart 8: OECD Broadband Penetration and Population Densities*, <http://www.oecd.org/dataoecd/36/57/38449405.xls> (2005 population density); OECD, *OECD in Figures* (2005 ed.), <http://ocde.p4.siteinternet.com/publications/doifiles/012005061T001.xls> (2004 population).

⁴³ See, e.g., Wallsten, *Everything You Hear About Broadband in the U.S. Is Wrong*, *supra* note 41, at 4 (OECD’s data is “extremely low quality” because there is “[n]o consistency in collection methods across countries”; “[n]o sources provided”; and “[n]o explanation of methodology”).

reported by governments or government agencies that do not collect data in comparable ways and may be interested in appearing to have a high rank.⁴⁴

Even more importantly, the OECD rankings fail to adjust for differences in demand-side factors that have a significant effect on broadband penetration. For example, a relatively high percentage of households in the United States still use dial-up Internet access.⁴⁵ Most foreign countries do not have a history of unlimited local calling and inexpensive dial-up Internet access like the United States, but instead meter all local calls, including those to ISPs. As a result, unlike in the United States, broadband prices in other countries have not had to compete with very low narrowband prices in attracting subscribers.⁴⁶ Cultural differences also play a big role in broadband adoption rates – such as the fact that Koreans disproportionately engage in online gaming.⁴⁷ The OECD rankings are fairly meaningless unless these variables are taken into account.

⁴⁴ See Letter from Ambassador David A. Gross, *supra* note 31; see also McDowell Address at 4 (“[T]he OECD methodology measures ‘broadband connections per capita.’ Countries are punished or rewarded by the OECD analysis based on the number of persons living in a household or the number of people working in a business.”); Market Clarity Pty. Ltd., *Broadband Wars; The OECD’s International Broadband Arms Race* (May 2007), <http://www.marketclarity.com.au/freebies/OECD-BB-Wars-15-May-2007.pdf>.

⁴⁵ Wallsten & Sacher, AEI-Brookings Joint Center, *What US Broadband Problem?*, *supra* note 9 (“What explains this difference between broadband penetration and Internet users? The answer is that about half of U.S. Internet users still connect via dial-up. . . . For many, dialup – often supplemented by broadband access at work – is sufficient for their current needs.”).

⁴⁶ See, e.g., International Telecommunication Union, *Promoting Broadband: The Case of Japan*, Document: PB/07, at 22 (Apr. 2003) (noting that the cost of broadband in Japan is “not much higher than the dial-up Internet access charge.”); Ken Belson, *Japan Goes High Speed: A Tenfold Increase in Connections*, N.Y. Times, May 5, 2003 (“Japanese consumers, who pay some of the highest local phone fees in the world, have [] been attracted to [ADSL] because for as little as \$22 a month, they can gain unlimited access to the Internet.”).

⁴⁷ See, e.g., Kristin Kalning, *Forget Reality TV. In Korea, Online Gaming Is It*, MSNBC (Feb. 21, 2007), <http://www.msnbc.msn.com/id/17175353/> (“An estimated 17 million people in the country of 48 million play [online] games regularly. Consoles, so popular in the United States and Japan, have barely made the radar in South Korea.”).

In addition, the comments downplaying the United States' successes provide no evidence that it is intrusive government regulation that has enabled other countries to achieve their supposedly greater broadband successes. Even with aggressive unbundling policies, and ignoring a host of other demand- and supply-side issues, both Japan and the United Kingdom have achieved only slightly higher broadband penetration according to the latest OECD statistics.⁴⁸ Furthermore, there is evidence to suggest that their supposed lead is only short-term: in Japan and the United Kingdom, no serious effort has been made to deploy a ubiquitous second broadband platform (cable in both countries is very limited), and no private company is investing on its own in deploying fiber.⁴⁹ Fiber deployment in Japan (and Korea) is being driven by government funding, which, incidentally, also owns part of the incumbent telephone company in both countries.⁵⁰

In any event, as discussed in Verizon's comments, similar policies were tried in this country, and the evidence shows that they were not successful. *See* Verizon Comments at 20-26. Instead, intermodal broadband competition has thrived and network investment has skyrocketed following the *removal* of those burdensome, network-sharing rules. The Commission should continue its procompetitive broadband policies and allow the continued flourishing of competition, investment, and innovation in the broadband marketplace.

III. THE COMMISSION SHOULD CONTINUE TO PURSUE PRO-INVESTMENT POLICIES AS THE BEST MEANS OF PROMOTING THE COMPETITIVE AVAILABILITY OF BROADBAND

Many commenters have used this NOI as an opportunity to urge the Commission to impose a wide variety of new regulations on broadband providers. For the most part,

⁴⁸ *See OECD Broadband Statistics.*

⁴⁹ *See id.*

⁵⁰ *See supra* note 39.

commenters have lumped their varied, vague, and often contradictory proposals under the heading of “network neutrality.” The comments thus confirm that “net neutrality” is a slogan that does not further, but rather impedes, constructive debate regarding the appropriate regulatory environment for promoting innovation and investment in the broadband marketplace. Some of the regulation proposals relate to the Commission’s question whether it should promulgate a policy of “nondiscrimination.” NOI ¶ 10. Other proposals for regulation raised in the comments relate tangentially, if at all, to the issues raised in the NOI; many pertain to matters that the Commission has under consideration in other dockets. The Commission should reject all of those calls for regulation because the proposed mandates are unnecessary and would restrict competition, innovation, and investment.

A. “Net Neutrality” Is a Meaningless Slogan

Several commenters have rightly observed that the label “net neutrality” does not meaningfully aid the Commission’s inquiry in this proceeding because it means different things to different people. *See, e.g.*, NCTA Comments at 9-13. The comments that proponents of broadband regulation have filed in this proceeding demonstrate how little clarity the “net neutrality” phrase adds to the debate. Indeed, one commenter candidly admits that “net neutrality” regulations “could take a number of forms,”⁵¹ and another “recommends that the Commission consider different approaches to preventing [n]ondiscrimination.”⁵²

When it comes to specifics, the proposals are all over the map, sometimes within the same set of comments. Several commenters argue that the Commission should prohibit

⁵¹ Open Internet Coalition Comments at 14-15.

⁵² National Association of State Utility Consumer Advocates (“NASUCA”) Comments at 12-13.

“unreasonable” discrimination by access providers,⁵³ but provide no criteria for judging reasonableness in this context. Some commenters would permit broadband providers to treat “different” packets differently, but would require the “same types” of packets to be treated the same. For example, NASUCA defines (at 24) “nondiscrimination” – which it would have the Commission mandate – as “the uniform treatment of all packets of the same type.” It would impose (at 27) “common carriage” requirements on network providers. The New York Department of Public Service (“NYDPS”) apparently agrees; it would have the Commission consider the State’s detailed common-carrier rules and extend them to Internet services “as a template for establishing network neutrality.” NYDPS Comments at 1. And the American Library Association asserts that network providers “should not be allowed to charge the same kinds of information providers more money for the same pipes.” American Library Ass’n Comments Attach. at 2.

Google, for its part, claims that the Commission should distinguish between “differentiation” (which it considers acceptable) and “discrimination” (which it considers unacceptable). Permissible differentiation apparently includes network-management practices, such as filtering harmful traffic, and prioritizing all traffic of a particular type, such as all streaming video traffic.⁵⁴ But Google would have the Commission prohibit any business practice under which a content or applications provider – as opposed to end users – would pay a network

⁵³ *E.g.*, Center for Democracy & Tech. (“CDT”) Comments at 14 (“The Commission should therefore consider adding an additional principle to those set forth in the Policy Statement. Taking a parallel form to the other principles, a new principle could read: . . . *To encourage broadband deployment and preserve and promote the open and interconnected nature of the public Internet*, consumers are entitled to access and use the content, applications, services, and devices of their choice without unreasonable discrimination by their network provider with respect to speed, service quality, or price.”).

⁵⁴ *See* Google Comments at 22-23.

provider for a higher quality of service.⁵⁵ Thus, for Google and many other commenters, “net neutrality” means that the only acceptable business model is one in which consumers must bear the full cost of network investments, even if other content-and-applications providers would prefer to recover part of the cost in other ways, such as through advertising support.

The vagueness and widespread uncertainty surrounding the various, disparate net-regulation proposals by itself discourages network investment – even apart from the troublesome content of those proposals. As Professor Hazlett has shown, the Commission’s decisions to remove the threat of unbundling obligations on telecommunications carriers’ broadband networks spurred massive investment in fiber networks. *See Verizon Comments at 20-22; id. App. A at 15-17.* The Commission should once again conclude that network providers should remain free to invest in next-generation broadband networks without fear that subsequent regulation will undercut their business models.

B. The Commission Should Reject Calls To Impose New Regulations

Nondiscrimination. As discussed above, multiple commenters assert that the Commission should impose some form of “nondiscrimination” obligation on broadband providers – without explaining what such an obligation would even mean or how it would operate in practice, or acknowledging the level of regulatory intrusion that would be necessary to implement it. But, even if a coherent proposal were to emerge, proponents of such regulation have failed either to carry the heavy burden of establishing the need for a nondiscrimination regulation or to prove why what is fundamentally a common-carriage concept should be extended to the competitive and innovative world of the Internet. Underscoring the lack of evidence supporting proposals for broadband regulation, the FTC recently found no “significant

⁵⁵ *Id.* at 24.

market failure or demonstrated consumer harm from conduct by broadband providers.”⁵⁶ Regulation proponents also have not shown that the benefits of any such regulation would outweigh the harms of limiting the ways in which network providers can recoup their investments and hampering innovation by providers of Internet content and applications that depend on a higher quality of service to perform properly. *See Verizon Comments at 42-47; supra Part I.*⁵⁷ As the FTC recognized, “prohibitions of certain business conduct, such as . . . the offering of prioritization services by broadband providers, . . . could result in a long-term decline in investment and innovation in broadband networks” because “[b]roadband providers that cannot differentiate their products or gain new revenue streams may have reduced incentives to upgrade their infrastructure.”⁵⁸

Regulation advocates also have not shown that any broadband provider possesses power in a properly defined market that it could use to engage in anticompetitive conduct. On the contrary, because providers of Internet content and applications compete nationally and globally and because no broadband provider has power in the national or global market for broadband access, no broadband provider can deprive content-and-applications providers of access to their national and global audiences. *See Verizon Comments at 49-56; supra Part II.* Indeed, the FTC acknowledged that, “as long as consumers have one or more alternatives to which they can turn

⁵⁶ *Broadband Connectivity Competition Policy* at 160.

⁵⁷ *See also Broadband Connectivity Competition Policy* at 105 (“Prioritization may thus improve [broadband providers’] profitability and enable greater investment and innovation in network quality and expansion.”).

⁵⁸ *Id.* at 160.

[for broadband access], it is difficult to imagine them accepting the blockage or elimination of content that is important to them.”⁵⁹

Some commenters rely on a Public Knowledge white paper⁶⁰ that they claim identifies purported instances in which network providers have engaged in anticompetitive discrimination. See NATOA Comments at 8; Open Internet Coalition Comments at 5 n.6. The single Madison River episode that they cite has been repeatedly addressed and debunked, and is discussed in our opening comments (at 32-33). The rest of the supposed examples of such discrimination do not involve actual instances of *blocking* or *degrading* of traffic, but instead policies that restrict users that pay for certain types of subscriptions (*e.g.*, residential subscriptions) from using their network connections in certain ways. The most specific example alleged in the white paper involved cable companies’ prior policies of prohibiting residential customers from using virtual private networks – policies that the article recognizes were abandoned long ago (a reflection of the fact that the market rejects terms consumers dislike, *cf.* Verizon Comments at 35 (noting failure of AOL’s attempt to create a “walled garden”)).⁶¹ Many of the usage restrictions discussed in the paper represent nothing more than reasonable attempts by network providers to prevent residential users from consuming so much bandwidth that they degrade the experience of

⁵⁹ *Broadband Connectivity Competition Policy* at 157. Because broadband providers do not block or degrade Internet traffic, Google’s proposed analogy (at 19-20) to CLECs’ terminating access charges is particularly inapt. Although a carrier could not complete a call to a CLEC’s customer without paying the CLEC’s terminating access charge, providers of content and applications do not need to pay a consumer’s Internet access provider to reach that consumer; there simply is no barrier to access to the user.

⁶⁰ John Windhausen, Jr., *Good Fences Make Bad Broadband; Preserving an Open Internet Through Net Neutrality* 16-22 (Feb. 6, 2006), <http://www.publicknowledge.org/pdf/pk-net-neutrality-whitep-20060206.pdf>.

⁶¹ See Windhausen, *supra* note 60, at 17-18.

all users of the network – *e.g.*, wireless carriers’ restrictions on large-bandwidth uses, *see* Verizon Comments at 37-39 (explaining the necessity for such restrictions).

The white paper also claims that the Bell Operating Companies have created “a new system tool that would enable them to block certain 800 calls transmitted by competitive VoIP service providers.”⁶² The statement appears to refer to a feature of the SMS/800 database, known as Release 16.3. But Release 16.3 has nothing to do with VoIP (at least as far as we are aware). Rather, the purpose of Release 16.3 is to prevent unauthorized routing of 8XX traffic to POTS numbers without the permission of the local carrier serving the POTS number in question. Such routing is in violation of the Bell Operating Companies’ Tariff F.C.C. No. 1, “SMS/800 Functions” (the “SMS/800 Tariff”), which requires that Responsible Organizations (“Resp Orgs”) – the companies that use the SMS/800 database to assign and route toll-free numbers – to “[n]otify and obtain the acceptance of any LEC or IC to which traffic for a specified 800 number will be routed.” SMS/800 Tariff § 2.3.1.⁶³ All of these issues were thoroughly discussed with the Commission staff before Release 16.3 was activated.

Several commenters contend that the Commission should promulgate a regulation resembling the “net neutrality” condition to which AT&T and BellSouth were subject to in order

⁶² *Id.* at 19.

⁶³ Before Release 16.3, it was technically possible for Resp Orgs to route intraLATA 8XX traffic by causing the number first to be translated to a local POTS number and then using “CIC 0110” to route the call as if it were a local call *without* notifying or obtaining the acceptance of carriers to which calls were routed, in violation of the tariff. (This is because CIC 0110 is a generic code for local traffic that does not – unlike other CIC codes – specify the interexchange carrier to which traffic is routed.) This practice prompted complaints by ILECs and CLECs alike. Those complaints were unrelated to VoIP, but instead reflected concerns that Resp Orgs were routing 8XX traffic in violation of the tariff. Release 16.3 allows Carriers and Network Service Providers – *i.e.*, the entities carrying calls and performing the database queries – to record in the SMS/800 database whether they will accept toll-free traffic routed by particular Resp Orgs or to particular numbers. The SMS/800 database administrator has no say in particular carriers’ policies with regard to acceptance of toll-free traffic routed using CIC 0110; it simply provides a tool that carriers can use to prevent unauthorized routing.

to obtain Commission approval for their merger.⁶⁴ The combined entity agreed to “maintain a neutral network and neutral routing in its wireline broadband Internet access service,” which “shall be satisfied by AT&T/BellSouth’s agreement not to provide or to sell to Internet content or application, 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.”⁶⁵

Imposing such a requirement more broadly would be a mistake. The provision’s vague language – it prohibits the offering of “any service” that “privileges” or “prioritizes” any packet based on its “source, ownership, or destination” – could be construed to prohibit network providers from offering quality-of-service guarantees that could benefit or enable some bandwidth-intensive or latency-sensitive applications (*e.g.*, online video, VoIP, telemedicine services). For that reason, such a regulation could not even achieve its stated purpose – ensuring a “neutral” network – because it would disadvantage providers and users of advanced applications. Moreover, a regulation like the AT&T/BellSouth merger condition would stifle innovation because an access provider contemplating a new service offering would need to consult with one team of lawyers to attempt to divine whether the service might be said to run afoul of such a provision, and another team of lawyers to deal with the inevitable opportunistic litigation it would spawn.

Attacking network providers from the other end, NBC Universal, Inc. (“NBC”) would have the Commission *force* providers to block Internet traffic that violates intellectual-property laws. The Commission should not permit NBC to inject the issue of copyright protection into

⁶⁴ *See, e.g.*, Google Comments at 39; Open Internet Coalition Comments at 14-15; CCIA Comments at 6; DivX Comments at 1-2.

⁶⁵ Letter from Robert W. Quinn, AT&T, to Marlene H. Dortch, FCC, WC Docket No. 06-74, Attach. at 8 (FCC filed Dec. 28, 2006).

this docket because the Digital Millennium Copyright Act, Pub. L. No. 105-304, 112 Stat. 2860 (1998) (“DMCA”), governs that issue. The DMCA represents a carefully negotiated compromise between the relevant stakeholders. Far from considering piracy as “not our problem,” NBC Comments at 4, broadband providers assumed unprecedented legal duties under the Act to protect copyright owners’ interests. Moreover, NBC neglects to mention that the DMCA includes a provision that protects the privacy of Internet users by specifying that access providers need *not* monitor their networks for evidence of infringing activity. *See* 17 U.S.C. § 512(m). Verizon remains willing to negotiate with content providers for additional copyright protections, but those negotiations should occur in the context of private, commercial agreements.

Terms of Service. Commenters in this proceeding have raised multiple complaints about various major broadband providers’ terms of service. They principally object to early-termination fees; usage restrictions; and (what they see as) insufficient disclosure of the terms of service. None of those arguments has merit.

First, early-termination fees are not, as some commenters suggest, either a symptom (or a cause) of market failure.⁶⁶ As Dr. Jerry A. Hausman has explained in detail in the context of the wireless industry, early-termination fees are a part of broadband providers’ pricing structures for recovering revenues to offset costs. When a consumer enters into a contract for a particular term, that enables the provider to offer her a lower monthly service price.⁶⁷ In the case of Verizon’s 3 Mbps/768 kbps DSL service, for example, a customer can pay \$37.99 per month for service

⁶⁶ *See* Consumer Federation Comments at 3, 24; Google Comments at 15; DivX Comments at 11.

⁶⁷ *See* Letter from John T. Scott, III, Verizon Wireless, to Marlene H. Dortch, FCC, WT Docket No. 05-194 (FCC filed Oct. 25, 2005) (enclosing October 19, 2005 declaration of Dr. Hausman (“Hausman Decl.”)).

with no commitment, or she can sign a one-year contract and receive service for a discounted price of \$19.99 per month, with a \$79 early-termination fee (thus saving \$216 over the course of a year, as compared to the month-to-month service). And a consumer can subscribe to Verizon's FiOS service (at 15 Mbps/2 Mbps) for \$57.99 per month with a \$79.99 installation fee, or she can agree to a one-year term and receive service for an average monthly price of \$40.82, with no installation fee (even though it costs Verizon more than \$900 to connect the home to the network) and a \$99 termination fee (thus saving more than \$285 for the year). Early-termination fees make it economically possible to offer those large discounts in part because the fees assure that providers recover at least some portion of their costs; limiting those fees also would limit providers' ability to offer discounted service.

Furthermore, early-termination fees have other procompetitive benefits. As shown above, the ability to offer a one-year term allows providers to reduce or eliminate charges for connection to the network, the provision and installation of equipment (*e.g.*, modems), and other upfront costs. Lowering customers' upfront costs, in turn, facilitates the adoption of new technologies. In addition, one- and two-year subscriber contracts help network providers recover a portion of the high costs of constructing and maintaining their networks.

Although Google suggests (at 15) that early-termination fees might hinder the emergence of alternative broadband providers, such as wireless or broadband over power line, it has made no attempt to demonstrate empirically that such fees have any anticompetitive effects whatsoever.⁶⁸ Moreover, the large number of customers who switch from one wireless carrier to

⁶⁸ *Cf. Eastern Food Servs., Inc. v. Pontifical Catholic Univ. Servs. Ass'n*, 357 F.3d 1, 8 (1st Cir. 2004) (recognizing that "there will normally be no serious effects" on competition when exclusive contracts "are for short terms" and that "exclusive dealing contracts are not disfavored by the antitrust laws" because "it is widely recognized that in many circumstances they may be highly efficient – to assure supply, price stability, outlets, investment, best efforts or the like –

another despite the prevalence of early-termination fees in wireless service plans shows that such fees have not undermined the competitiveness of the wireless industry.⁶⁹ In any event, as noted, providers like Verizon do offer month-to-month service without an early-termination fee.

Second, the Consumer Federation’s claim (at 92-98) that broadband providers impose usage restrictions that hinder innovation has a distinctly hypothetical ring. As an initial matter, the Consumer Federation appears to concede (as it must) that “network management” *requires* some usage restrictions. Consumer Federation Comments at 96. And it identifies only one alleged instance in which a single broadband provider – Comcast – terminated a single customer’s service for improper use. *Id.* at 94-95. To the extent that the Consumer Federation claims that broadband providers are refusing to meet consumers’ demands for greater bandwidth, the record contradicts the claim. Broadband providers are investing heavily to expand the capacity of their networks and are competing vigorously to offer more bandwidth to consumers. *See Verizon Comments* 6-16, 55-56. Verizon’s terms of service do no more than assure that it will have the ability lawfully to take appropriate action if a user engages in harmful activity. In addition, Verizon Wireless’s terms of service, about which the Consumer Federation also complains (at 93-94), benefit consumers by reducing costs, improving security, and ensuring efficient functioning of shared resources. *See Verizon Comments* at 37-39.⁷⁰

and pose no competitive threat at all”) (citing 11 Herbert Hovenkamp, *Antitrust Law* ¶¶ 1810-1814b (1998)); *cf. also Stop & Shop Supermarket Co. v. Blue Cross & Blue Shield of R.I.*, 373 F.3d 57, 68 (1st Cir. 2004) (“For exclusive dealing, foreclosure levels are unlikely to be of concern where they are less than 30 or 40 percent.”).

⁶⁹ *See Hausman Decl.* ¶¶ 16-18.

⁷⁰ *See also Verizon Wireless Comments, In re Skype Communications S.A.R.L.*, RM-11361 (FCC filed Apr. 30, 2007).

Third, some commenters urge the Commission to regulate the disclosures that broadband providers make to their subscribers about their services.⁷¹ As an initial matter, existing, generally applicable consumer protection laws that apply to other providers *already* apply to broadband providers. Regulation proponents fail to identify any failure in the current regime – *e.g.*, by providing concrete instances of ostensibly misleading statements or material omissions by providers. Moreover, there is no reason to believe that providers would mislead customers intentionally. Providers have an economic incentive to give customers accurate and reasonably complete information, because, if subscribers perceive that they have been misled, they will grow dissatisfied and choose to purchase service from a competitor instead. The challenge in crafting terms of service is to supply sufficient information about the product without making them too detailed to be useful or so vague as to be meaningless. The commenters offer no reason to believe that new regulation would result in customers receiving materially superior information. Finally, attempts to prescribe or otherwise regulate the content of broadband providers’ communications with their customers would raise First Amendment concerns.

Special Access. Several commenters also argue that the Commission should promote broadband by re-regulating special access.⁷² As an initial matter, the Commission is considering issues involving special access in another docket,⁷³ and it should not duplicate those efforts here. Furthermore, none of the commenters that call for new regulation of special access services comes close to demonstrating that such regulation is necessary or would have the desired effect. Sprint argues that regulation is needed to constrain special access prices and thereby facilitate the

⁷¹ See Google Comments at 35; NATOA Comments at 5 n.7; N.J. Div. Rate Counsel Comments at 8.

⁷² See Sprint Comments at 6; NTCA Comments at 2-3; BT Americas Comments at 7, 11; Open Internet Coalition Comments at 8.

⁷³ See Public Notice, WC Docket No. 05-25 (July 9, 2007).

deployment of wireless broadband networks that Sprint is constructing. But Sprint is already investing heavily to deploy those networks, as are other wireless carriers. Indeed, Sprint has conceded that “[b]roadband continues to be deployed in a reasonable and timely fashion.”⁷⁴ In any event, the claim that special access is insufficiently competitive is based largely on argument regarding ARMIS returns. But, as Verizon has demonstrated extensively elsewhere, such claims have no merit,⁷⁵ and the Commission has already rejected their use for rate-making purposes.

Special access is highly competitive and prices are falling – results consistent with Professor Hazlett’s demonstration that the removal of unbundling regulations stimulates competition. As the Commission has recognized, there is “robust” competition to provide high-capacity services to the large and medium business, government, and institutional customers that purchase the overwhelming majority of the high-capacity services that are provided over special access facilities.⁷⁶ The Commission, moreover, found that “myriad providers are prepared to make competitive offers” to enterprise customers and that “these multiple competitors ensure that there is sufficient competition.”⁷⁷ Indeed, the Commission found that, “for all groups of business customers, there are multiple services and multiple providers that can meet their

⁷⁴ See Sprint Comments App. A at 4; see also Global Crossing, Presentation, Citigroup 17th Annual Entertainment, Media & Telecommunications Conference at 18 (Jan. 11, 2007) (showing decrease in the cost of special access), available at <http://files.shareholder.com/downloads/GLBC/146940834x0x67497/c4d9e60a-dda5-4d30-971f-66af8e1eb1f5/Microsoft%20PowerPoint%20-%20Citigroup%202007%20Final.ppt.pdf>.

⁷⁵ See Verizon Reply Comments, WT Docket No. 07-71 (FCC filed May 22, 2007).

⁷⁶ Memorandum Opinion and Order, *SBC Communications Inc. and AT&T Corp. Applications for Approval of Transfer of Control*, 20 FCC Rcd 18290, ¶ 73 n.223 (2005) (“*SBC-AT&T Order*”).

⁷⁷ Memorandum Opinion and Order, *Verizon Communications Inc. and MCI, Inc. Applications for Approval of Transfer of Control*, 20 FCC Rcd 18433, ¶ 74 (2005) (“*Verizon-MCI Order*”); accord *SBC-AT&T Order* ¶ 73.

demand.”⁷⁸ Those enterprise customers, moreover, “are sophisticated, high-volume purchasers of communications services” that demand individualized offerings and “negotiate for significant discounts.”⁷⁹ The Commission therefore has no basis to engage in rate-setting for special access. Where competition is robust, there is no reason to abandon the Commission’s successful deregulatory efforts with respect to special access, particularly in the context of this proceeding.

Unbundling. There is likewise no merit to arguments that the Commission should impose, re-impose, or refuse to forbear from imposing burdensome unbundling regulation on wireline networks as a means to promote broadband deployment, as Earthlink (at 9-12), BT Americas (at 16), and the Consumer Federation (at 30-32) suggest. Unbundling and network sharing polices have been tried in the past, and they did not merely fail to enhance broadband investment, they deterred it. *See Verizon Comments Part II and App. A.* Since that time, broadband services have grown only more competitive, which makes the case for imposing new regulation particularly weak. *See id.* Furthermore, as Verizon has explained in detail in its filings in WC Docket No. 06-172, vigorous competition exists in the markets in which Verizon has sought forbearance from unbundling regulations, and the costs of continuing those regulations therefore outweigh their benefits.⁸⁰ In any event, as with special access, the Commission should consider requests for forbearance in proceedings devoted to those requests,

⁷⁸ *Verizon-MCI Order* ¶ 78; *accord SBC-AT&T Order* ¶ 77.

⁷⁹ *E.g., Verizon-MCI Order* ¶¶ 52, 56, 75.

⁸⁰ *See also Shelanski, supra* note 22, at 77 (monopoly regulations of the telecommunications industry, such as unbundling mandates, should be eliminated because “economic regulation of [the telecommunications] market is likely to have significant, unintended costs for competition and for consumers” and “no empirical evidence or general economic principles support the conclusion that the competitive imperfections will cause the market to perform so poorly for consumers that monopoly regulation is warranted or likely to improve consumer welfare”).

applying the appropriate statutory standards – rather than allowing commenters to insinuate issues into this docket that properly belong in other proceedings.

Similarly, even though claims about “locking” handsets and other allegedly restrictive practices in the wireless sector have been thoroughly debunked,⁸¹ commenters such as Google (at 20-21) continue to hold up those allegations as supporting broadband regulation even for competitive markets. As Professor Thomas Hazlett has explained, integration of wireless phones, services, and the network has served consumers well, and is economically justified. Moreover, “regulators cannot usefully prescribe the extent to which wireless carriers integrate service into bundles, and . . . competitive rivalry between service providers efficiently guides and constrains carriers.”⁸² In short, in a competitive marketplace, no regulation of how products and services are sold is needed to protect consumers. The few examples that Google cites from Professor Tim Wu’s papers provide no evidence that the existing regulatory regime for the wireless industry is in need of any reform, let alone the imposition of invasive net-neutrality or open-access rules. And, because there is no demonstrated market failure in the wireless sector, there is no need for the Commission to include the “modular approach” to regulating wireless carriers suggested by Skype Communications (RM-11361) as part of its broadband policy, despite Google’s claim to the contrary (at 36-37). In any event, as indicated, all of these issues are pending in other dockets, and there is no basis also to consider them in this proceeding.

Restrictions on Copper Retirement. The Commission also should not revisit the need for restrictions on network providers’ ability to retire copper facilities when they deploy new fiber

⁸¹ See Verizon Wireless Comments, RM-11361 (FCC filed Apr. 30, 2007); Comments of AT&T, RM-11361 (FCC filed April 30, 2007); CTIA – The Wireless Association® Opposition, RM-11361 (FCC filed Apr. 30, 2007).

⁸² Thomas W. Hazlett, “Wireless Carterfone: An Economic Analysis,” at 1 (Apr. 30, 2007) (attached as Exhibit A to Verizon Wireless Comments, RM-11361).

networks, as the Consumer Federation suggests (at 126-27). As Verizon has explained in the Commission’s ongoing proceeding involving copper retirement (which is the proper forum for the Commission to consider these issues), it makes no sense to require providers to maintain redundant copper facilities that have been replaced by fiber.⁸³ In fact, the Commission already recognized, in the *Triennial Review Order*, that requiring a provider to incur the expense of maintaining and operating redundant networks would lessen the incentive for all providers to invest in broadband infrastructure, including in particular next-generation fiber networks.⁸⁴ The Commission’s considered judgment on this particular issue has proven successful – as the competitive facts discussed above and in Verizon’s comments show – and there is no reason for the Commission to backtrack on its settled policy. Requests to revisit the Commission’s decision are premature. Verizon – which is far and away the largest current investor in fiber-to-the-premises networks – is not currently retiring copper loops as a result of the deployment of its FiOS network.⁸⁵ Instead, at this stage in Verizon’s rollout of FiOS, it is understandably focusing on deploying fiber to more areas, and to switching over those customers who order FiOS services, rather than retiring legacy facilities.

⁸³ See Verizon Comments, *Petitions for Rulemaking and Clarification Regarding the Commission’s Rules Applicable to Retirement of Copper Loops and Copper Subloops*, RM-11358 (FCC filed Mar. 1, 2007).

⁸⁴ See Report and Order and Order on Remand and Further Notice of Proposed Rulemaking, *Review of the Section 251 Unbundling Obligations of Incumbent Local Exchange Carriers*, 18 FCC Rcd 16978, ¶¶ 213, 244, 272, 281-284, 290, 295 (2003), *aff’d*, *U.S. Telecom Ass’n v. FCC*, 359 F.3d 554, 578-85 (D.C. Cir. 2004).

⁸⁵ Contrary to the press report that the Consumer Federation quotes (at 127 n.215), it is not true that Verizon retires customers’ copper lines when it installs FiOS. Although Verizon often removes the copper “drop line” running from the telephone pole to the customer’s house after it deploys fiber, it is not currently retiring the “copper loop.” If a customer later decides to order service from a competing provider, the copper loop remains available and Verizon will reattach the copper drop to the home at no cost to the customer or the competitor. Although at some point it will become uneconomical for Verizon to maintain redundant networks, that point has not been reached today.

CONCLUSION

The best way for the Commission to promote consumer welfare is to continue procompetitive, deregulatory policies that encourage investment and deployment of broadband infrastructure, and continued innovation at all levels of the Internet.

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