

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

In the Matter of)	
)	
Protecting and Promoting the Open Internet)	GN Docket No. 14-28
)	
Framework for Broadband Internet Service)	GN Docket No. 10-127
)	

REPLY COMMENTS OF T-MOBILE USA, INC.

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T-Mobile USA, Inc. (“T-Mobile”)^{1/} hereby submits these reply comments in response to the Commission’s Notice of Proposed Rulemaking seeking comment on the adoption of new open Internet rules^{2/} and the Wireline Competition Bureau’s Public Notice seeking to refresh the record in the *Framework for Broadband Internet Services* docket.^{3/}

INTRODUCTION AND SUMMARY

The record in this proceeding confirms that new, restrictive net neutrality rules for mobile broadband providers are unnecessary, would harm consumers, stifle innovation, and interfere with mobile providers’ ability to differentiate themselves and compete in the marketplace. T-Mobile supports preserving an open and innovative Internet. Spurred by the Commission’s light-touch regulatory approach to mobile broadband, the industry has experienced explosive growth

^{1/} T-Mobile USA, Inc. is a wholly owned subsidiary of T-Mobile US, Inc., a publicly traded company.

^{2/} *Protecting and Promoting the Open Internet*, Notice of Proposed Rulemaking, 29 FCC Rcd. 5561 (2014) (“*Open Internet NPRM*”).

^{3/} *Wireline Competition Bureau Seeks to Refresh the Record in the 2010 Proceeding on Title II and Other Potential Legal Frameworks for Broadband Internet Access*, Public Notice, 29 FCC Rcd. 5856 (2014).

that has fueled infrastructure investment, global technology leadership and new jobs. The FCC should do nothing to risk undermining that success.

In particular, the Commission should not apply rigid open Internet rules designed for wireline providers to mobile broadband networks that face unique technical issues and capacity constraints, and compete in a very different competitive market. Robust retail competition in the mobile broadband market already effectively constrains mobile provider behavior. Carriers have every incentive to use network management tools in a manner that maintains a positive customer experience while enhancing consumer choice and control. Indeed, as Chairman Wheeler recently remarked, “the entire Open Internet proceeding is about ensuring that the Internet remains free from barriers erected by last-mile providers” and noted the stark contrast in the level of competition in the uncompetitive fixed and highly competitive mobile broadband markets.^{4/} Mobile broadband providers simply do not have the kind of monopoly control over access to subscribers over the last mile that might warrant different regulation of fixed broadband providers.

In addition, the significant technical and operational differences between wireless and wireline broadband networks necessitate a continued regulatory distinction between fixed and mobile broadband. While mobile networks are more robust and offer greater speeds and capacity than they did when the 2010 rules were enacted, they also face far greater demands; their need for agile and dynamic network management tools has actually increased. Moreover, ongoing spectrum scarcity, the unpredictability of capacity demands, and the need to accommodate a wide variety of user equipment present additional technical challenges justifying

^{4/} Prepared Remarks of FCC Chairman Tom Wheeler, “The Facts and Future of Broadband Competition,” 1776 Headquarters, Washington, D.C. (Sept. 4, 2014) (“*Chairman Wheeler Speech at 1776 Headquarters*”).

greater latitude under the rules to provide the best service to all consumers. In sum, the record does not support increased regulation of mobile broadband. But, if the Commission nonetheless decides that additional rules are necessary for mobile broadband, it should limit those rules to the scope of the 2010 *Open Internet Order* rules.

In the absence of rules and in the face of strong competition, wireless providers have developed innovative offerings consumers want. The Commission needs to preserve the ability of mobile broadband carriers to differentiate themselves from their competitors. Such differentiation is fueling positive developments for consumers and benefitting new enterprises. One means of differentiation is the different service features mobile broadband providers offer using network management practices, such as T-Mobile's Simple Choice data offerings described below. Prescriptive regulations would harm the public interest by depriving consumers of greater choice and control over their services. An expanded transparency rule is also unneeded and would pose significant difficulties for mobile providers while providing little or no added benefit for consumers or edge providers. Existing enforcement mechanisms are also sufficient to ensure transparency.

The record reflects that some proponents of new mobile broadband rules are seeking regulation that extends far beyond the actual scope of net neutrality. These commenters urge the Commission to enact rules governing all aspects of offering broadband service, whether or not they have anything to do with net neutrality principles. By taking the concept of "net neutrality" to its theoretical extreme, these advocates have sadly lost sight of what actually benefits consumers.

The Commission should preserve the light regulatory touch approach to mobile broadband services that has fostered competition and consumer choice. By keeping mobile

broadband free of burdensome requirements, this approach has ensured that consumers experience faster speeds, a greater number of choices, and more advanced offerings over time. The Commission should not reverse this progress.

DISCUSSION

I. NEW NET NEUTRALITY OBLIGATIONS SHOULD NOT BE IMPOSED ON MOBILE BROADBAND NETWORKS, WHICH FUNDAMENTALLY DIFFER FROM FIXED BROADBAND NETWORKS

The record demonstrates that it is unnecessary to impose new network neutrality obligations on mobile broadband services and that doing so would ignore the critical differences between mobile and fixed broadband networks, stifle the explosive network investment and innovation that has characterized the mobile broadband industry, and ultimately harm consumers. Some claim that the distinction between fixed and mobile broadband is no longer necessary because mobile has changed since the 2010 rules were adopted. In fact, that there has been no significant change in the fundamentals of wireless versus wireline capability.

A. Mobile Broadband Investment Has Flourished In The Absence Of Burdensome Regulations.

Nearly two decades of a light-touch regulatory approach have spurred remarkable investment and innovation in mobile broadband infrastructure and services. The wireless industry “has produced generation after generation of cutting-edge networks, offering increasingly higher data speeds and greater throughput.”^{5/} The wireless industry has been one of the major driving forces of our recent economic recovery, with private investment in U.S. wireless infrastructure outstripping investment by the major oil and gas companies and U.S. auto

^{5/} Comments of CTIA—The Wireless Association, GN Docket Nos. 14-28, 10-127, at 7 (filed July 18, 2014) (“CTIA Comments”).

companies.^{6/} Commenters note, “[a]s of December 2013, wireless providers had made over \$398 billion in cumulative capital expenditures to build and upgrade their networks, reflecting 9% year-over-year growth since 1985. Indeed, wireless providers have invested four times more in their networks per subscriber than the global average.”^{7/} Moreover, mobile broadband’s investment far outstripped that of other broadband providers. Mobile providers invested more than \$33 billion in infrastructure in 2013,^{8/} accounting for 45 percent of all broadband capital expenditures, while wireline providers accounted for only 37 percent, and cable providers accounted for just 18 percent.^{9/}

These massive investments have made the United States the hub of the mobile ecosystem, with its wireless industry directly or indirectly employing more than 3.8 million Americans.^{10/} U.S. consumers also account for almost half of all LTE connections worldwide, and data usage continues to expand exponentially, with year-to-year increases of roughly 120 percent.^{11/}

This investment has been driven in part by the FCC’s wise decision in 2010 to leave mobile broadband free of highly prescriptive regulations, adopting only those requirements it deemed strictly necessary to protect consumers. The Commission recognized in the 2010 *Open*

^{6/} See WHITE HOUSE OFFICE OF SCI. AND TECH. POLICY & THE NATIONAL ECON. COUNCIL, FOUR YEARS OF BROADBAND GROWTH 2 (2013), available at http://www.whitehouse.gov/sites/default/files/broadband_report_final.pdf.

^{7/} Comments of Verizon and Verizon Wireless, GN Docket Nos. 14-28, 10-127, at 41-42 (filed July 15, 2014) (“Verizon Comments”), citing Didier Scemama, et al., *2014 wireless capex: BRICs & Europe to pick up the slack*, Bank of America Merrill Lynch, Global Telecom Equipment, Jan. 13, 2014, at Table 2.

^{8/} Didier Scemama, et al., *2014 Wireless CAPEX: BRICS & Europe to Pick Up the Slack*, BANK OF AMERICA MERRILL LYNCH, GLOBAL TELECOM EQUIPMENT, Table 2 (2014).

^{9/} USTelecom, Broadband Investment, *Capex by Type of Provider*, <http://www.ustelecom.org/broadband-industry-stats/investment/capex-by-type-of-provider> (last visited Sept. 10, 2014).

^{10/} *Id.* at 8.

^{11/} *Id.* at 10.

Internet Order that the mobile broadband marketplace was characterized by rapid innovation and the development of new services and business models,^{12/} and this is still the case. If it now imposed rigid net neutrality obligations on mobile broadband networks, the Commission would place this innovation and investment at risk, ultimately harming the consumers whom the FCC is mandated to protect.

Mobile broadband providers rely on network management practices to meet consumer demand and provide a quality customer experience, which in turn fuels further investment. As AT&T pointed out, to meet “[c]onsumers’ near-insatiable demand for mobile broadband Internet access services, coupled with the exploding number of applications and services used over mobile broadband networks,” mobile broadband providers must “continue to dedicate substantial resources to network management” and overall infrastructure investment.^{13/} If the Commission is serious about encouraging wireless broadband as a competitor to wireline broadband,^{14/} then it must tread carefully in enacting any regulations that may stifle investment and innovation in the mobile broadband industry. As Chairman Wheeler recently explained, “[t]he pace of innovation on the Internet is much, much faster than the pace of notice-and-comment rulemaking. . . . We cannot hope to keep up if we adopt a prescriptive regulatory approach.”^{15/}

^{12/} *Preserving the Open Internet*, Report and Order, 25 FCC Rcd. 17905, 17956-57 ¶ 94. (“*Open Internet Order*”) (“The mobile ecosystem is experiencing very rapid innovation and change, including an expanding array of smartphones, aircard modems, and other devices that enable Internet access; the emergence and rapid growth of dedicated-purpose mobile devices like e-readers; the development of mobile application (‘app’) stores and hundreds of thousands of mobile apps; and the evolution of new business models for mobile broadband providers, including usage-based pricing.”).

^{13/} Comments of AT&T Services, Inc., GN Docet Nos. 14-28, 10-127, at 24 (filed July 15, 2014) (“AT&T Comments”).

^{14/} *Chairman Wheeler Speech at 1776 Headquarters* (“[W]here greater competition [to fixed broadband] can exist, we will encourage it. Again, a good example comes from wireless broadband.”).

^{15/} Remarks of FCC Chairman Tom Wheeler, American Enterprise Institute, Washington, D.C. (June 12, 2014) (discussing the FCC’s new approach to cybersecurity).

B. The Intensely Competitive Nature Of The Mobile Broadband Market Renders New Net Neutrality Regulations Unnecessary.

A close examination of the mobile broadband marketplace demonstrates that new net neutrality regulations are unnecessary because fierce retail competition already governs providers' actions and benefits consumers. Earlier this month, Chairman Wheeler expressly stated: "The underpinning of broadband policy today is that competition is the most effective tool for driving innovation, investment, and consumer and economic benefits."^{16/} Nowhere has this proven more true than in the highly competitive mobile broadband market.

Fixed broadband, by contrast, is not nearly as competitive as the wireless industry.^{17/} Thus, according to the most recent *Mobile Competition Report*, 82 percent of U.S. consumers have access to service from four or more mobile broadband providers, nearly 92 percent have access to three or more, and nearly 98 percent have access to at least two mobile broadband providers.^{18/} In addition to the four major nation-wide carriers, millions of U.S. consumers subscribe to regional providers offering LTE-based services.^{19/} Intense price competition has

^{16/} *Chairman Wheeler Speech at 1776 Headquarters.*

^{17/} *Open Internet Order* ¶ 95 ("[M]ost consumers have more choices for wireless providers than for fixed (particular fixed wireline) broadband."). Earlier this month, Chairman Wheeler observed that "meaningful competition for high-speed wired broadband is lacking and Americans need more competitive choices for faster and better Internet connections." *Chairman Wheeler Speech at 1776 Headquarters.*

^{18/} *Annual Report and Analysis of Competitive Market Conditions With Respect to Mobile Wireless, Including Commercial Mobile Services*, Sixteenth Report, 28 FCC Rcd. 3700, 3749-50 ¶ 48, tbl.8 (2013).

^{19/} See CTIA Comments at 6-7 ("In terms of LTE coverage, AT&T's network now covers 290 million POPs, Sprint's covers 225 million POPs, T-Mobile's covers 230 million POPs, and Verizon's covers 306 million POPs. Regional providers offering LTE-based service across markets that are home to millions include U.S. Cellular, Appalachian Wireless, Bluegrass Cellular, Cellcom, Chariton Valley, Chat Mobility, Cross Wireless, Custer Telephone Cooperative, Inc., Mid-Rivers Wireless, MTA Wireless, Pioneer Cellular, Thumb Cellular, NorthwestCell, and Strata Networks. Additional companies offering or constructing LTE networks include Carolina West Wireless, Copper Valley Telecom, C Spire, KPU (Ketchikan Public Utilities), Nemont Wireless, Ntelos, and S and R Communications.").

also led to a 93 percent decline in wireless data prices from 2008 to 2012.^{20/}

The intensely competitive market has resulted in mobile broadband providers constantly launching innovative service offerings and features to attract and capture subscribers. In a nod to T-Mobile, AT&T points out, “[c]ompetition is so fierce that some mobile providers have recently deployed promotional plans that pay customers for switching to their services.”^{21/} As a very recent example, T-Mobile also recently launched Un-carrier 7.0 “Wi-Fi Unleashed,” which will allow every Simple Choice customer to use Wi-Fi calling and texting on every new smartphone T-Mobile sells. Under this innovative initiative, 100 percent of new smartphones in T-Mobile stores will be Wi-Fi calling- and texting-capable, and 100 percent of T-Mobile customers will be able to get a Wi-Fi calling- and texting-capable smartphone if they do not already have one. T-Mobile is also opening an exclusive enrollment window in its revolutionary upgrade program, JUMP!, to help customers immediately upgrade to a new Wi-Fi calling-ready smartphone.^{22/}

In such a competitive market, allowing market forces to govern provider behavior is far superior to new rules establishing a hyper-regulatory solution. As Chairman Wheeler explains, “[i]f the facts and data determine that a market is competitive, the need for FCC intervention decreases.”^{23/} Under these circumstances, the compelling differences between the competitive

^{20/} CTIA, *The U.S. Wireless Industry: Leading the World in Investment, Value, Innovation, and Competition*, at 10 (2013), available at http://files.ctia.org/pdf/filings/2013_CTIA_Investment_and_Innovation_Letter.pdf.

^{21/} AT&T Comments at 22.

^{22/} T-Mobile Press Release, *T-Mobile Launches Un-carrier 7.0 Un-leashes Wi-Fi Worldwide* (Sept. 10, 2014), available at <http://newsroom.t-mobile.com/news/t-mobile-launches-un-carrier-7.htm>.

^{23/} Prepared Remarks of FCC Chairman Tom Wheeler, The Ohio State University, Columbus, OH (Dec. 2, 2013), available at <http://www.fcc.gov/document/remarks-fcc-chairman-tom-wheeler-ohio-state-university>.

landscape for fixed and mobile broadband must be taken into account and result in the continuation of a “light touch” regulatory regime for wireless services.

C. Mobile Broadband Networks Have Different Technical Needs and Constraints Than Fixed Broadband Networks.

In addition to existing competitive restraints that curb anti-consumer behavior in the mobile broadband market, the Commission must take into account the unique technical constraints facing wireless providers. As T-Mobile and others established in their initial comments, mobile broadband networks are technically very different from fixed broadband networks.^{24/} Any new net neutrality regime must accommodate the unique technical attributes of mobile broadband networks.

CTIA recently submitted into the record a detailed analysis of the distinctions between fixed and mobile networks, describing several key characteristics of mobile broadband networks that “as a whole pose significant challenges to mobile wireless networks and make the

^{24/} See Comments of T-Mobile USA, Inc., GN Docket Nos. 14-28, 10-127, at 5-6 (filed July 15, 2014) (“T-Mobile Comments”) (“The *Open Internet Order* correctly recognized that ‘mobile networks present operations constraints that fixed broadband networks do not typically encounter,’ and tailored the open Internet rules accordingly. The distinctions between fixed and mobile networks persist, and, if anything, have become even more significant as mobile broadband usage has grown.”); Verizon Comments at 42 (“[W]ireless broadband communications require complex and dynamic management of spectrum as the number and mix of users being served by a cell site changes in sometimes highly unpredictable ways. Moreover, these complexities are compounded by the scarce spectrum resources available to each provider, which constrain a provider’s ability to increase network capacity to meet subscriber needs and quality-of-service expectations.”); AT&T Comments at 23 (“The Commission recognized in adopting the 2010 rules that special characteristics of mobile broadband infrastructure make it essential to afford mobile providers additional flexibility in how they operate their broadband services.”); CTIA Comments at 14 (“The technical, operations, and other factors that warranted a different regulatory approach to mobile broadband services [in 2010] continue to apply today.”); see also Prepared Remarks of CTIA President and CEO Meredith Attwell Baker, Keynote Remarks Day 2 at Super Mobility Week on Connected Car and Net Neutrality, Las Vegas, NV (Sept. 10, 2014) (“I have about 20 reasons why mobile is different. I’ll give you 4. #1. Mobile broadband is still very new. . . . #2. Mobile broadband is dependent upon limited spectrum. . . . #3. Spectrum is a shared resource. . . . And #4. Mobile broadband competition is flourishing.”).

application of prescriptive net neutrality principles to mobile wireless networks practically infeasible.”^{25/} These characteristics include:

- Scarcity of radio resources resulting from limited spectrum availability and increasing user traffic;
- Sharing of limited radio resources among the ever-changing number active users in a given geographic area;
- Dynamic channel conditions that vary over time and as a function of distance from the serving cell;
- Varying resource consumption by users in different channel conditions and using different services;
- Challenges of network capacity additions, which depend largely on government allocation of spectrum resources that must be bought at auction;
- Ever-evolving networks that must change to adapt to newer generations of cellular standards and even multiple revisions within a given standard;
- Integration of multiple categories of devices; and
- The overall complexity of network management in modern mobile wireless networks.^{26/}

Because of these unique technical challenges, mobile broadband providers need to employ “aggressive and extremely agile network management that is not amenable to prescriptive rules or extremely granular disclosure requirements.”^{27/} For example, mobile

^{25/} Jeffrey H. Reed and Nishith Tripathi, *Net Neutrality and Technical Challenges of Mobile Broadband Networks*, at 13 (2014), attached to *Ex Parte* Letter from Scott Bergmann, Vice President, Regulatory Affairs, CTIA—The Wireless Association, to Marlene Dortch, Secretary, FCC, GN Docket Nos. 14-28, 10-127 (dated Sept. 4, 2014) (“*CTIA Report*”).

^{26/} *Id.* at 13-16.

^{27/} CTIA Comments at 18; *see also* Verizon Comments at 42 (“[W]ireless broadband communications require complex and dynamic management of spectrum as the number and mix of users being served by a cell site changes in sometimes highly unpredictable ways. Moreover, these complexities are compounded by the scarce spectrum resources available to each provider, which constrain a provider’s ability to increase network capacity to meet subscriber needs and quality-of-service expectations. Wireless networks face limits imposed by finite spectrum resources. While wireless providers can and do innovate to maximize the traffic that can be transmitted over the available spectrum, they cannot make more of it, and must instead manage their networks to overcome spectrum scarcity.”); AT&T Comments at 23 (“To ensure high-quality service for all customers, mobile providers need greater flexibility in how they address congestion over their networks—particularly in the “over-the-air” segment. Intrusive net neutrality rules that hamstring mobile providers’ efforts to grapple with such network management challenges would degrade the quality of mobile service for all users.”).

broadband providers use network management techniques to assure that all its customers have fair access to network resources. Assuring that all users are not disproportionately slowed due to the a small number of very aggressive data users is important to T-Mobile’s ability to offer all of their customers a high quality service, as each cell site in the network has a fixed amount of capacity that is shared among all customers on that site. Notably, T-Mobile does not use network management techniques to withhold resources from anyone. All cell site resources are provided to all customers.

In sum, mobile broadband networks face fundamentally different challenges than cable networks, and any claims to the contrary are simply false. Cable providers do not face mobility challenges, and while cable broadband networks may rely on shared capacity, the capacity being shared is vastly more robust than that of mobile broadband. Fiber-optic cable has been demonstrated to reach a throughput of more than 1,000 times that of even an “enormous 10 GHz wide radio channel and 10 bps/Hz of ultra-high spectral efficiency.”^{28/} Indeed, a single strand of fiber has more capacity than the entire electromagnetic spectrum available to wireless carriers.^{29/} Furthermore, cable operators can add capacity as needed. These important distinctions between fixed and mobile networks show that it would be inadvisable to impose new net neutrality rules, especially those designed for fixed networks, on mobile broadband networks.

D. The Record Evidence Does Not Support Increased Regulation Of Mobile Broadband.

Any FCC rules – and especially those with such severe and far-reaching consequences on the industry and economy as those under discussion – should be rooted firmly in a record that

^{28/} See Peter Rysavy, *How will 5G compare to fiber, cable or DSL?*, FIERCE WIRELESS (May 27, 2014), available at <http://www.fiercewireless.com/story/rysavy-how-will-5g-compare-fiber-cable-or-dsl/2014-05-27>.

^{29/} *Id.*

demonstrates that the FCC has undertaken a comprehensive examination of the surrounding facts and determined that sufficient evidence of a problem exists to warrant the burdensome imposition of regulation.^{30/} No such record exists here. Nothing in the record suggests that mobile broadband providers have either the incentive or the ability to limit Internet openness, or that any problem exists requiring regulatory intervention.

Under the 2010 net neutrality rules, mobile providers were exempt from the non-discrimination requirements, and subject only to a limited version of the no-blocking rule; and despite the dire predictions of net neutrality advocates, mobile providers did not block lawful content, discriminate against disfavored or unaffiliated content, or develop and implement anti-consumer practices. To the contrary, mobile providers' network management practices were and are tightly linked to carriers' goal of providing a satisfying customer experience while managing fluctuating and limited spectrum resources. T-Mobile respectfully submits that the Commission should not regulate based on hypotheticals, especially when all evidence demonstrates that there is no problem to be addressed. If the Commission nonetheless determines that new rules are necessary, it should go no further than reimposing the Open Internet rules for mobile broadband contained in its 2010 *Open Internet Order*.

E. A Minimum Level of Service Requirement Is Unworkable For Mobile Broadband.

Any proposal to impose a "minimum level of service" on mobile providers is unworkable and unnecessary. As a threshold matter, there are too many external factors influencing data speeds for a mobile provider to meet a guaranteed constant minimum level. As CTIA explains, a

^{30/} Regulatory action cannot pass muster under the Administrative Procedure Act if it fails to demonstrate a problem in need of proposed remedy or that the harms addressed were real rather than conjectural. *Home Box Office, Inc. v. FCC*, 567 F.2d 9, 36 (D.C. Cir. 1977) ("[A] regulation perfectly reasonable and appropriate in the face of a given problem may be highly capricious if that problem does not exist.") (internal quotation marks omitted).

single user or single application can overwhelm the limited resources provided to wireless providers, forcing providers to choose between blocking the interfering use and sacrificing the quality of service expected by other users on the network.^{31/} And several commenters have explained that the very nature of mobile broadband makes it impossible to guarantee a minimum level of service as “the number and mix of users being served by a cell site changes in sometimes highly unpredictable ways.”^{32/}

Apart from the complex technical issues that make a minimal level of service requirement unworkable, it is simply unnecessary. As discussed above, the market for mobile broadband is highly competitive, and customer satisfaction and retention is critical to a mobile provider’s success. Knowing that customers have the ability to “vote with their feet” if service levels are unsatisfactory, mobile providers have every incentive to ensure that they are offering the highest level of service technically feasible.

II. IN THE ABSENCE OF RULES, MOBILE BROADBAND PROVIDERS HAVE CREATED INNOVATIVE PLANS AND FEATURES THAT CONSUMERS WANT

The record confirms that mobile providers are using network practices to distinguish themselves and their offerings in the marketplace.^{33/} The resulting innovations should not be seen as a net neutrality “problem,” but rather as a tremendously positive development for consumers who have more choice and control over the services they pay for. Commenters who

^{31/} *CTIA Report* at 27.

^{32/} Verizon Comments at 42; *see also* AT&T Comments at 23 (“[M]obile networks face spectrum constraints, a shared “last mile” radio access network, and other impediments that make it far more challenging to provide mobile broadband than wireline service. These factors create capacity and quality-of-service challenges for mobile broadband Internet access providers that are particularly acute in the “last mile” radio access network.”).

^{33/} *See* CTIA Comments at 7-8 (“Mobile broadband providers in this country offer a wide variety of plans and services, including a broad range of data tiers, price points, and service configurations. These offerings are constantly evolving, offering more value and better pricing.”).

attempt to characterize innovation and consumer choice as “discrimination” that must be banned^{34/} are substituting their own views for what consumers should want in ways that would reduce consumer choice and control.

The Commission recognized the importance of consumer choice and control in the 2010 *Open Internet Order*, stating that “[m]aximizing end-user control is a policy goal Congress recognized in Section 230(b) of the Communications Act, and end-user choice and control are the touchstones in evaluating the reasonableness of discrimination.”^{35/} The Commission anticipated that broadband providers would develop innovative service models, including tiered or usage-based pricing, and rejected calls to prohibit such business models. Such a prohibition, the Commission argued, would require “all subscribers to pay the same amount for broadband service, regardless of the performance or usage of the service,” and “would force lighter end users of the network to subsidize heavier end users.”^{36/} This approach has succeeded, as mobile providers have developed innovative ways to provide consumers with value without reducing quality or choice. Imposing rigid new net neutrality rules on mobile broadband providers would deprive consumers of the enhanced choice, control, and features that they enjoy today, and would harm competition by limiting the ability of mobile providers to distinguish themselves in the marketplace.

T-Mobile has focused on developing innovative service offerings to differentiate itself from its competitors. For example, all customers on T-Mobile’s Simple Choice plan receive truly unlimited data. They can choose plans with unlimited high-speed data, or an allotment of

^{34/} See Comments of Writers Guild of America, West, Inc., GN Docket Nos. 14-28, 10-127, at 15 (filed July 15, 2014) (“WGAW Comments”).

^{35/} *Open Internet Order* ¶ 71.

^{36/} *Id.* ¶ 72.

high-speed data with unlimited data at 2G speeds after their allotment is used. And as noted above, all Simple Choice customers can now also use WiFi calling and texting on all capable TMUS smartphones.

The Simple Choice plans are designed to allow subscribers to decide what price they want to pay for what service, and still use as much mobile data as they want without incurring overage charges – which is a different approach than our competitors. Customers are notified by text message when they approach and exceed their plan’s high speed mobile data allotments, so that they can continue to evaluate whether the plan and service they have selected best meets their needs. These rate plan options are extremely popular with customers because they offer a selection of clear plan options based on the consumers’ individual needs. And because T-Mobile has eliminated new annual service contracts and early termination fees, customers are free to seek alternative providers if they are not satisfied with T-Mobile’s service. Yet customers are choosing T-Mobile in record numbers, with roughly 2.75 million new subscribers signing up this past August. Consumers clearly want what T-Mobile is offering.

Thus, allowing mobile providers to manage their networks in innovative and effective ways that offer consumers increased choice and control is not only technically and operationally essential to ensuring quality service to all customers,^{37/} it is good for consumers and for competition. Nonetheless, because T-Mobile gives customers the *choice* of receiving data at slower speeds rather than charging them an overage fee, certain advocates of new net neutrality rules have argued this practice is discriminatory and anti-consumer.^{38/} This notion is

^{37/} See discussion *supra* at 9 regarding the unique technical challenges mobile providers face and the importance of network management tools to the provision of quality services for the benefit of all consumers.

^{38/} See, e.g., WGAW Comments at 15 (“[T]here have been reports of streaming video sites like ESPN negotiating with carriers to bypass data caps. Similarly, T-Mobile recently announced it would exempt certain music streaming services from its data caps.”); Comments of Consumers Union, GN

nonsensical. In the highly competitive marketplace in which T-Mobile operates, carriers cannot afford to be anti-consumer and do not need additional rules to encourage consumer-friendly behavior. Any rules for mobile broadband providers that eliminate informed consumer choice to advance a theoretical form of “nondiscrimination” would be profoundly anti-consumer by restraining carriers from offering innovative services and launching cutting-edge business models with new features and offerings. T-Mobile could not be the disruptive force that it is today under such a regulatory regime.

III. NEW NET NEUTRALITY RULES COULD BE MISUSED TO STIFLE A BROAD RANGE OF PRO-CONSUMER BROADBAND SERVICE OFFERINGS

Not every feature and function of a broadband service offering implicates net neutrality concerns. And yet some have argued that new net neutrality rules should prohibit any Internet Service Provider (“ISP”) service offering or practice that they believe somehow “affects” use of the Internet, no matter how remotely, and without regard to the loss of consumer benefits. The Commission must not allow such misguided zealotry or overly broad assumptions to trump common sense and consumer welfare.

Mobile broadband providers offer a variety of innovative and exciting new service billing features that give consumers additional choices and the ability to get more value from their plans, by allowing some data use for free or without counting against data usage allotments. These offerings do not involve prioritization of one edge provider’s data over that of a competing edge provider, or manipulation of data traffic from these edge providers. In other words, they do not

Docket Nos. 14-28, 10-127, at 12 (filed July 15, 2014); *see also*, Comments of Public Knowledge, Benton Foundation, Access Sonoma Broadband, GN Docket Nos. 14-28, 10-127, 09-191, WC Docket No. 07-52, at 21 (filed July 15, 2014) (“Public Knowledge Comments”) (expressing “concerns” that AT&T’s Sponsored Data and T-Mobile’s Music Freedom will harm innovation by discriminating against some edge services).

implicate network management or open Internet issues. The only effect on consumers is positive – more services, flexible use of services, and lower bills.

T-Mobile’s Music Freedom program is a good example of this type of innovative pro-consumer offering. Music Freedom allows T-Mobile’s Simple Choice customers to stream all the music they want from a large and growing number of music streaming services – all on T-Mobile’s Data Strong™ network and all without counting against customers’ high-speed data allotments. Contrary to the misunderstanding of some critics, Music Freedom does not discriminate among streaming music services. Any music streaming provider can apply to be part of Music Freedom, and T-Mobile’s goal is to add all lawful and licensed music streaming services to this offer. T-Mobile recently doubled the number of streaming services available by adding the music streaming services of AccuRadio, Black Planet, Grooveshark, Radio Paradise, Rdio, and Songza to the six already available.^{39/}

The Minority Media and Telecommunications Council applauded the expansion of Music Freedom, stating that T-Mobile “has made history by opening its national wireless platform to diverse-owned enterprises.”^{40/} As of late August, customers had streamed nearly 7,000 terabytes of music since the launch and were streaming five million more songs per day than before the launch. Analysts, too, immediately recognized the value to the subscriber and the distinction between this type of arrangement and one in which an edge provider pays for priority over its competitors. The Information Technology & Innovation Foundation stated that the arrangement is “good for consumers and shouldn’t be a real net neutrality concern,”^{41/} while Ross Rubin,

^{39/} See T-Mobile Press Release, *T-Mobile Cranks Up the Volume on Music Freedom* (Aug. 27, 2014), available at <http://newsroom.t-mobile.com/news/music-streaming-momentum-update.htm>.

^{40/} *Wireless Notes*, COMMUNICATIONS DAILY, Aug. 28, 2014, at 13.

^{41/} Joe McKnight, *T-Mobile’s Unlimited Data Plan for Music Streaming Prompts Net Neutrality Debate*, COMMUNICATIONS DAILY, June 20, 2014, at 8.

Principal Analyst at Reticle Research, agreed that free music streaming is “not really a net neutrality issue” because T-Mobile does not favor any one provider or set up a “fast lane” for chosen services.^{42/}

Despite the clearly pro-consumer nature of offerings like Music Freedom, the most extreme view of net neutrality would term these offerings as a grave threat to the Internet because they bias subscribers towards using free data. In the case of Music Freedom, it almost appears as if certain commenters went in search of a reason to oppose the consumer enabling offering. At first, critics wrongly asserted that T-Mobile was being paid by the participating music streaming services, and excluding others.^{43/} When these accusations proved to be false, these critics then complained that allowing subscribers to stream music freely might disadvantage some hypothetical non-music Internet content that the subscriber may have chosen if the subscriber were not listening to music.^{44/} As Verizon noted, “[i]t is instructive that T-Mobile’s experiment with an approach that, on its face, gives consumers new benefits and potential savings was met with knee-jerk hostility from some net neutrality proponents.”^{45/} It is

^{42/} Ross Rubin, @rossrubin, TWITTER (June 18, 2014), *available at* <https://twitter.com/rossrubin/status/479444515883724800> (“Free streaming of music not really a net neutrality issue. T-Mo not favoring a provider or apparently providing a ‘fast lane’ for music.”).

^{43/} See, e.g., Michael Weinberg, *T-Mobile Uses Data Caps to Manipulate Competition Online, Undermine Net Neutrality*, PUBLIC KNOWLEDGE (June 19, 2014), *available at* <https://www.publicknowledge.org/news-blog/blogs/t-mobile-uses-data-caps-to-manipulate-competition-online-undermine-net-neut> (“For music services that are proudly niche ... their fate is to be left out of this agreement entirely.”); see also Jared Newman, *T-Mobile’s Unlimited Music Streaming is the Worst for Net Neutrality*, TIME (June 19, 2014), *available at* <http://time.com/2901142/t-mobile-unlimited-music-net-neutrality/> (“Instead of treating all music services equally, T-Mobile has decided that the most popular streaming music services should get better treatment.”).

^{44/} See, e.g., Public Knowledge Comments at 21, *citing* Michael Weinberg, *T-Mobile Uses Data Caps to Manipulate Competition Online, Undermine Net Neutrality*, PUBLIC KNOWLEDGE (June 19, 2014), *available at* <https://www.publicknowledge.org/news-blog/blogs/t-mobile-uses-data-capsto-manipulate-competition-online-undermine-net-neutrality>.

^{45/} Verizon Comments at 19, *citing* John Eggerton, *T-Mobile Criticized for Online ‘Music Freedom’ Move*, BROADCASTINCABLE.COM (June 20, 2014 12:19 PM), <http://www.broadcastingcable.com/news/washington/tmobile-criticized-online-music-freedom-move/131915>.

ironic that the same consumer groups that frequently complain that data caps discourage customers from using their broadband service are the loudest critics of Music Freedom, which gives consumers a way to enjoy music streaming without regard to data limits. And as Wells Fargo also noted, “[t]hat T-Mobile isn’t ‘counting this usage against a subscriber’s data bucket represents a unique approach’ and ‘clearly offers further evidence’ of T-Mobile’s ‘value offering.’”^{46/} Such offerings should be commended, not condemned.

Such comments show that if mobile broadband is subjected to new restrictions, the most strident advocates for new rules will seek to impose their own vision of the proper role of ISPs, and will misuse the rules to challenge even consumer-friendly service offerings unrelated to network management. Should the Commission impose new rules on mobile broadband offerings – a decision T-Mobile does not believe is necessary or appropriate – the Commission should ensure that the rules do not limit the ability of mobile providers to offer free or discounted offerings to attract and retain subscribers. There is no need (and no evidence of a need) to restrict these types of consumer-friendly offerings in the name of a rigid and misguided vision of Internet “openness.”

IV. AN EXPANDED TRANSPARENCY RULE WOULD IMPOSE SIGNIFICANT BURDENS WITH NO ADDED CONSUMER BENEFITS

As T-Mobile demonstrated in its initial comments,^{47/} mobile broadband providers already disclose extensive information regarding their network management practices to help consumers make informed decisions about their mobile broadband services. The initial comments in this proceeding confirm that any additional transparency requirements would pose significant difficulties for mobile providers with little or no added benefit for consumers or edge providers.

^{46/} Joe McKnight, *T-Mobile’s Unlimited Data Plan for Music Streaming Prompts Net Neutrality Debate*, COMMUNICATIONS DAILY, Vol. 34, No. 119, at 8 (June 20, 2014).

^{47/} T-Mobile Comments at 8-10.

A. The Existing Rule Requires Ample Transparency On The Part Of Mobile Broadband Providers And Allows For Effective Enforcement Of The Transparency Rules.

Pursuant to the existing transparency rule, mobile broadband providers already disclose meaningful information regarding their network management practices, providing consumers the information they need to make informed choices. Among the currently required disclosures are information regarding network management practices, performance, and commercial terms of services, as well as information on third-party device and application certification procedures, and any criteria for restrictions on use of their network.^{48/} Moreover, the comments demonstrate that to best serve their subscribers, many mobile providers have gone above and beyond the requirements of the existing transparency rule. For example, carriers who are signatories to the CTIA Consumer Code for Wireless Service voluntarily adopted a best practice of notifying customers on wireless plans with data allowances when they approach and exceed their allowance for data usage.^{49/} The CTIA Consumer Code for Wireless Service “also specifies that wireless providers should clearly and conspicuously disclose tools or services that enable consumers to track, monitor, and set limits on data usage.”^{50/}

As commenters have pointed out, any failure on the part of broadband providers to disclose sufficient information is an enforcement issue, not evidence that additional rules are needed.^{51/} The Commission already has the authority to recommend that mobile and other

^{48/} See 47 C.F.R. § 8.3; see also *Open Internet Order* ¶ 98.

^{49/} CTIA Comments at 35; T-Mobile Comments at 9 (discussing how T-Mobile provides its subscribers with tools and information to help them monitor and control data usage).

^{50/} CTIA Comments at 35, *citing* CTIA, Consumer Code for Wireless Service, <http://www.ctia.org/policy-initiatives/voluntary-guidelines/consumer-code-for-wireless-service>.

^{51/} AT&T Comments at 80 (“ISPs are already required to disclose accurate information sufficient for consumers to make informed choices. The rule thus does not need to be changed but simply enforced.”).

broadband providers make specific disclosures it believes are needed for consumers to make informed service choices.^{52/}

The Commission also has ample existing means of enforcing the transparency rule without adopting additional enforcement policies or procedures. The Commission’s three-pronged approach to enforcement – informal complaints, Commission-initiated investigations, and formal complaints – has proven successful, allowing the Commission to take aggressive action when needed in situations involving both competition^{53/} and consumer protection.^{54/} There is no evidence in the record supporting the need for additional enforcement procedures, nor is there any reason to believe that the proposals will in any way enhance compliance with the Commission’s net neutrality requirements. As AT&T stated in its comments, the Commission’s proposal to allow anonymous reporting of complaints would actual hinder compliance with the net neutrality rules by making it “impossible for ISPs to adequately investigate claims and to address issues directly with complainants if problems are identified.”^{55/} For these reasons, rather than imposing additional transparency requirements or enforcement mechanisms, the

^{52/} See, e.g., *Broadband Providers Must Disclose Accurate Information to Protect Consumers*, Public Notice, Enforcement Advisory, 29 FCC Rcd. 8606 (2014); see also Gautham Nagesh, *FCC Questions Verizon Plan to Manage Data Speeds for Some Customers*, WALL ST. J. (July 30, 2014), available at <http://online.wsj.com/articles/fcc-questions-verizon-plan-to-manage-data-speeds-for-some-costumers-1406756051>.

^{53/} *Qwest Corp.*, Notice of Apparent Liability for Forfeiture, 19 FCC Rcd. 5169 (2004) (\$9 million proposed forfeiture regarding local competition issues); *SBC Communications, Inc.*, Forfeiture Order, 17 FCC Rcd. 19923 (2002) (\$6 million forfeiture regarding local competition issues).

^{54/} *Advantage Telecommunications Corp.*, Notice of Apparent Liability for Forfeiture, 28 FCC Rcd. 6843 (2013) (\$7.6 million proposed forfeiture regarding cramming, slamming, and truth-in-billing issues); *Sprint Corp. Compliance with the Commission’s Company-Specific Do-Not-Call Rules*, Order, 29 FCC Rcd. 4759 (EB 2014) (\$7.5 million Consent Decree regarding do-not-call issues); *Verizon Wireless Data Usage Charges*, Order, 25 FCC Rcd. 15107 (EB 2010) (\$25 million consent decree regarding Section 201(b)/truth-in-billing issues).

^{55/} AT&T Comments at 91, n.305.

Commission should continue to use its existing authority and enforcement mechanisms to provide further guidance as needed about disclosures.

B. The Proposed Expanded Transparency Rules Would Place An Undue Burden On Mobile Broadband Providers With No Corresponding Benefit For Consumers Or Edge Providers.

The record confirms that the proposed expansion of the transparency rule would impose significant burdens on mobile broadband providers whose network management practices are constantly evolving. As a result of the ever-changing, real-time challenges associated with managing mobile networks, a new rule requiring detailed technical disclosures would be unworkable, forcing mobile providers to spend significant resources to update their disclosures on a near constant basis.^{56/} Furthermore, there are significant security and competition concerns associated with the types of disclosures proposed by the Commission.^{57/}

Despite the significant burdens associated with the proposed expansion of the transparency rule, there is little evidence that additional disclosures will benefit consumers. It is far more likely that the constant disclosure updates necessitated by an expanded rule would overwhelm consumers' ability to make informed choices. As AT&T states:

There is a real risk of overwhelming consumers with information that would not be understandable to the vast majority of broadband users. Requiring ISPs to disclose information about highly

^{56/} CTIA Comments at 36 (“The changing real-time challenges and needs associated with the management of mobile networks preclude the disclosure of information at the high level of granularity proposed.”).

^{57/} Verizon Comments at 24 (“[A] rule mandating disclosure of even more information . . . could limit broadband providers’ ability to implement innovative new network-management tools and security protocols, because it would require them first to describe any new practices to consumers and edge providers – and, by extension, to competitors, hackers, spammers, and others wishing to exploit the network’s weaknesses.”); AT&T Comments at 87 (“Requiring ISPs to provide usage information on an application-specific basis would be impractical and raise other concerns. Broadband Internet access providers generally cannot identify which applications are responsible for usage without conducting Deep Packet Inspection (‘DPI’). And requiring providers to conduct DPI for all traffic on their networks would surely prompt concerns from privacy and net neutrality advocates alike.”).

technical service metrics would baffle all but the most sophisticated end users, unnecessarily cluttering disclosures and making it more difficult for consumers to ascertain information about other metrics that are actually relevant to their broadband purchasing decisions.^{58/}

This is particularly true for mobile providers because mobile networks, unlike fixed networks, have many metrics such as latency, jitter, and upstream and downstream speed that may change depending on where the user is located and how many other users are located in close proximity. Moreover, in the mobile context, unanticipated events, such as severe weather, a big sports event, or a traffic accident, can affect network usage unexpectedly, from minute-to-minute and place-to-place. In addition, mobile broadband providers are generally competing head-to-head for customers, and making public the extremely detailed and most sensitive network information now proposed could place them at a competitive disadvantage.

To confirm, a new transparency rule is not necessary because the existing transparency rule is working. The disclosures required by the existing transparency rule, when coupled with the voluntary adoption of other best practices, provides consumers with effective and useful information. Additional transparency requirements would provide little or no additional value to consumers.

^{58/} AT&T Comments at 88.

CONCLUSION

For the reasons discussed above, the Commission should decline to impose any additional open Internet requirements on mobile broadband providers.

Respectfully submitted,

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