

November 6, 2014

**VIA ELECTRONIC FILING**

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

**Re: Written Ex Parte Communication**

*Protecting and Promoting the Open Internet, GN Dkt. No. 14-28;  
Framework for Broadband Internet Service, GN Dkt. No. 10-127*

Dear Ms. Dortch:

The open Internet debate has included much discussion of the reasons why mobile broadband is “different” from wired broadband and why any rules need to reflect those differences, just as they did in 2010. There is significant evidence in the record on the technical differences between mobile and fixed,<sup>1</sup> but the robust competitive conditions in the mobile broadband marketplace are a defining differentiator as well. Any new open Internet framework should account for the competitive mobile dynamic and avoid rules or standards under a commercial reasonableness test or any other mandate that would impede the differentiated offerings and choices mobile consumers enjoy today.

Since early in his tenure, Chairman Wheeler has touted “competition, competition, competition”<sup>2</sup> and espoused a “see-saw” theory of regulation, whereby the need for FCC intervention decreases if facts and data show that a market is competitive.<sup>3</sup> As the Chairman has explained, “[i]f there are good things happening [in] the marketplace, if there is

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<sup>1</sup> The record explains in great depth how mobile broadband presents unique technical challenges that demand far more complex and aggressive network management than fixed broadband requires. See CTIA Comments at 14-27; CTIA Reply Comments at 8-14; Dr. Jeffrey H. Reed and Dr. Nishith D. Tripathi, Net Neutrality and Technical Challenges of Mobile Broadband Networks, at 12-19 (Sept. 4, 2014), *appended to* Letter from Scott Bergmann, Vice President – Regulatory Affairs, CTIA, to Marlene H. Dortch, Secretary, FCC, GN Dkt. Nos. 14-28 & 10-127 (Sept. 4, 2014); see also Akamai Comments at 11-12; Alcatel-Lucent Comments at 25; AT&T Reply Comments at 80-83; Cisco Comments at 20-22; CCA Comments at 4-5; CEA Comments at 10; Ericsson Comments at 8-10; GSM Ass’n Comments at 4-5; Qualcomm Comments at 2, 8; TIA Comments at 2, 14-15, 27; T-Mobile Reply Comments at 9-11; Verizon Reply Comments at 30. References herein to “Comments” and “Reply Comments” refer to those pleadings filed in GN Docket Nos. 14-28 and 10-127 on or around July 18, 2014, and September 15, 2014, respectively.

<sup>2</sup> See Prepared Remarks of FCC Chairman Tom Wheeler, Silicon Flatirons, University of Colorado Law School, Boulder, Colorado, at 2 (Feb. 10, 2014), [https://apps.fcc.gov/edocs\\_public/attachmatch/DOC-325531A1.pdf](https://apps.fcc.gov/edocs_public/attachmatch/DOC-325531A1.pdf); Prepared Remarks of FCC Chairman Tom Wheeler, The Ohio State University, Columbus, Ohio, at 6 (Dec. 2, 2013) (“Wheeler Ohio State Remarks”), [https://apps.fcc.gov/edocs\\_public/attachmatch/DOC-324476A1.pdf](https://apps.fcc.gov/edocs_public/attachmatch/DOC-324476A1.pdf).

<sup>3</sup> See Wheeler Ohio State Remarks at 4 (“If the facts and data determine that a market is competitive, the need for FCC intervention decreases. *I have zero interest in imposing new regulations on a competitive market just because we can.* I have repeatedly advocated the “see-saw” rule – that when competition is high, regulation can be low.”) (emphasis added).

competition, then the [FCC] doesn't have to do much"<sup>4</sup> and "regulation can be low."<sup>5</sup> This philosophy applies to Internet openness: as the Chairman has stated, competition is "[o]ne of the most effective tools for ensuring Internet openness."<sup>6</sup>

Any new open Internet rules should recognize the undeniable differences in the competitive landscape between fixed and mobile broadband. The contrast between fixed and mobile is stunning: while 15% of U.S. homes have **three or more wired** broadband providers, 82% of Americans are served by **four or more mobile** broadband providers.<sup>7</sup> Calls for regulatory parity and prescriptive regulation designed for wireline providers will only serve to deny mobile consumers the choices they enjoy today.

Moreover, in today's intensely competitive wireless market, mobile broadband providers seeking to win and keep customers fully embrace Internet openness. The mobile market demands it, and the FCC's mobile-specific approach has enabled the innovation and experimentation that consumers benefit from every day. As T-Mobile has explained, "[i]mposing 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."<sup>8</sup>

The Commission should put the Chairman's see-saw philosophy into practice as it considers mobile broadband and open Internet policy. Mobile broadband remains an early-stage technology – nascent as compared to fixed broadband – and continues to evolve from 1G through 4G and beyond. Continued flexibility will encourage further innovation and development that may, ultimately, allow wireless to be a more competitive alternative to wireline broadband services from cable and telcos. The Commission should maintain the mobile-specific approach that the Commission embraced in 2010 and allow all Americans to continue to benefit from the significant degree of competitive differentiation and experimentation in the mobile industry.

***The FCC got it right in 2010: wireless is different and deserves a mobile-specific regulatory approach when it comes to open Internet regulation.*** The Commission's decision to take a measured approach to its open Internet rules for mobile broadband was driven in significant part by competition among mobile providers. In addition to finding that

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<sup>4</sup> David S. Cohen, *FCC Chairman Voices Clear But Cautious Support for Net Neutrality*, VARIETY, Jan. 8, 2014, <http://variety.com/2014/digital/news/fcc-chairman-voices-clear-but-cautious-support-for-net-neutrality-1201037827/#> (quoting FCC Chairman Tom Wheeler at the 2014 Consumer Electronics Show).

<sup>5</sup> Wheeler Ohio State Remarks at 4.

<sup>6</sup> Remarks of FCC Chairman Tom Wheeler, National Cable & Telecommunications Association, at 4 (Apr. 30, 2014), [https://apps.fcc.gov/edocs\\_public/attachmatch/DOC-326852A1.pdf](https://apps.fcc.gov/edocs_public/attachmatch/DOC-326852A1.pdf).

<sup>7</sup> See Wheeler 1776 Remarks; *Annual Report and Analysis of Competitive Market Conditions With Respect to Mobile Wireless*, Sixteenth Report, 28 FCC Rcd 3700, 3749-50 ¶ 48 (2013).

<sup>8</sup> T-Mobile Reply Comments at 14.

consumers “have more choices for mobile broadband” than for fixed broadband, the Commission also observed that mobile broadband was “rapidly evolving” and recognized “meaningful recent moves toward openness in and on mobile broadband networks.”<sup>9</sup> Today, the mobile broadband market is even more competitive than it was in 2010.

***New facts and data confirm that mobile broadband is intensely competitive and “good things” are happening in the market today.*** CTIA recently showed that, among other things, 97% of U.S. consumers are now able to choose from at least three wireless carriers and wireless penetration exceeds 104%.<sup>10</sup> The U.S. also registers 47% of the world’s LTE subscribers despite having only 5% of its overall wireless subscribers,<sup>11</sup> and 30% of U.S. subscribers have LTE service compared to only 4% of Europeans.<sup>12</sup> And due to massive investments in infrastructure,<sup>13</sup> including a record \$33 billion in 2013,<sup>14</sup> over 95% of Americans have access to wireless broadband download speeds of greater than 10 Mbps as of mid-2013.<sup>15</sup> In addition, U.S. smartphone speeds have increased eight times since 2010.<sup>16</sup> Meanwhile, prices in the U.S. keep dropping. Overall, the wireless Consumer Price Index (CPI) fell again in 2013. From December 2005 to January 2014, the Wireless CPI fell 10%,

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<sup>9</sup> *Preserving the Open Internet*, Report and Order, 25 FCC Rcd 17905, 17956-57 ¶¶ 94-95 (2010), *aff’d in part, vacated and remanded in part sub nom. Verizon v. FCC*, 740 F.3d 623 (D.C. Cir. 2014). Of course, the Commission also noted that mobile networks “present operational constraints” that fixed broadband networks typically do not encounter. *Id.* at 17957 ¶ 95. As CTIA has previously documented, those technical constraints continue to apply today and have become even more acute as subscribers continue to adopt mobile broadband, mobile broadband data traffic continues to surge, and mobile broadband is integrated into entirely new sectors of our economy, such as mHealth, mobile education, connected vehicles, mCommerce and more.

<sup>10</sup> See Letter from Scott K. Bergmann, Vice President, Regulatory Affairs, CTIA – The Wireless Association®, to FCC Chairman Tom Wheeler, *et al.*, WT Dkt. No. 13-135 (Oct. 2, 2014) (citing CTIA, CTIA WIRELESS INDUSTRY INDICES REPORT, YEAR-END 2013, at 21 (June 2014)).

<sup>11</sup> INFORMA TELECOMS & MEDIA GROUP, WCIS + DATABASE, SUBSCRIPTIONS & KPIS (4Q2013).

<sup>12</sup> *Id.*

<sup>13</sup> U.S. carriers in 2013 spent about four times more on network infrastructure per subscriber than the rest of the world. See DIDIER SCEMAMA, *ET AL.*, 2014 WIRELESS CAPEX: BRICS & EUROPE TO PICK UP THE SLACK, BANK OF AMERICA MERRILL LYNCH, GLOBAL TELECOM EQUIPMENT, at Table 2 (Jan. 13, 2014); see also GLEN CAMPBELL, 2014: THE YEAR AHEAD, BANK OF AMERICA MERRILL LYNCH, GLOBAL WIRELESS MATRIX 4Q13, at Tables 1 and 2 (Jan. 8, 2014).

<sup>14</sup> See CTIA, Annual Wireless Industry Survey, Year-End U.S. Figures from CTIA’s Annual Survey Report (June 2014), <http://www.ctia.org/your-wireless-life/how-wireless-works/annual-wireless-industry-survey>.

<sup>15</sup> Declaration of Andres V. Lerner, Competition in Broadband and “Internet Openness,” at ¶ 82 (July 15, 2014), *appended to Verizon Comments*.

<sup>16</sup> See CTIA, Since 2010, U.S. Smartphone Speeds Increased Eight Fold, <http://www.ctia.org/resource-library/facts-and-infographics/archive/since-2010-us-smartphone-speeds-increased-eight-fold> (last visited Oct. 29, 2014) (citing Cisco, VNI Forecast Highlights, United States - Accelerating Network Speeds (Mobile Speed), [http://www.cisco.com/web/solutions/sp/vni/vni\\_forecast\\_highlights/index.html](http://www.cisco.com/web/solutions/sp/vni/vni_forecast_highlights/index.html) (last visited Oct. 29, 2014); CISCO, CISCO VISUAL NETWORKING INDEX (VNI) GLOBAL IP TRAFFIC FORECAST, 2010–2015, Table 8 (2010)).

while the overall CPI for all items increased 18.9%.<sup>17</sup> Indeed, the record shows that price declines for mobile broadband services have “accelerated dramatically in recent months,” as carriers introduce ever-more innovative data plans that are “shaking up the industry.”<sup>18</sup>

***Differentiation is at the core of the mobile broadband experience today.*** The record also demonstrates that differentiation in service – far from weakening an open Internet – is providing extraordinary benefits for consumers.<sup>19</sup> Last year alone, the four major carriers offered nearly 700 combinations of smartphone plans, and a family of five had in excess of 250 choices to select from.<sup>20</sup> Innovation abounds as providers offer unique services to attract and retain customers. For example, T-Mobile’s Music Freedom offering allows users to stream unlimited amounts of music from a wide range of streaming sites without counting towards a plan’s data limits.<sup>21</sup> And AT&T’s Sponsored Data plan allows edge providers to reach consumers and new audiences without impacting consumers’ individual data allowance.<sup>22</sup> Differentiation is becoming especially crucial as Americans embrace the “Connected Life”: From vehicle-to-vehicle, real-time traffic and weather, and other helpful updates to keep drivers and passengers safer when on the road, to banking, healthcare, and connected homes – connected life innovations are either available or will soon be reality, as 50 billion connected devices will be sharing information with each other by 2020.<sup>23</sup>

***Regulators have highlighted the competitive benefits of the wireless market.*** In talking about today’s wireless marketplace, Chairman Wheeler recently remarked that “the American consumer has been the beneficiary” of “new pricing and new services that have

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<sup>17</sup> See U.S. DEPARTMENT OF LABOR, BUREAU OF LABOR STATISTICS, CONSUMER PRICE INDEX: ALL URBAN CONSUMERS – (CPI-U), U.S. CITY AVERAGES, WIRELESS TELEPHONE SERVICES (Series ID CUUR0000SEED03), <http://data.bls.gov/cgi-bin/dsrv> (last visited Feb. 20, 2014); CONSUMER PRICE INDEX: ALL URBAN CONSUMERS – (CPI-U), U.S. CITY AVERAGES, ALL ITEMS, [www.bls.gov/ro5/cpiushistorical.pdf](http://www.bls.gov/ro5/cpiushistorical.pdf) (last visited Feb. 20, 2014).

<sup>18</sup> See AT&T Reply Comments at 60-64.

<sup>19</sup> See CTIA Reply Comments at 2, 16-19; see also T-Mobile Reply Comments at 3 (“The Commission needs to preserve the ability of mobile broadband carriers to differentiate themselves from their competition.”); *Wireless Carrier Executives Say They Need Flexibility to Manage Networks*, TR DAILY, Oct. 14, 2014, (quoting T-Mobile Chief Technology Officer and Executive Vice President, Neville Ray, as stating, “It’s very, very difficult to predict what’s going to happen over the next 12, 18, 24 months, and we need all the flexibility we can possibly have”), <http://www.tr.com/online/trd/2014/td101414/td101414-01.htm#TopOfPage>.

<sup>20</sup> Thomas Gryta, *Inside the Phone-Plan Pricing Puzzle*, THE WALL STREET JOURNAL, July 31, 2013, <http://online.wsj.com/articles/SB10001424127887324110404578630110732955422>.

<sup>21</sup> See T-Mobile Reply Comments at 17-19; *T-Mobile Adds Rdio, Songza Grooveshark to Free Data Program*, BILLBOARD, Aug. 28, 2014, <http://www.billboard.com/biz/articles/news/digital-and-mobile/6236386/t-mobile-adds-rdio-songza-grooveshark-to-free-data>.

<sup>22</sup> See AT&T, Sponsored Data, [http://www.att.com/att/sponsoreddata/en/index.html#fbid=B6j\\_iIC-vSt](http://www.att.com/att/sponsoreddata/en/index.html#fbid=B6j_iIC-vSt) (last visited Oct. 28, 2014); AT&T Reply Comments at 77-78.

<sup>23</sup> See CTIA Reply Comments at 6.

been spurred by competition.”<sup>24</sup> And earlier this year, Department of Justice Assistant Attorney General for Antitrust Bill Baer looked “long and hard at the wireless industry” and found that “the [wireless] market is thriving and consumers are benefitting from the current competitive dynamic.”<sup>25</sup> These findings echo what the facts and data clearly show: the U.S. wireless market is a vibrant and competitive industry delivering welfare-enhancing benefits to consumers across the nation.<sup>26</sup>

***The mobile broadband market demands openness, and any commercially reasonableness requirement will harm consumers and competition.*** The record in this proceeding shows that “consumers expect and demand openness from their mobile broadband service provider.”<sup>27</sup> Given the many “good things” happening in the wireless marketplace, mobile providers can be expected to act in commercially reasonable ways for the same reasons that companies in hundreds of other ultra-competitive markets do: consumers and the competitive market command it. Simply put, providers that fail to act in a commercially reasonable manner will see their customers go elsewhere, and this competitive reality makes wireless different. The record, moreover, confirms that there is no reliable evidence of a threat to mobile broadband openness.<sup>28</sup> As a result, as Sprint and others have explained, “expansive open Internet regulations are less crucial for, and would be unnecessarily harmful to, mobile broadband providers in light of market forces that foster openness.”<sup>29</sup> Additional open Internet regulation of mobile broadband would undermine the very consumer experience the Commission is seeking to protect.<sup>30</sup> Indeed, more intrusive regulation in the form of a commercially reasonableness standard or other new requirements

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<sup>24</sup> Tom Wheeler, Chairman, Federal Communications Commission, Prepared Remarks, 2014 CTIA Show, Las Vegas, NV (Sept. 9, 2014) (“Wheeler CTIA Show Remarks”), [http://transition.fcc.gov/Daily\\_Releases/Daily\\_Business/2014/db0909/DOC-329271A1.pdf](http://transition.fcc.gov/Daily_Releases/Daily_Business/2014/db0909/DOC-329271A1.pdf); see also Wheeler 1776 Remarks at 5 (indicating that “competition exists” in the mobile wireless marketplace).

<sup>25</sup> Edward Wyatt, *Wireless Mergers Will Draw Scrutiny, Antitrust Chief Says*, N.Y. TIMES, Jan. 30, 2014, at B3 (emphasis added), [http://dealbook.nytimes.com/2014/01/30/wireless-mergers-will-draw-scrutiny-antitrust-chief-says/?\\_php=true&\\_type=blogs&\\_r=0](http://dealbook.nytimes.com/2014/01/30/wireless-mergers-will-draw-scrutiny-antitrust-chief-says/?_php=true&_type=blogs&_r=0); see also Bill Baer, Assistant Attorney General, Antitrust Division, U.S. Department of Justice, “Reflections on Antitrust Enforcement in the Obama Administration,” Remarks as Prepared for Delivery to the New York State Bar Association (Jan. 30, 2014) (“Competition today is driving enormous benefits in the direction of the American Consumer.”), <http://www.justice.gov/atr/public/speeches/303269.pdf>.

<sup>26</sup> See also T-Mobile Reply Comments at 3 (“In the absence of rules and in the face of strong competition, wireless providers have developed innovative offerings consumers want.”).

<sup>27</sup> Sprint Reply Comments at 7; see also AT&T Reply Comments at 74; T-Mobile Reply Comments at 16; Verizon Reply Comments at 62.

<sup>28</sup> See CTIA Reply Comments at 17.

<sup>29</sup> Sprint Reply Comments at 17; see AT&T Reply Comments at 74 (“Th[e] ability of consumers to vote with their feet serves as a powerful deterrent to any effort to limit Internet openness in the mobile ecosystem.”); T-Mobile Reply Comments at 2 (“Robust retail competition in the mobile broadband market already effectively constrains mobile provider behavior.”); Verizon Reply Comments at 25 (“Competition has led mobile wireless broadband providers to embrace openness, even absent prescriptive regulation.”).

<sup>30</sup> See *id.* at 2, 54; T-Mobile Reply Comments at 3.

on mobile broadband providers would strongly deter the competitive differentiation that lies at the heart of the mobile broadband ecosystem and would thus harm consumers.<sup>31</sup> “The Commission needs to preserve the ability of mobile broadband carriers to differentiate themselves from their competition,”<sup>32</sup> and should retain a mobile-specific approach to any rules or standards.

***The reasonable network management “exception” is an important, but not sufficient safeguard.*** Some have suggested that differences related to mobile broadband can be addressed through the Commission’s reasonable network management exception. The exception is important, as is the definition’s recognition that “particular network architecture and technology” must be taken into account. By necessity, in highly managed mobile broadband networks, reasonable network management is the norm, not an exception. That exception, however, cannot capture the competitive or dynamic differences related to mobile broadband. Simply allowing for a reasonable network management “exception” to any commercially reasonableness standard or other new rules for mobile broadband will not overcome the underlying problem – new rules would stifle innovation and risk homogenized mobile services, causing substantially more consumer harm in the mobile context where the market already deters any consideration of limits on Internet openness. A genuine mobile-specific approach to Open Internet is needed to preserve the ability of mobile operators to provide the innovations, differentiation, and experimentation Americans have come to expect.

***Concern that mobile competition is insufficient to assure Internet openness based on the “walled garden” of the past is misconceived.*** It has been suggested that competition may not assure Internet openness because “walled gardens” existed in the early years of mobile broadband – despite “multi-carrier competition” – due to carriers’ “control over the last mile.”<sup>33</sup> Technological restraints, however, and not control over last mile connections, led to walled gardens in the early mobile Internet. At the time, device manufacturers used their own operating systems, which meant that apps had to be designed to work with specific devices on each carrier’s 2G network and rigorously tested to ensure proper functionality. With the introduction of the iPhone in 2007 and the evolution to more robust 3G networks, consumer demand and data usage exploded,<sup>34</sup> other manufacturers developed competing devices using common interfaces, and providers invested billions to upgrade their networks

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<sup>31</sup> See CTIA Reply Comments at 27.

<sup>32</sup> T-Mobile Reply Comments at 3; see *Wireless Carrier Executives Say They Need Flexibility to Manage Networks*, TR DAILY, Oct. 14, 2014 (noting that Sprint’s Vice President-Technology Innovation & Architecture, Ron Marquardt, highlighted the “impact on competitiveness” of net neutrality regulations), <http://www.tr.com/online/trd/2014/td101414/td101414-01.htm#TopOfPage>; Sprint Reply Comments at 7; see also AT&T Reply Comments at 74; T-Mobile Reply Comments at 16; Verizon Reply Comments at 62.

<sup>33</sup> See Wheeler CTIA Show Remarks at 3.

<sup>34</sup> For example, global total monthly data traffic in mobile networks expanded from well below 50 Petabytes in 2007 to approximately 1,500 Petabytes by 2013. See ERICSSON, ERICSSON MOBILITY REPORT, at 9 (June 2013), <http://www.ericsson.com/res/docs/2013/ericsson-mobility-report-june-2013.pdf>.

to keep pace with the mobile market.<sup>35</sup> Thus, “wireless competition itself created the virtuous circle of innovation and investment in wireless networks, handsets, operating systems, and applications that created the ‘abundance of an open [Internet] ecosystem.’”<sup>36</sup> As Sprint concludes, the mobile market reality is that “[p]roviders who do not keep pace with consumer demand for Internet openness will inevitably suffer and may not survive.”<sup>37</sup>

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The Commission’s regulatory see-saw approach cautions against strict platform parity and unnecessary open Internet regulation for mobile broadband that risks harming both competition and consumers. The Commission should retain a mobile-specific approach and reject proposals to apply a generic commercially reasonableness requirement or similar mandates on mobile broadband providers that fail to reflect that wireless is different – a fact that the Commission recognized in 2010 when it declined to impose a non-discrimination standard for wireless based on a track record of vibrant competition, innovation, and openness in mobile wireless. These differences are even more pronounced today, and strongly support mobile-specific rules reflective of this dynamically changing marketplace, vibrant competitive landscape, and track record of pro-consumer differentiation and innovation.

Pursuant to Section 1.1206 of the Commission’s rules, 47 C.F.R. § 1.1206, this letter is being electronically filed via ECFS. If you have any questions, please do not hesitate to contact me.

Sincerely,

*/s/ Scott K. Bergmann*

Scott K. Bergmann  
Vice President, Regulatory Affairs  
CTIA – The Wireless Association®

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<sup>35</sup> See AT&T Reply Comments at 75-77.

<sup>36</sup> *Id.* at 76-77 (quoting Wheeler CTIA Show Remarks at 3).

<sup>37</sup> Sprint Reply Comments at 7.