

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

In the Matter of	)	
	)	
Inquiry Concerning the Deployment of Advanced	)	GN Docket No. 15-191
Telecommunications Capability to All Americans	)	
in a Reasonable and Timely Fashion, and Possible	)	
Steps to Accelerate Such Deployment Pursuant to	)	
Section 706 of the Telecommunications Act of	)	
1996, as Amended by the Broadband Data	)	
Improvement Act	)	

**COMMENTS OF VERIZON**

Kathleen M. Grillo  
*Of Counsel*

William H. Johnson  
Ian J. Dillner  
VERIZON  
1320 North Courthouse Road  
9th Floor  
Arlington, VA 22201  
(703) 351-3060

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**I. INTRODUCTION AND SUMMARY**

There should be no doubt that broadband is being deployed in a reasonable and timely manner throughout the United States. Verizon and others have explained in detail, year after year and in various dockets, that broadband providers' substantial investments in next-generation fixed and mobile broadband networks have provided U.S. consumers with access to an ever-growing array of innovative and high-quality services.<sup>2</sup> The Commission historically had agreed with that assessment, reversing course only in the past several years—ironically, at a time when broadband deployment has expanded even further, particularly due to the widespread deployment of mobile broadband services in general and 4G LTE services.

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<sup>1</sup> The Verizon companies participating in this filing (“Verizon”) are the regulated, wholly-owned subsidiaries of Verizon Communications, Inc.

<sup>2</sup> See generally, e.g., Comments of Verizon on the Tenth Broadband Progress Notice of Inquiry, GN Docket No. 14-126, at 4-27 (filed Sept. 4, 2014) (“Verizon Tenth NOI Comments”); Reply Comments of Verizon on the Tenth Broadband Progress Notice of Inquiry, GN Docket No. 14-126, at 2-3 (filed Sept. 19, 2014) (“Verizon Tenth NOI Reply Comments”); Comments of Verizon, WT Docket No. 15-125, at 5-23 (filed June 29, 2015) (“Verizon Wireless Competition Comments”).

As the Commission embarks on its latest broadband progress inquiry, it should not manufacture new tests to justify a negative assessment of the status of broadband deployment in the United States and instead provide a straightforward assessment of “whether advanced telecommunications capability is being deployed to all Americans in a reasonable and timely fashion.”<sup>3</sup> First and foremost, this requires the Commission to recognize and incorporate mobile broadband service into its assessment. The failure of previous analyses to reflect *all* broadband options that are available to and used by consumers was a persistent flaw in methodology, as it ignored both marketplace trends and the technology-neutral language of the statute.<sup>4</sup> The *Eleventh NOI* signals a new approach that recognizes mobile broadband, and the Commission should take this opportunity to make this correction.<sup>5</sup> However, the Commission should reject the notion that *both* fixed and mobile broadband options must be present in order to conclude that advanced telecommunications capability has been deployed in a reasonable and timely manner. In addition, the Commission should refrain from adding new criteria to its assessment that are unnecessary or unreliable, such as latency and service quality.

Finally, as in all things, the Commission should act in a manner that promotes continued broadband investment and innovation, including by foregoing unnecessary regulation of broadband. In particular, the Commission should focus its regulatory efforts on initiatives that would facilitate the continued growth of broadband networks and thus spur even more choice for

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<sup>3</sup> 47 U.S.C. § 1302(b).

<sup>4</sup> *Id.* § 1302(d)(1) (defining “advanced telecommunications capability” “without regard to any transmission media or technology”).

<sup>5</sup> *Inquiry Concerning the Deployment of Advanced Telecommunications Capability to All Americans in a Reasonable and Timely Fashion, and Possible Steps to Accelerate Such Deployment Pursuant to Section 706 of the Telecommunications Act of 1996, as Amended by the Broadband Data Improvement Act*, Eleventh Broadband Progress Notice of Inquiry, GN Docket No. 15-191, at ¶ 5 (rel. Aug. 7, 2015) (“*Eleventh NOI*”).

consumers. For example, to help further the United States' lead in mobile broadband, the Commission should take steps to make more spectrum resources available and to remove barriers to rights of way and wireless tower siting.

## **II. BROADBAND IS BEING DEPLOYED IN A REASONABLE AND TIMELY FASHION**

The broadband marketplace in the United States continues to thrive. As the Commission already is well aware, broadband providers of all types and with all kinds of platforms—traditional telephone companies, cable operators, wireless providers, and satellite providers—are investing heavily to deploy new broadband technologies, such as fiber-to-the-premises, DOCSIS 3.0, 4G LTE wireless services, fixed wireless, and next-generation satellite broadband. The results for broadband deployment are staggering. For instance, even under the restrictive definition adopted by the Commission for the first time last year (a 25 Mbps/3 Mbps threshold), NTIA's National Broadband Map shows that 85.62 percent of household units and 86.73 percent of the U.S. population have access to broadband services.<sup>6</sup> These figures represent a steady increase from the previous year.<sup>7</sup> And data on lower speed thresholds that better reflect the speeds that many customers choose today show that broadband is nearly ubiquitous throughout the United States: 99.73 percent of household units and 99.82 percent of the U.S. population have access to broadband service at any speed.<sup>8</sup>

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<sup>6</sup> Broadband Statistics Report: Access to Broadband Technology by Speed, at 4, <http://www.broadbandmap.gov/download/Technology%20by%20Speed.pdf> (data as of June 2014, report published Mar. 2015) (“NBM Broadband Statistics Report”).

<sup>7</sup> Broadband Statistics Report: Access to Broadband Technology by Speed, at 4, [http://www.broadbandmap.gov/download/TechnologyBySpeedDec2013\\_updated.pdf](http://www.broadbandmap.gov/download/TechnologyBySpeedDec2013_updated.pdf) (data as of December 2013, report published July 2014) (data as of December 2013, showing that 84.91 percent of household units and 85.66 percent of the U.S. population had access to broadband service with download speeds in excess of 25 Mbps).

<sup>8</sup> NBM Broadband Statistics Report at 3.

Mobile broadband is just as ubiquitous as fixed broadband. As a result of U.S. wireless providers' substantial investments in their networks—more than \$32 billion in 2014 alone, and \$430 billion since 1985<sup>9</sup>—99.7 percent of the U.S. population lives in areas with mobile broadband coverage (100 percent of the non-rural population, and 98.5 percent of the non-rural population).<sup>10</sup> Virtually all U.S. consumers not only enjoy mobile broadband access, but mobile broadband competition: 98.8 percent of the population has access to two or more mobile broadband providers, and 93.4 percent has three or more mobile broadband options.<sup>11</sup>

The Commission has historically—and misguidedly—excluded mobile broadband from its Section 706 assessment of broadband deployment, citing concerns regarding the quality and reliability of data about these services as well as perceived “limitations” on these services as they were provided at the time.<sup>12</sup> But as Verizon has explained, that approach rendered the Commission's findings over the last several years incomplete and inaccurate.<sup>13</sup> The *Eleventh*

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<sup>9</sup> CTIA, Annual Year-End 2014 Top-Line Survey Results, at 11 [http://www.ctia.org/docs/default-source/Facts-Stats/ctia\\_survey\\_ye\\_2014\\_graphics.pdf?sfvrsn=2](http://www.ctia.org/docs/default-source/Facts-Stats/ctia_survey_ye_2014_graphics.pdf?sfvrsn=2).

<sup>10</sup> *Annual Report and Analysis of Competitive Market Conditions With Respect to Mobile Wireless, Including Commercial Mobile Services*, Seventeenth Report, 29 FCC Rcd 15311 cht. III.A.5 (2014) (“*Seventeenth Report*”).

<sup>11</sup> *Id.* cht. III.A.2.

<sup>12</sup> *Eleventh NOI* ¶ 5 (citing *Inquiry Concerning the Deployment of Advanced Telecommunications Capability to All Americans in a Reasonable and Timely Fashion, and Possible Steps to Accelerate Such Deployment Pursuant to Section 706 of the Telecommunications Act of 1996, as Amended by the Broadband Data Improvement Act*, Broadband Progress Report and Notice of Inquiry on Immediate Action to Accelerate Deployment, 30 FCC Rcd 1375 ¶ 1 n.1 (2015)).

<sup>13</sup> Verizon Tenth NOI Comments at 19 (noting that the Commission's Sixth, Seventh, and Eighth Broadband Progress Reports all concluded that broadband was not being deployed in a reasonable and timely fashion); *id.* at 20-21 (explaining the analytical significance of excluding mobile broadband services).

*NOI*'s recognition that mobile broadband should be incorporated into Section 706 broadband progress inquiries going forward thus is an overdue course correction.<sup>14</sup>

Of note is the widespread deployment of 4G LTE services. As reported last year in the *Seventeenth Report* on mobile wireless competition, as of January 2014, LTE is available to 98.5 percent of the U.S. population, a remarkable increase from coverage of 67.5 percent of the U.S. population just two years earlier.<sup>15</sup> That statistic offers a compelling statement in its own right regarding the near-ubiquity of mobile broadband across the United States, but to put it in even clearer perspective, LTE deployment in the U.S. far surpasses that in Europe, where only 63 percent of the population has access to LTE.<sup>16</sup>

For its part, Verizon has been a leader in 4G LTE deployment. Verizon's 4G LTE service is available to 98 percent of the U.S. population—nearly 308 million people.<sup>17</sup> Further, Verizon has worked to bring the benefits of LTE to rural areas through its LTE in Rural America (LRA) program, which extended deployment to cover 2.6 million people in rural areas and counts 21 rural wireless carriers as participants.<sup>18</sup> All told, 54 operators—Verizon, AT&T, Sprint, and T-Mobile, together with a large number of regional and smaller operators—currently

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<sup>14</sup> See, e.g., *Eleventh NOI* ¶¶ 5, 9.

<sup>15</sup> *Id.* ¶ 59 & tbl.III.A.2.

<sup>16</sup> GSMA, *The Mobile Economy 2015*, at 12, [http://www.gsamobileeconomy.com/GSMA\\_Global\\_Mobile\\_Economy\\_Report\\_2015.pdf](http://www.gsamobileeconomy.com/GSMA_Global_Mobile_Economy_Report_2015.pdf).

<sup>17</sup> Verizon Wireless, *The Verizon Wireless 4G LTE Network*, <http://www.verizonwireless.com/news/LTE/Overview.html>.

<sup>18</sup> Verizon Wireless Competition Comments at 20 (citing Paul Macchia, *Verizon's LTE in Rural America (LRA) Program Celebrates Five Years of Delivering Advanced Wireless Services to Rural Customers*, Verizon News Center (May 15, 2015), <http://www.verizonwireless.com/news/article/2015/05/verizons-lte-in-rural-america-lraprogram-celebrates-five-years-of-delivering-advanced-wireless-services-to-rural-customers.html>).

offer commercial LTE across the country.<sup>19</sup> This leadership continues as carriers like Verizon set plans for ever-better 5G mobile broadband networks.<sup>20</sup>

Providers also continue to invest in next-generation fixed broadband networks. Verizon began rolling out its all-fiber FiOS network in 2004 and continues to invest in and deploy this network. Verizon's FiOS network passes almost 20 million households,<sup>21</sup> an increase since the Commission's last broadband progress inquiry.<sup>22</sup> Verizon's current FiOS Internet offerings range from 25 Mbps to 500 Mbps symmetrical (upload and download) speeds,<sup>23</sup> and 64 percent of FiOS Internet customers subscribe to service plans with speeds of 50 Mbps or higher.<sup>24</sup> And Verizon continues to invest and innovate, recently testing next-generation 10 Gbps speeds over its all-fiber network.<sup>25</sup> To compete with fiber services like FiOS, cable firms have rolled out advanced high-speed "DOCSIS 3.0" broadband technology over the past several years, now

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<sup>19</sup> 4G Americas LTE Deployment Status Update, North America – USA/Canada, Sept. 1, 2015, [http://www.4gamericas.org/files/7214/4112/1452/North\\_America\\_9.1.15.pdf](http://www.4gamericas.org/files/7214/4112/1452/North_America_9.1.15.pdf).

<sup>20</sup> See Verizon News Release, *Verizon sets roadmap to 5G technology in U.S.; Field trials to start in 2016*, Sept. 8, 2015, <http://www.verizon.com/about/news/verizon-sets-roadmap-5g-technology-us-field-trials-start-2016> ("The expected benefits of 5G, as described during Verizon's inaugural forum, include about 50 times the throughput of current 4G LTE, latency in the single milliseconds, and the ability to handle exponentially more Internet-connected devices to accommodate the expected explosion of the Internet of Everything").

<sup>21</sup> Thomson Reuters StreetEvents, Edited Transcript, Verizon Communications Inc. Q1 2015 Earnings Call, April 21, 2015, at 11, <http://www.verizon.com/about/investors/quarterly-reports/1q-2015-quarter-earnings-conference-call-webcast>.

<sup>22</sup> Verizon Tenth NOI Comments at 7 (noting that the FiOS network passed more than 19 million premises).

<sup>23</sup> Verizon, FiOS – The Power You Need, <http://www.verizon.com/home/fios/>.

<sup>24</sup> Thomson Reuters Street Events, Edited Transcript, Verizon Communications Inc. Q2 2015 Earnings Call, July 21, 2015, at 6, <http://www.verizon.com/about/investors/quarterly-reports/2q-2015-quarter-earnings-conference-call-webcast>.

<sup>25</sup> Verizon News Release, *Verizon Tests Superfast 10 Gigabit Internet Service Using Newest Optical Technology: Introduction of High-Powered Technology Will Open the Door for Ultrafast Service of Up to 80 Gigabits per Second Over Fiber Optic Platform*, Aug. 11, 2015, <http://www.verizon.com/about/news/verizon-tests-superfast-10-gigabit-internet-service-using-newest-optical-technology>.

available to over 85 percent of homes in the United States.<sup>26</sup> This upgraded infrastructure will also facilitate increasing broadband speeds in the near future with next generation technology (so-called DOCSIS 3.1), with speeds close to 1 Gbps.<sup>27</sup> Cable companies also have begun deploying fiber to the home (FTTH) to respond to competitive threats.<sup>28</sup>

In light of this data, there should be no doubt that broadband—whether supported by fixed or mobile technologies—is being deployed in the United States in a reasonable and timely fashion. Recognizing mobile offerings in the broadband progress inquiry will harmonize the Commission’s approach with NTIA’s, which has incorporated mobile broadband into its analysis of national broadband availability.<sup>29</sup> And more fundamentally, doing so will ensure that the Commission’s methodology takes proper account of current options available to consumers.

### **III. THE COMMISSION SHOULD REFRAIN FROM MANDATING THAT BOTH FIXED AND MOBILE SERVICES BE AVAILABLE TO SUPPORT A POSITIVE FINDING IN ITS SECTION 706 INQUIRY**

While the Commission should incorporate mobile broadband into its analysis, it should reject the suggestion in the *Eleventh NOI* that consumers must have access to *both* fixed and mobile options before broadband will be deemed to have been deployed in a reasonable and

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<sup>26</sup> See NCTA, Industry Data, <https://www.ncta.com/industry-data>.

<sup>27</sup> See, e.g., Sean Buckley, *Cable sees DOCSIS 3.1 as the competitive response to Google Fiber, telcos' 1 Gbps drive*, *Fierce Telecom*, Sept. 9, 2015, <http://www.fiercetelecom.com/story/cable-sees-docsis-31-competitive-response-google-fiber-telcos-1-gbps-drive/2015-09-09>; Jeff Baumgartner, *Comcast Sets Table for DOCSIS 3.1 Trials*, *Multichannel News*, July 24, 2015, <http://www.multichannel.com/blog/bauminator/comcast-sets-table-docsis-31-trials/392474> (describing plans for a market trial in the fourth quarter of 2015); Rich Nelson, *DOCSIS 3.1 Enables Rapid Deployment of Gigabit Broadband*, *Light Reading*, July 7, 2015, <http://www.lightreading.com/cable/docsis/docsis-31-enables-rapid-deployment-of-gigabit-broadband/a/d-id/716814>.

<sup>28</sup> See Sean Buckley, *Cable sees DOCSIS 3.1 as the competitive response to Google Fiber, telcos' 1 Gbps drive*, *Fierce Telecom*, Sept. 9, 2015, <http://www.fiercetelecom.com/story/cable-sees-docsis-31-competitive-response-google-fiber-telcos-1-gbps-drive/2015-09-09>.

<sup>29</sup> See, e.g., NBM Broadband Statistics Report at 2 (graphic showing wireless broadband availability by speed).

timely fashion.<sup>30</sup> There is no legal or policy basis for requiring the presence of multiple different technologies to make an affirmative finding under Section 706.

First, this proposal is contrary to Section 706’s mandate.<sup>31</sup> To meet its statutory responsibilities, the Commission must determine simply “whether advanced telecommunications capability is being deployed to all Americans in a reasonable and timely fashion,”<sup>32</sup> not whether such capability is being deployed using each of multiple technological platforms. Indeed, Section 706 is technology-neutral: “[t]he term ‘advanced telecommunications capability’ is defined, *without regard to any transmission media or technology*, as high-speed, switched, broadband telecommunications capability that enables users to originate and receive high-quality voice, data, graphics, and video telecommunications *using any technology*.”<sup>33</sup> Congress thus clearly intended that the Commission consider all types of broadband in its analysis. The *Eleventh NOI* itself acknowledges as much, noting “the section 706 instruction to define advanced telecommunications capability ‘without regard to any transmission media or technology.’”<sup>34</sup> That “instruction” plainly prohibits the Commission from carving up the broadband marketplace based on technology.

Moreover, while the *Eleventh NOI* demonstrates an understanding that mobile broadband must be considered “advanced telecommunications capability,” it continues to labor under misperceptions about the capabilities and uses of mobile broadband services, positing that fixed

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<sup>30</sup> *Eleventh NOI* ¶¶ 7, 18.

<sup>31</sup> See generally Verizon Tenth NOI Comments at 27-28.

<sup>32</sup> 47 U.S.C. § 1302(b).

<sup>33</sup> *Id.* § 1302(d)(1) (emphasis added).

<sup>34</sup> *Eleventh NOI* ¶ 28 (quoting 47 U.S.C. § 1302(d)(1)).

terrestrial and mobile broadband options support “different communications needs.”<sup>35</sup> Although advanced fixed and mobile broadband options do not always meet the same needs, from the consumer’s perspective, mobile broadband often provides the same functions as fixed services. For instance, data-intensive mobile app usage grew by 76 percent in 2014,<sup>36</sup> and there are now more Google searches from mobile devices than PCs.<sup>37</sup> While the *Eleventh NOI* focuses largely on online video in distinguishing fixed and mobile options,<sup>38</sup> it fails to recognize that video accounted for 45 percent of mobile data traffic in 2014 (projected to be 60 percent by 2020)<sup>39</sup>—consistent with the definition of “advanced telecommunications capability” as including the ability “to originate and receive high-quality . . . video telecommunications using any technology.”<sup>40</sup> Thus, if the Commission were in fact to be guided by “customer purchasing and usage patterns” and “service capabilities” as the *Eleventh NOI* suggests,<sup>41</sup> it would inevitably be forced to conclude that fixed and mobile often are interchangeable.

In short, the Commission must account for deployment overall, including the ways in which mobile broadband supplements and substitutes for fixed broadband. To do so, it will need to recognize that consumers use broadband for an immensely broad set of purposes. Inordinate

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<sup>35</sup> *Id.* ¶ 13.

<sup>36</sup> Verizon Wireless Competition Comments at 14 (citing Simon Khalaf, *Shopping, Productivity and Messaging Give Mobile Another Stunning Growth Year*, Flurry Insights (Jan. 6, 2015), <http://flurrymobile.tumblr.com/post/115194992530/shopping-productivity-and-messaging-givemobile>).

<sup>37</sup> Alexei Oreskovic, *Mobile devices are now the main source of Google search traffic*, Business Insider (May 5, 2015), <http://www.businessinsider.com/google-search-traffic-mobile-passes-desktop-2015-5>.

<sup>38</sup> *Eleventh NOI* ¶¶ 10-11.

<sup>39</sup> Ericsson, *Ericsson Mobility Report: On the Pulse of the Networked Society* 14-15 (June 2015), <http://www.ericsson.com/res/docs/2015/ericsson-mobility-report-june-2015.pdf>.

<sup>40</sup> 47 U.S.C. § 1302(d)(1).

<sup>41</sup> *Eleventh NOI* ¶ 8.

focus on one specific use would distort the agency’s analysis and fail to reflect consumers’ diverse needs.<sup>42</sup> Moreover, even though today’s fixed and mobile broadband options may not currently be perfect substitutes for all consumers and all purposes, the burdens resulting from any increased regulation will prevent mobile broadband from ever reaching that level of parity. The Commission should avoid additional regulation that will impede investment and innovation in mobile broadband.

#### **IV. THE COMMISSION SHOULD NOT ADD CRITERIA THAT WILL UNDERMINE A PROPER ASSESSMENT OF BROADBAND DEPLOYMENT**

The *Eleventh NOI* posits that various other factors relating to broadband service may be relevant to the Commission’s inquiry, and it seeks comment on how the Commission should consider them. But as Verizon has explained previously, the Commission should not undermine its assessment of broadband deployment through the addition of criteria that are unnecessary, unreliable, or otherwise inappropriate.<sup>43</sup> The statute directs the Commission to pursue one inquiry: “whether advanced telecommunications capability is being deployed to all Americans in a reasonable and timely fashion.”<sup>44</sup> The Commission should refrain from stretching this specific statutory inquiry into something it is not—a government assessment of quality of service.

The various additional criteria discussed in the *Eleventh NOI* do not assist the Commission in fulfilling its statutory mission. First, the Commission should avoid becoming distracted by the selection of specific speed thresholds and should instead focus its efforts on evaluating the steady and continued deployment of ever-higher speed services, like the rapid

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<sup>42</sup> See, e.g., *id.* ¶¶ 10-11 (discussion about viewing the offerings of one OVD, Netflix).

<sup>43</sup> Verizon Tenth NOI Comments at 27-32.

<sup>44</sup> 47 U.S.C. § 1302(b).

migration from widely deployed 3G to similarly ubiquitous 4G LTE deployments.<sup>45</sup> While constantly evaluating and reevaluating a speed benchmark is less important than consistently measuring progress over time, any threshold the Commission adopts for mobile broadband, at a minimum, must capture the widely deployed—and widely adopted—4G wireless services offered by Verizon and other providers. Verizon advertises these services as providing “typical” download speeds of 5-12 Mbps and upload speeds of 2-5 Mbps—although customers may experience speeds far greater than these levels.<sup>46</sup> An assessment of broadband deployment that ignores these broadly deployed, world-leading mobile broadband services would fail to meet the goals of the statute.<sup>47</sup>

Second, as Verizon has explained previously, consideration of a latency threshold as part of the Commission’s inquiry is unnecessary and should not be incorporated as a benchmark for defining broadband services.<sup>48</sup> Selecting a single latency benchmark that would apply in all circumstances, for broadband in general or even mobile broadband in particular, is not a straightforward exercise. The *Eleventh NOI* acknowledges this problem—correctly noting that mobile latency can vary by mobile technology<sup>49</sup>—but it does not offer any solutions to these

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<sup>45</sup> *Eleventh NOI* ¶ 28 (seeking comment on the adoption of various speed benchmarks).

<sup>46</sup> Verizon, *4G LTE Speeds vs. Your Home Network*, <http://www.verizonwireless.com/mobile-living/network-and-plans/4g-lte-speeds-compared-to-home-network/>.

<sup>47</sup> *Eleventh NOI* ¶ 28.

<sup>48</sup> *Id.* ¶ 31.

<sup>49</sup> *Id.* ¶ 40; *see also Seventeenth Report* ¶ 206 (regarding tests for mobile latency, “[i]t is possible that consecutive tests in the same place, on the same provider, and at about the same time may test to different servers”).

methodological challenges. Further, not all data is of the same quality or equally suitable for all purposes, and the Commission should be wary about advancing a latency benchmark.<sup>50</sup>

Third, the Commission should not develop and rely on a standard for “service consistency” or “quality of service.”<sup>51</sup> Section 706 is concerned with measuring *deployment* and does not pursue Commission review of service quality or consistency, however those concepts may be defined. As discussed above, there can be no question that broadband is widely deployed,<sup>52</sup> and there is no basis in the statute or elsewhere for the Commission to include only some portion of that deployment based on an amorphous and arbitrary notion of what may constitute “consistent” service.

Apart from this legal limitation, practical constraints preclude the use of any sort of service consistency metric in assessing broadband availability. The *Eleventh NOI* itself acknowledges that assessing quality of service for mobile services is particularly difficult, since mobile broadband travels with the user and thus will vary depending on location.<sup>53</sup> While these common aspects of mobile broadband options do not prevent these services from being used for many of the same purposes as fixed broadband services, they would greatly complicate the development of a single, nationwide benchmark for consistency of service.

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<sup>50</sup> *Eleventh NOI* ¶ 40; *see also id.* ¶ 58 (seeking comment on changes to data sources, including Form 477).

<sup>51</sup> *Id.* ¶ 41.

<sup>52</sup> *See supra* Section II.

<sup>53</sup> *Id.* ¶ 45 (“[B]ecause mobile broadband travels with the user, service quality may vary at different locations due to a variety of factors, including the particular network technology deployed in a given area, network congestion, or physical interference.”); *see also id.* ¶ 41 (suggesting that the Commission “consider the effect of weather conditions and physical obstacles on service quality”).

Finally, the Commission should avoid any focus on criteria “beyond physical deployment” that relate to broadband adoption.<sup>54</sup> As Verizon has explained, the plain language of Section 706’s mandate, which speaks only in terms of “deploy[ment],” requires that the Commission distinguish broadband availability from broadband adoption.<sup>55</sup> Thus, for example, the statute does not allow for factors like pricing and data allowances to inform the mandated inquiry.<sup>56</sup> As Verizon has explained, carriers offer a range of plans, but the availability of those plans does not mean broadband has not been deployed.<sup>57</sup> In fact, the range of choices that consumers enjoy merely underscores how robust broadband deployment has been.

#### **V. THE COMMISSION SHOULD FOCUS ON APPROPRIATELY TAILORED POLICIES TO ACCELERATE BROADBAND DEPLOYMENT**

Even though broadband has been reasonably and timely deployed throughout the United States, the Commission still has a responsibility to ensure that its regulatory policies advance continued deployment of next-generation wireless and wireline networks.

First, the Commission should continue to explore ways of increasing available spectrum for mobile broadband services. Spectrum is essential to enabling network expansion and technology upgrades. And while there are current opportunities for carriers to obtain the mix of spectrum they want to serve their customers—including an active secondary market, as well as unlicensed spectrum—more licensed and unlicensed spectrum is needed.<sup>58</sup> The National Broadband Plan found that “[t]he growth of wireless broadband will be constrained if

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<sup>54</sup> *Id.* ¶¶ 50-51.

<sup>55</sup> Verizon Tenth NOI Comments at 26-27.

<sup>56</sup> *Eleventh NOI* ¶ 50.

<sup>57</sup> Verizon Tenth NOI Comments at 29-30; Verizon Tenth NOI Reply Comments at 4-7.

<sup>58</sup> *See, e.g.*, Verizon Wireless Competition Comments at 38-42 (describing current spectrum opportunities but noting that this supply is not enough).

government does not make spectrum available to enable network expansion and technology upgrades.”<sup>59</sup> The federal government thus should move quickly and aggressively to identify and reallocate additional spectrum for mobile broadband use. For instance, completing its rulemaking on the 3.5 GHz band and unleashing that band for both licensed and unlicensed use, and continuing to identify spectrum that can be reallocated from federal to commercial use will help address the growing needs of wireless consumers. Through these steps, the Commission will enable mobile wireless broadband to realize its full potential.

Second, the Commission should continue to explore ways to facilitate access to rights of way and wireless tower siting. Less than a year ago, the Commission took a series of actions in this regard,<sup>60</sup> and it clearly remains attentive to problems posed by barriers to wireless infrastructure deployment. For instance, the Commission recently solicited input on a new program alternative to improve and facilitate the review process for deployments of small wireless communications facilities, including Distributed Antenna Systems and small cell facilities, under Section 106 of the National Historic Preservation Act.<sup>61</sup> That public notice and the scoping document underlying it properly recognize the need to “foster efficient deployment of infrastructure and equipment that could deliver greater spectrum capacity in more locations and

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<sup>59</sup> FCC, *Connecting America: The National Broadband Plan*, at 77 (2010), <http://download.broadband.gov/plan/national-broadband-plan.pdf>; see also Press Release, *Presidential Memorandum: Unleashing the Wireless Broadband Revolution* (June 28, 2010), <http://www.whitehouse.gov/the-press-office/presidential-memorandum-unleashing-wirelessbroadband-revolution> (“America’s future competitiveness and global technology leadership depend, in part, upon the availability of additional spectrum.”).

<sup>60</sup> *Acceleration of Broadband Deployment by Improving Wireless Facilities Siting Policies*, Report and Order, 29 FCC Rcd 12865 (2014); *Erratum*, 30 FCC Rcd 31 (2015).

<sup>61</sup> Public Notice, *Wireless Telecommunications Bureau Seeks Comment on Revising the Historic Preservation Review Process for Small Facility Deployments*, DA 15-865, WT Docket No. 15-180 (rel. July 28, 2015).

fill in coverage gaps”—consistent with the core goals underlying Section 706.<sup>62</sup> Verizon fully supports such efforts and encourages the Commission to continue in this positive direction.

Finally, and more generally, the Commission should avoid over-regulation and focus instead on allowing flexibility for broadband investment and innovation. As Verizon and others have consistently emphasized, a flexible, consumer-driven approach will ensure the Internet’s continued success while fostering the needed ongoing investments in broadband infrastructure.

## **VI. CONCLUSION**

For these reasons, the Commission should ensure that its methodology for assessing broadband deployment reflects all broadband options available to and used by consumers, including in particular mobile broadband options; avoid reliance on criteria or metrics that are unnecessary or unreliable as it pursues its analysis of broadband deployment; and act in a manner that promotes continued broadband investment and innovation.

Respectfully submitted,

Kathleen M. Grillo  
*Of Counsel*

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William H. Johnson  
Ian J. Dillner  
VERIZON  
1320 North Courthouse Road  
9th Floor  
Arlington, VA 22201  
(703) 351-3060

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<sup>62</sup> *Id.* at 6.