## Before the Federal Communications Commission Washington, D.C. 20554

In the Matter of ) Inquiry Concerning Deployment of Advanced ) Telecommunications Capability to All Americans ) in a Reasonable and Timely Fashion )

GN Docket No. 19-285

### **REPLY COMMENTS OF THE UTILITIES TECHNOLOGY COUNCIL**

The Utilities Technology Council ("UTC") hereby files the following reply comments in response to the Commission's Notice of Inquiry in the above-referenced proceeding.<sup>1</sup> UTC supports the Commission's proposal to adopt a progress-based approach towards for its next Broadband Deployment Report, and to continue to treat fixed terrestrial broadband as separate from mobile broadband for purposes of determining whether broadband is being deployed on a reasonable and timely basis, as required under Section 706 of the Communications Act.<sup>2</sup> UTC also supports the Commission's proposal to use the same evaluative framework with the same five year period and the same five speed metrics for terrestrial fixed broadband services (specifically, the 25 Mbps/3 Mbps fixed advanced telecommunications capability speed benchmark, 10 Mbps/1 Mbps, 50 Mbps/5 Mbps, 100 Mbps/10 Mbps, and 250 Mbps/25 Mbps) service speeds.<sup>3</sup> However, UTC respectfully requests that the Commission adopt a speed benchmark that is faster than 25/3 Mbps, consistent with UTC's comments in response to previous Broadband Progress Report inquiries,<sup>4</sup> as well as its comments in response to the

<sup>&</sup>lt;sup>1</sup> Inquiry Concerning Deployment of Advanced Telecommunications Capability to All Americans in a Reasonable and Timely Fashion, Fifteenth Broadband Deployment Report Notice of Inquiry, FCC 19-102 (rel. Oct. 23, 2019) ("NOI")

<sup>&</sup>lt;sup>2</sup> 47 U.S.C §706 (b) (directing the Commission to conduct regular inquiries to determine whether advanced telecommunications capability is being deployed to all Americans in a reasonable and timely fashion; and directing the Commission to take immediate action to accelerate deployment of such capability if it finds that broadband is not being deployed in a reasonable and timely basis).

 $<sup>^3</sup>$  UTC takes no position with regard to the Commission's proposal to use two speeds for evaluating the deployment of mobile broadband services. *See* NOI at ¶9.

<sup>&</sup>lt;sup>4</sup> See Comments of the Utilities Technology Council in GN Docket No. 16-245 at 4 (filed Sept. 6, 2016)(reporting

Commission's rulemaking regarding the Rural Digital Opportunity Fund.<sup>5</sup> UTC supports the Commission's proposal to use the existing FCC Form 477 data to evaluate the deployment of fixed broadband services, consistent with the reasoning in UTC's comments in support of using the FCC Form 477 data for the RDOF auction. UTC supports the Commission's proposal to separately assess satellite service, because satellite is limited in capacity as well as latency, which distinguishes it from other broadband services.<sup>6</sup> Finally, UTC suggests that the Commission revise the methodology by which it calculates the number of Americans receiving advanced telecommunications capability. Instead of combining the sum total of the entire population of all the census blocks served by at least one provider, the Commission should break down the numbers by the type of technology and the speeds by which the population is being served with broadband.<sup>7</sup> That would enable the Commission to provide a more granular assessment of the actual state of broadband deployment.

#### I. Introduction

UTC is the international association for the telecommunications and information technology

that utilities have been able to cost-effectively deploy future-proof broadband networks in rural areas, such that they are providing gigabit services for less than \$100/month in some cases.) and Reply Comments of the Utilities Technology Council in GN Docket No. 16-245 at 1-2 (supporting defining broadband availability using a 50/20 Mbps benchmark, as well as other criteria including latency and jitter.) See also Reply Comments of UTC in GN Docket No. 18-238 at 1-2 (filed Oct. 12, 2018). And See Inquiry Concerning Deployment of Advanced Telecommunications Capability to All Americans in a Reasonable and Timely Fashion, GN Docket No. 18-238, Fourteenth Broadband Deployment Notice of Inquiry, 33 FCC Rcd 8386 (2018).

<sup>&</sup>lt;sup>5</sup> See Comments of the Utilities Technology Council in WC Docket No. 19-126 (filed Sept. 20, 2019)(recommending that the Commission adopt faster speeds for the various different service tiers under the Rural Digital Opportunity Fund auction, including a minimum service tier of 100/20 Mbps); and see Reply Comments of the Utilities Technology Council in WC Docket No. 19-126 (filed Sept. Oct. 21, 2019)(supporting comments suggesting rule changes designed to promote deployment of broadband networks and services that provide symmetrical speeds.)

<sup>&</sup>lt;sup>6</sup> *NOI* at ¶19 (explaining that "while satellite signal coverage may enable operators to offer services to wide swaths of the country, overall satellite capacity may limit both the speed of service and the number of consumers that can actually subscribe to satellite service at any one time.")

<sup>&</sup>lt;sup>7</sup> See Id. at ¶22 (inviting comment on the proposal to use the same methodology from the 2019 Broadband Report for calculating the population served with advanced telecommunications capability, under which the Commission sums the population of all of the census blocks with at least one provider of services, whether the calculation is considering fixed terrestrial services, all fixed services, mobile LTE services, a combination of fixed terrestrial and mobile LTE services, or a combination of fixed terrestrial or mobile LTE services/.)

interests of electric, gas and water utilities and other critical infrastructure industries.<sup>8</sup> UTC's members include large investor-owned utilities that may serve millions of customers across multi-state service territories as well as smaller cooperatively-organized or governmentally-owned utilities that may serve only a few thousand customers in rural areas or isolated towns. All of these utilities operate extensive communications networks in support of their core businesses, and an increasing number of utilities are also deploying broadband networks and providing infrastructure access in areas that would otherwise lack access to broadband services. Utilities are answering the call for access to broadband and are promoting economic development and improving the quality of education and health care in the communities they serve. Accordingly, UTC is pleased to provide its comments in response to the Commission's NOI in this proceeding.

## II. The Commission Should Increase the Benchmark Speeds for Broadband Availability.

In its NOI, the Commission proposes to define advanced telecommunications capability using the current speed benchmark of 25/3 Mbps.<sup>9</sup> The Commission noted that it had decided to adopt this benchmark for its 2019 Broadband Report because "the record lacked a compelling justification for raising the benchmark," and it reasoned "a consistent benchmark better enables the Commission and the public to track deployment progress over time."<sup>10</sup> The Commission invited comment on its proposal to use the 25/3 Mbps benchmark again for the 2020 Broadband Report.

As UTC has commented in numerous other proceedings, the Commission should increase the benchmark speed that it uses to define broadband. Numerous comments on the record in response to the NOI agree with UTC that 25/3 Mbps is already becoming outdated. As the Fiber Broadband Association stated, the Commission "needs to increase its current speed benchmark from 25/3 Mbps to at least 100/10

<sup>&</sup>lt;sup>8</sup> See <u>www.utc.org</u> for more information about UTC and its activities.

<sup>&</sup>lt;sup>9</sup> *NOI* at ¶11.

<sup>&</sup>lt;sup>10</sup> Id.

Mbps, and preferably higher, to reflect current and near term use.<sup>111</sup> Similarly, Next Century Cities stated that "[t]he Commission's definition of basic broadband service at 25/3 Mbps is an outdated standard that should be increased.<sup>12</sup> While there are many reasons why consumers need more bandwidth, UTC agrees that the increasing number of connected devices in homes and business will quickly outpace the bandwidth capacity available over a 25/3 Mbps connection.<sup>13</sup> For example, Cisco predicts that that the number of connected devices will increase to 13 networked devices per person by 2022.<sup>14</sup> Moreover, UTC agrees with the Benton Institute for Broadband and Society that the Commission needs to adopt a benchmark for broadband that is forward looking so that the Commission's policies are keeping pace with consumer demands.<sup>15</sup> Therefore, UTC urges the Commission to adopt a faster benchmark speed for defining broadband.

## III. Mobile Broadband is Not a Substitute for Fixed Broadband Service.

In its NOI, the Commission proposes to maintain the evaluative framework that it used in the 2019 Broadband Report, and it asks whether mobile broadband should be treated as a functional substitute for fixed wireline broadband.<sup>16</sup> UTC supports the Commission's proposal to use the same evaluative framework that it used for the 2019 Broadband Report, including same five year period and the same five

<sup>16</sup> *NOI* at ¶¶9-10.

<sup>&</sup>lt;sup>11</sup> Comments of the Fiber Broadband Association in GN Docket No. 19-285 at 4 (filed Nov. 22, 2019)(observing that consumers are trending towards 100/20 Mbps connections.)

<sup>&</sup>lt;sup>12</sup> Comments of Next Century Cities in GN Docket No. 19-285 at 4 (filed Nov. 22, 2019)(observing that "[i]n the five years since this definition was updated, both usage and reliance has exponentially increased.")

<sup>&</sup>lt;sup>13</sup> See Comments of Next Century Cities at 5 (stating that "[a]s more people work from home or engage in online education courses, the requirement of multi-tasking while participating on an HD video conference will overwhelm that 3 Mbps capacity, even if no other devices in the household are attempting to share the network.")

<sup>&</sup>lt;sup>14</sup> See Cisco, "VNI Complete Forecast Highlights," 2017, available at: <u>https://www.cisco.com/c/dam/m/en\_us/solutions/service-provider/vni-forecast-highlights/pdf/United States 2017 Year in Review.pdf</u>.

<sup>&</sup>lt;sup>15</sup> See Comments of the Benton Institute for Broadband and Society in GN Docket No. 19-285 at 11 (stating that "[b]roadband providers market 25/3 service only to homes with 1-5 devices connecting just for web browsing and email. For streaming video content or sharing large files, broadband providers suggest 100 Mbps service. The Commission's benchmark should reflect this.")

speed metrics for terrestrial fixed broadband services (specifically, the 25 Mbps/3 Mbps fixed advanced telecommunications capability speed benchmark, 10 Mbps/1 Mbps, 50 Mbps/5 Mbps, 100 Mbps/10 Mbps, and 250 Mbps/25 Mbps) service speeds.<sup>17</sup> Moreover, UTC urges the Commission to affirm its previously adopted conclusion that mobile broadband services are not a substitute for fixed wireline broadband services.<sup>18</sup>

As numerous comments on the record have confirmed, mobile broadband services are not a substitute for fixed broadband services because consumers use mobile broadband in very different ways compared to fixed broadband services.<sup>19</sup> Capacity on a fixed wireline broadband connection is typically much greater and better suited for streaming video than mobile broadband connections, which is also true for file sharing applications as well. Moreover, there are limitations associated with mobile broadband, including data caps and additional fees, which are at odds with truly unlimited services that are available on fixed wireline broadband services. As noted above, utilities are deploying broadband to help promote economic development in communities that lack broadband access, and they are deploying fixed wireline broadband networks that use future-proof technologies because they recognize that businesses need very high capacity connections compared to the capacity that would be available over a mobile broadband connection. Therefore, UTC urges the Commission to treat fixed broadband as a separate service from mobile broadband for purposes of determining if broadband is being deployed on a reasonable and timely basis.

# IV. The Commission Should Assess Satellite Separately From other Broadband Services, and It Should Use a Granular Approach in its Calculation of Americans With

<sup>&</sup>lt;sup>17</sup> *Id*.at ¶9.

<sup>&</sup>lt;sup>18</sup> See Inquiry Concerning Deployment of Advanced Telecommunications Capability to All Americans in a Reasonable and Timely Fashion, GN Docket No. 18-238, 2019 Broadband Deployment Report, at ¶ 11 (May 29, 2019); and see Inquiry Concerning the Deployment of Advanced Telecommunications Capability to All Americans in a Reasonable and Timely Fashion, GN Docket No. 17-199, 2018 Broadband Deployment Report, at ¶ 18. (Feb. 2, 2018)

<sup>&</sup>lt;sup>19</sup> See e.g. Comments of NTCA – The Rural Broadband Association in GN Docket No. 19-285 at 4-5 (filed Nov. 22, 2019); Comments of ITTA – The Voice of America's Broadband Providers in GN Docket No. 19-285 at 7 (filed Nov. 22, 2019); and Comments of Next Century Cities in GN Docket No. 19-285 at 3-4 (filed Nov. 22, 2019)(emphasizing that "mobile access is not a substitute for fixed service.").

#### **Advanced Telecommunications.**

In the NOI, the Commission proposes to assess satellite services separately from other types of broadband services, based in part because "the overall satellite capacity may limit both the speed of service and the number of consumers that can actually subscribe to satellite service at any one time."<sup>20</sup> UTC and numerous other comments on the record agrees with the Commission's proposal in this respect.<sup>21</sup> Satellite services do not provide the same capacity as terrestrial fixed broadband networks and services, and UTC disagrees with comments that suggest that the Commission should evaluate satellite deployment data the same as other technologies.<sup>22</sup> Therefore, UTC urges the Commission to assess satellite data separately from other broadband technology data.

In the NOI, the Commission invites comment on its proposed approach for the calculation of Americans with advanced telecommunications availability.<sup>23</sup> UTC believes that the Commission should take a more granular approach to this calculation so that individual technologies can be assessed according to the census blocks where those technologies are available. UTC believes that combining these technologies together when calculating the population with broadband availability may distort the extent to which broadband is actually available, particularly to the extent that the calculation includes satellite services, which the Commission itself recognizes as providing broad coverage compared to other technologies. By the same token, it may not accurately reflect the population that has access to faster speeds that are available over fiber networks and other high capacity connections. Therefore, UTC urges the Commission to revise its proposed calculation and to break out the numbers according to the technologies that are serving census blocks when calculating the population that has access to broadband.

<sup>23</sup> *NOI* at ¶22.

<sup>&</sup>lt;sup>20</sup> *NOI* at 19.

<sup>&</sup>lt;sup>21</sup> See e.g. Comments of the Benton Institute for Broadband and Society in GN Docket No. 19-285 at 7 (filed Nov. 22, 2019)(stating that "[t]he U.S. cannot rely on satellite providers for affordable, high-performing broadband service.")

<sup>&</sup>lt;sup>22</sup> See Comments of Viasat, Inc. in GN Docket No. 19-285 at 7-8 (filed Nov. 22, 2019). See also Comments of Hughes Network Systems, LLC in GN Docket No. 19-285 at 4-5 (filed Nov. 22, 2019).

WHEREFORE, the premises considered, UTC respectfully requests that the Commission adopt benchmark speeds for broadband that are faster than 25/3 Mbps, not treat mobile broadband as a substitute for fixed wireline broadband, and separately assess satellite broadband data and provide a more granular approach for the calculation of Americans with access to advanced telecommunications capability.

Respectfully,

**Utilities Technology Council** 

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