

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

In the Matter of	)	
	)	
Technology Transitions	)	GN Docket No. 13-5
	)	
	)	
Policies and Rules Governing Retirement of	)	RM-11358
Copper Loops by Incumbent Local Exchange	)	
Carriers	)	
	)	
Special Access for Price Cap Local Exchange	)	WC Docket No. 05-25
Carriers	)	
	)	
AT&T Corporation Petition for Rulemaking to	)	RM-10593
Reform Regulation of Incumbent Local Exchange	)	
Carrier Rates for Interstate Special Access	)	
Services	)	

**Reply of AARP**  
November 24, 2015

Trevor R. Roycroft, Ph.D.  
Economic Consultant

David Certner  
Legislative Counsel and  
Legislative Policy Director  
Government Affairs  
AARP  
601 E Street, NW  
Washington, DC 20049

## Table of Contents

Introduction.....	1
Diverse parties support the importance of network reliability.....	2
Carrier comments on network reliability and performance are misleading.....	6
Comments show that 911 service continuity is essential.....	8
The record supports the importance of affordability .....	12
CenturyLink’s “rebuttable presumption” approach should be rejected.....	14
CenturyLink’s evaluation of the <i>AT&amp;T High Seas</i> decision is not on point.....	17
Verizon’s “safe harbor” approach should be rejected.....	19
AT&T’s customer outreach and education proposals are inappropriate .....	20
Conclusion .....	21

## Introduction

AARP is pleased to provide the Commission with these reply comments. As noted in opening comments, AARP applauds the fact that the Commission has adopted portions of the Public Knowledge technology transition criteria. These criteria contribute to a reasonable roadmap for technology transition. Specifically, the Further Notice of Proposed Rulemaking (FNPRM), proposes that a carrier seeking to discontinue an existing retail service in favor of a retail service based on a newer technology demonstrate that any substitute service offered by the carrier, or alternative services available from other providers in the affected service area, meet eight criteria in order for a section 214 application to be approved.<sup>1</sup> AARP believes that this approach is appropriate, and nothing that AARP has reviewed in the opening comments leads AARP to change this conclusion, or the proposals to improve upon the FNPRM's framework that were offered by AARP in opening comments.

AARP's opening comments provided detailed suggestions associated with technology transition and the potential for section 214 discontinuance. Many of the arguments advanced by carriers in their opening comments as to why the Commission should not hold them to high standards have already been addressed by AARP in opening comments, thus, those arguments will not be repeated here. To the extent that these reply comments do not address specific issues raised by a party, this should not be taken as a concession of the issue by AARP.

---

<sup>1</sup> Those eight criteria are: (1) network capacity and reliability; (2) service quality; (3) device and service interoperability, including interoperability with vital third-party services (through existing or new devices); (4) service for individuals with disabilities, including compatibility with assistive technologies; (5) PSAP and 9-1-1 service; (6) cybersecurity; (7) service functionality; and (8) coverage. FNPRM, ¶208.

As the Commission considers the comments and reply comments in this proceeding, AARP urges the Commission to keep a sharp focus on the importance of the continuity of high quality and affordable services on the next-generation public network. As AARP has previously noted, technology transition is inevitable, however, during previous technology transitions, the Commission did not abandon its statutory responsibilities.<sup>2</sup> The Commission must not lose sight of the larger issues associated with IP transition, especially those associated with the affordability and underlying reliability of next generation IP-based broadband networks. The next generation public network must offer affordability and reliability similar to the legacy PSTN, otherwise, consumers, competition, and innovation will be harmed.

### **Diverse parties support the importance of network reliability**

In opening comments AARP emphasized that reliability in next-generation networks should be consistent with the reliability of the networks that are being replaced, and that service quality must remain at a high level.<sup>3</sup> On the matter of network reliability, AARP finds points of agreement with various commenters, including United States Telecom Association when it states:

*Network capacity and reliability, as measured by attributes such as latency, jitter, and packet loss are important to determine the adequacy of certain services to meet customer expectations. Similarly, it is reasonable for customers to expect their voice and other communications services to meet minimum quality standards. For that reason, we agree*

---

<sup>2</sup> “Alternatively, the technique associated with the transmission of traffic on the PSTN was significantly modified with the introduction of Signaling System 7 (SS7). SS7 improved the efficiency of the delivery of voice and data services using the PSTN, and also introduced many new services (such as Caller ID, call trace, distinctive ringing, etc.) With the FDM or SS7 transitions, the change in technique did not require the abandonment of basic policy objectives, such as the widespread availability of affordable and reliable services.” *In the Matter of AT&T Petition to Launch a Proceeding Concerning the TDM-to-IP Transition; Petition of the National Telecommunications Cooperative Association for a Rulemaking to Promote and Sustain the Ongoing TDM-to-IP Evolution*, WC Docket No. 12-353, Comments of AARP, January 28, 2013

<sup>3</sup> AARP, October 26, 2015 Comments, pp. 10-11.

*generally with the Commission that network performance and service quality should be taken into account. . . .*<sup>4</sup>

However, United States Telecom Association goes on to state that specific measurement of performance and service quality is not needed in the technology transition.<sup>5</sup> On that matter AARP and United States Telecom Association disagree. Without measurement and standards, the adequacy of alternative services cannot be evaluated.

It is also important to note that United States Telecom Association members such as Verizon, AT&T, and CenturyLink, disagree with United States Telecom Association on the basic matter of the need for reliability of alternative services, and the need to take account of service quality and network performance during the technology transition. AT&T states “there is simply no need for metrics relating to service quality, device and service interoperability, communications security, or service functionality,”<sup>6</sup> indicating that competition takes care of these matters.<sup>7</sup>

What is clear, as discussed by AARP in opening comments, is that in business markets where there is competition, carriers are compelled to deliver high quality services, or face monetary penalties through service level agreements.<sup>8</sup> For residential customers potentially affected by the technology transition, these carriers encourage the Commission to abandon all oversight, and to trust “market forces” to deliver acceptable outcomes.<sup>9</sup> The Commission should reject these carrier opinions. Competition in residential markets is not sufficient. As a result, the Commission must assure that the technology transition results in next-generation networks that: (1) offer sufficient network capacity and reliability, (2) consistently deliver capacity and

---

<sup>4</sup> United States Telecom Association, October 26, 2015 Comments, p. 11, footnotes omitted, emphasis added.

<sup>5</sup> *Id.*

<sup>6</sup> AT&T, October 26, 2015 Comments, p. 10.

<sup>7</sup> AT&T, October 26, 2015 Comments, p. 4. CenturyLink expresses similar sentiment. CenturyLink, October 26, 2015 Comments, pp. 17-18.

<sup>8</sup> See the discussion of service level agreements in AARP, October 26, 2015 comments, pp. 12-15.

<sup>9</sup> See the October 26, 2015 Comments of AT&T, pp. 4 & 6, CenturyLink, pp. 16 & 34, Verizon, pp. 11-12.

reliability as defined by well-understood metrics such as service availability, latency, jitter, and packet loss, and (3) are governed by minimum quality standards that reflect high levels of network performance and service quality.<sup>10</sup>

Other parties also address the need for highly reliable services. For example, NASUCA states:

If a service is not reliable, it cannot be an adequate substitute. Without sufficient capacity, service will not be reliable. Reliable service should also involve network design that allows for the continued completion of calls over diverse routes when facilities are damaged, and during storms and emergencies.<sup>11</sup>

The Alarm Industry Communications Committee states:

AICC supports the development of performance-based standards to ensure communications paths, including VoIP paths, are reliable, robust and provide a standard of measurable quality. Performance-based standards should address, at a minimum, decibel loss, jitter, dual tone multi frequency (DTMF) signal performance, compression and latency and must measure quality in other areas beyond dial tone and human voice. Further, the standards should measure the entire span of the connection and all legs or providers in the connection and not just the individual carriers. This is crucial to ensure that alarm signals are properly transmitted even when there are multiple carriers involved with a call. Thus, for example, if the Commission adopts a 100 millisecond latency metric and there are four carriers in a connection, the total span of the connection should have no more than 100 milliseconds of latency, rather than allowing each of the four carriers to have 100 milliseconds of latency.<sup>12</sup>

CWA states that consumer expectations are for high quality services:

Consumers expect their voice communications to be clear, understandable, and free of distortion and their data connections to be sufficiently robust and reliable to access the video- and data-intensive applications on today's Internet.<sup>13</sup>

With regard to the potential for wireless services to be identified as the substitute for legacy service offerings, Appalachian Regional Commission states:

---

<sup>10</sup> See AARP, October 26, 2015 Comments, pp. 10-15 and *passim*.

<sup>11</sup> NASUCA, October 26, 2015 Comments, p. 6.

<sup>12</sup> Alarm Industry Communications Committee, October 26, 2015 Comments, pp. 4-5.

<sup>13</sup> CWA, October 26, 2015 Comments, p. 7.

The FCC also needs to consider the reliability of wireless substitutions. Many rural areas still have no cell service available. We have had rural subscribers tell us they have no wireless signal at all or only in a certain upstairs bedroom near the window. To be considered an adequate substitution, the wireless service need to be reliable throughout the rural community. This might be particularly problematic in states where the state commissions have little to no oversight ability because of state deregulation.<sup>14</sup>

AARP discussed the potential for negative spillovers associated with less reliable networks in opening comments.<sup>15</sup> Other parties also note the potentially wide-ranging impact of less reliable networks. For example, the National Rural Electric Cooperative Association states:

Reliable wireline data telecommunications services are essential for the day-to-day operation of the electric grid including protective relaying which encompasses the ongoing monitoring of grid performance by intelligent monitoring devices, referred to as protective relays. These devices assess whether grid components are operating within specified values and, as necessary, send a trip signal to circuit breakers to disconnect a non-compliant component.<sup>16</sup>

Reliability is also essential for electric cooperative wireline voice communications that support both inbound and outbound calling. In addition to day-to-day communications that are typical of many businesses, wireline voice services are used by cooperatives' members (consumers) to receive notices of service outages and to obtain information related to service installations and repairs. Electric power outage notifications are essential to the prompt service restoration and the safety of life and property in the communities served by NRECA members and to the integrity of their transmission and distribution networks. . . .<sup>17</sup>

With regard to reliability, in opening comments AARP identified performance criteria needed to appropriately establish that the alternative services identified by section 214 petitioners perform in a manner that is consistent with the services that are being replaced.<sup>18</sup> Other parties also point to the need to establish performance standards. For example, the Pennsylvania Public Utilities Commission points to the need for testing proposed replacement service offerings:

---

<sup>14</sup> Appalachian Regional Commission, October 26, 2015 Comments, unnumbered third page.

<sup>15</sup> AARP, October 26, 2015 Comments, p. 3.

<sup>16</sup> National Rural Electric Cooperative Association, October 26, 2015 Comments p. 3-4.

<sup>17</sup> National Rural Electric Cooperative Association, October 26, 2015 Comments p. 4-5.

<sup>18</sup> AARP, October 26, 2015 Comments, pp. 10-15.

The Pa. PUC agrees with the Commission’s tentative conclusion that any adequate substitute test should evaluate whether the replacement or alternative service will (1) afford the same or greater capacity as the existing service and (2) afford the same reliability as the existing service even when large numbers of communications, including but not limited to calls or other end-user initiated uses, take place simultaneously, and/or when large numbers of connections are initiated in or terminated at a communications hub.<sup>19</sup>

In summary, reliability of next generation networks must result from the technology transition.

Carrier arguments to the contrary would require that the Commission abandon its statutory responsibilities.

### **Carrier comments on network reliability and performance are misleading**

A general assertion in the carrier comments is that IP-based services are inherently superior to legacy services, and given this “fact,” the Commission need not measure the performance of alternative services. For example, AT&T states:

But the Commission’s proposals do not gauge adequacy. They fail to accord any weight to the numerous and significant advantages of IP services over TDM services — advantages the Commission itself has acknowledged — while requiring that IP networks meet or exceed TDM networks with respect to a laundry list of metrics covering everything from service quality and functionality to network capacity, security, and reliability.<sup>20</sup>

In a similar vein, United States Telecom Association states:

The Commission has already acknowledged that the benefits and advantages of modern networks and services far outweigh any burdens or costs associated with moving away from outdated technology.<sup>21</sup>

However, United States Telecom Association goes on to state:

We therefore encourage the Commission to take a “light-touch” regulatory approach to ensure that providers continue to prioritize replacing their outdated, costly-to-maintain

---

<sup>19</sup> Pennsylvania Public Utilities Commission, October 26, 2015 Comments, p. 8.

<sup>20</sup> AT&T, October 26, 2015 Comments, p. 3.

<sup>21</sup> United States Telecom Association, October 26, 2015 Comments, p. 7.

legacy networks *in favor of newer, more reliable and robust networks that will improve the communications experience for all consumers.*<sup>22</sup>

It is this Commission's responsibility to make sure that the networks that replace legacy TDM-based technology are *in fact* "more reliable and robust," and will *in fact* "improve the communications experience for all consumers." Absent an evaluation of the proposed replacement technology, measurement of the performance of the alternative services, and standards that ensure that reliable and robust performance is ongoing, that outcome is unlikely.

Verizon states that the performance metrics discussed in the FNPRM, such as jitter, packet loss, and throughput never apply to services, only to networks:

But the proposed metrics for these three criteria [jitter, packet loss, and throughput] relate to the facilities and networks over which services travel, not the services themselves, and thus are inappropriate to a service discontinuance process.<sup>23</sup>

Verizon is simply incorrect on this matter. Verizon's own service level agreement (SLA) offered to Verizon's VoIP business customers clearly illustrates Verizon's error:

"The VoIP Jitter SLA provides that Verizon's contiguous U.S. Internet Network (as defined in the Guide) monthly jitter performance will not exceed 1.0 millisecond."<sup>24</sup>

Similarly, other carrier SLAs address the VoIP performance metrics that Verizon asserts are not associated with services like VoIP. AT&T specifies that business VoIP services will be associated with Packet delivery at least 99.95%; Jitter of less than 1 ms average; and latency of

---

<sup>22</sup> United States Telecom Association, October 26, 2015 Comments, pp. 7-8, emphasis added.

<sup>23</sup> Verizon, October 26, 2015 Comments, pp. 11-12.

<sup>24</sup> Verizon SLA:

[http://www.verizonenterprise.com/industry/public\\_sector/state\\_local/contracts/texasdir\\_tex\\_an\\_ng/docs/sla.pdf](http://www.verizonenterprise.com/industry/public_sector/state_local/contracts/texasdir_tex_an_ng/docs/sla.pdf)

less than 37 ms average round-trip latency PoP-to-PoP network-wide.<sup>25</sup> Level 3 also specifies VoIP quality in its SLAs in terms of service availability (99.99%), packet loss (0.01%), jitter (6 ms round-trip), and delay (50 ms round-trip).<sup>26</sup> Verizon is simply incorrect about these metrics not being associated with services.

### **Comments show that 911 service continuity is essential**

In opening comments AARP emphasized the importance of network performance in light of 911 services, and AARP continues to believe that there should be no compromise on this matter—911 functionality should be as good or better for any proposed replacement service. Recent evidence from AT&T’s technology transition trials in Carbon Hill, Alabama, and Del Rey Beach, Florida also reinforce the importance of 911 services to consumers. “As in the prior reports, customers who declined to migrate to WHP [Wireless Home Phone] expressed concerns regarding 911 calls and compatibility with medical devices, home security alarms and fax machines.”<sup>27</sup>

In comments, other parties addressed the critical nature of 911 services, and the relationship between 911 and network reliability. For example, the National Emergency Number Association correctly establishes the connection between high-quality 911 performance and the performance of the underlying network:

Likewise, consumers should expect that a carrier or alternative service provider outage will limit his ability to reach 9-1-1 no more than ~5 minutes in any given year (99.999% reliability). These two metrics, long fundamental to telephone network engineering (and often greatly exceeded) set the foundation for access to emergency services through 9-1-1, and should form part of any transition criteria adopted by the Commission.

---

<sup>25</sup><https://ebiznet.sbc.com/calnetinfoiii/Uploads/Link/ATT%20Service%20Level%20Agreements%201%203%205%20-%20VoIP.pdf>

<sup>26</sup> [http://www.level3.com/en/legal/interexchange-service-schedules/~media/Assets/legal/legal\\_convergedBusinessNetworkServicesServiceSchedule\\_bmg.ashx](http://www.level3.com/en/legal/interexchange-service-schedules/~media/Assets/legal/legal_convergedBusinessNetworkServicesServiceSchedule_bmg.ashx)

<sup>27</sup> AT&T, October 6, 2015 *ex parte* presentation, Slide 8. <http://apps.fcc.gov/ecfs/document/view?id=60001326674>

Importantly, these metrics could apply regardless of whether the underlying service is voice, text, video, or something else entirely. Consequently, NENA urges the Commission to retain these or similar metrics in its final transition principles.<sup>28</sup>

NARUC also correctly connects the performance of 911 service and the underlying carrier network:

As the early roll-outs of so-called nomadic VoIP services with defective E911 service demonstrated, customers have understandable expectations about the reliability of communications services for business, communications about work and emergencies. In times of crises, the communications system must have the capacity to handle the increase in calls that may occur. The current reliability of legacy systems to complete those calls must remain unaffected by changes in technology.<sup>29</sup>

Similarly, the Michigan Public Service Commission stresses the importance of the equivalence of 911 performance after the technology transition:

The MPSC agrees that the availability, reliability, and functionality of 9-1-1 service are important and should be a criterion in any adequate substitute test adopted. Customers expect and rely on the ability to call 9-1-1. Any substitute or alternative service should be required to provide equivalent or better service and resiliency as compared to the legacy system it is replacing. Substitution or alternative service should comply with all federal and state laws and regulations pertaining to 9-1-1. The FCC should also exercise special care when considering retirement of 911 network components. The replacement service should provide automatic location information that is comparable to the legacy system it is replacing. It is not acceptable to allow new technologies to impair the existing 9-1-1 system by not providing essential location information.<sup>30</sup>

The Pennsylvania Public Utilities Commission also advocates for an “as good or better” assessment of 9-1-1.

Because of the specific importance of having reliable 911/E911 capability, the Pa. PUC asserts that the substitute or alternative services should provide as good – or better – 9-1-1 functionality as the existing service(s) being replaced.<sup>31</sup>

Likewise, the Texas 9-1-1 Entities point out the importance of equivalent functionality:

---

<sup>28</sup> National Emergency Number Association, October 26, 2015 Comments, p. 3.

<sup>29</sup> NARUC, October 26, 2015 Comments, p. 6.

<sup>30</sup> Michigan Public Service Commission, October 26, 2015 Comments, pp. 7-8.

<sup>31</sup> Pennsylvania Public Service Commission, October 26, 2015 Comments, p. 13.

It would be contrary to the public interest for the Commission to “force” resident and small business consumers to lose existing wireline 9-1-1 levels of service. At a minimum, a requirement for all “substitute services” to include a “dispatchable address” and its associated wireline 9-1-1 equivalent functionalities is reasonable in order for the substitute service to be deemed “adequate.”<sup>32</sup>

These statements support the ongoing need for highly reliable 911 services, and the only outcome that the Commission should be willing to accept on this matter when it comes to 911 is “as good, or better.”

On the other hand, carrier positions on 911 services would place public safety at risk. For example, CenturyLink asserts that the Commission must accept that it is “unrealistic and counterproductive” to expect that technology transition will enable 911 service continuity:

By its nature, technological evolution entails tradeoffs. Some functionalities of the legacy service will still be provided, but just in a different way. For example, the mobility inherent in non-fixed wireless services makes it much more difficult to pinpoint a wireless phone to a street address for 9-1-1 purposes, but mobile wireless providers achieve similar functionality using latitude and longitude.<sup>33</sup>

The “tradeoffs” suggested by CenturyLink are unacceptable. Location accuracy is a hallmark legacy of 911 services. For example, the ability to locate individuals in multi-tenant buildings is compromised by wireless-grade “latitude and longitude” methods. AT&T also misses the point regarding the importance of 911 services:

The Commission already has requirements applicable to 911 service and service to PSAPs, and it has rules that address service compatibility for individuals with disabilities. To the extent the Commission wishes to adopt additional requirements in these areas, it should propose such requirements in a rulemaking proceeding of general applicability. It makes no sense to pursue these goals in the context of section 214 applications by a handful of carriers and that address service to a small minority of customers.<sup>34</sup>

AT&T’s proposal to redirect the Commission’s efforts on 911 services to “a rulemaking of general applicability” misses the fact that the current FNPRM is exactly that sort of generally

---

<sup>32</sup> Texas 9-1-1 Entities, October 26, 2015 Comments, p. 5.

<sup>33</sup> CenturyLink, October 26, 2015 Comments, p. 22.

<sup>34</sup> AT&T, October 26, 2015 Comments, pp. 13-14.

applicable rulemaking. Of course, once the rules are made, case-by-case compliance will have to be ensured by the Commission.

Verizon also glosses over the 911 issue by proposing a requirement that consumers still be able to “call 911” after the technology transition, and existing rules that govern the carriage of 911 traffic to PSAPs over trunking facilities:

The Commission recognizes the importance of customers’ ability to call 9-1-1. We agree, as evidenced in our proposed safe harbor above, *which includes a requirement that discontinuing the service does not affect the ability of the end user to call 9-1-1. . . .* Commission rules already appropriately view the discontinuance or modification of 9-1-1 network services and components as matters to be worked out between and among carriers and their PSAP customers. The Part 12 rules already require a 9-1-1 service provider to certify to measures taken regarding circuit diversity, central office backup power and network monitoring in the 911 network. Those obligations would remain if 9-1-1 trunks are migrated to next generation 9-1-1-capable gateways and transport methods.<sup>35</sup>

As discussed elsewhere in these reply comments, Verizon’s safe harbor ignores all aspects of 911 location accuracy, and there is much more to be worked out on 911 service than the migration of 911 trunks.

In conclusion on the 911 service continuity, as noted by NASUCA, 911 services cannot be compromised:

Of these, voice service provided over legacy networks is fundamental to public safety because it is the most vital means of communication between the public and first responders, in terms of the public contacting emergency services and local authorities contacting the public through reverse 911 calls.<sup>36</sup>

AARP continues to encourage taking all steps necessary to provide consumers and first responders the security offered by high quality 911 services, which will require that alternative

---

<sup>35</sup> Verizon, October 26, 2015 Comments, p. 16, emphasis added.

<sup>36</sup> NASUCA, October 26, 2015 Comments, p. 3.

services provide continuity of current 911 capabilities. Section 214 discontinuances should not result in any lower level of access to emergency services.

### **The record supports the importance of affordability**

In opening comments, AARP stressed that the FNPRM’s tentative conclusion to exclude affordability from consideration is an error—the Commission must recognize that cost of alternative services proposed in a section 214 proceeding is a necessary part of the equation.<sup>37</sup>

High and unaffordable prices for the alternative services qualified by the Commission will have a detrimental impact on consumers, broadband deployment, and universal service objectives.<sup>38</sup>

Other parties also point to the importance of affordability as a factor in evaluating Section 214 discontinuance. Michigan Public Service Commission correctly points out that carrier marketing practices can easily lead to expensive bundles that contain services that consumers do not want or need, thus driving up service prices:

The MPSC notes that the Commission has declined to consider affordability in its criteria in the section 214 process because “the evaluation process in this context should focus on the nature of the service and because cost is not part of the equation in determining whether an available alternative service constitutes an adequate substitute for the service sought to be discontinued.” *While price is not a functional component of the service itself, retail pricing and affordability is a crucial factor in a customer’s decision to continue using a service. The MPSC is concerned that Plain Old Telephone Service (POTS) may be discontinued and replaced with big-package bundles. These big-package bundles would be more expensive than POTS and would give some customers more features than they requested, wanted or needed. Some customers may only want, or afford, stand-alone voice service, so it is important that this service remains an option and continues to be affordable. In the event that stand-alone voice does not continue to exist, it is important that voice and broadband bundles are offered at affordable prices without the need for customers to be forced into obtaining a triple or quad play-package bundle. Not taking affordability and comparable pricing of a replacement service into consideration could lead to de-facto discontinuance by customers in that particular market if no other service providers are available in that area. The MPSC asks the*

---

<sup>37</sup> AARP, October 26, 2015 Comments, pp. 5-8.

<sup>38</sup> AARP, October 26, 2015 Comments, p. 7.

Commission to reconsider adding Affordability as one of the criteria for measuring the adequacy of substitute or alternative services.<sup>39</sup>

AARP is also concerned about the potential for POTS to disappear into expensive bundles.

NASUCA also raises the issue of affordability:

As discussed earlier in these comments, NASUCA strongly supports including affordability as one of the criterion to be taken into consideration in the evaluation of substitute services. From the perspective of customers, whether a service is affordable is part of the nature of the service and affordability should be a criterion in the section 214 process.<sup>40</sup>

The Greenlining institute also stresses the importance of affordability:

To a consumer, affordability is a major factor in determining whether a replacement technology is an adequate substitute, because a consumer cannot replace one service with another service that the customer cannot afford. Additionally, the migration to a new technology may require a customer to pay for equipment, as well as installation or other non-recurring fees which further contributed to the expense of the service. Greenlining urges the Commission to include affordability in its analysis of whether a replacement technology constitutes an adequate substitute.<sup>41</sup>

Public Knowledge addresses the affordability issue in comments, as it has done previously:

As the Commission has previously noted in its ongoing Lifeline proceeding, if a service is not affordable, then it is not meaningfully available. As the Commission moves forward in defining its coverage criterion, it should consider the relative price differences between new and legacy services, and to what extent that change would lock out low-income or other portions of the affected community. In many communities, a substantial price increase would create a de facto discontinuance of service to those communities who remain wholly dependent on affordable copper access. While a hypothetical 20% rate increase may not affect subscription rates among higher-income neighborhoods, it would preclude access for many in low-income communities.<sup>42</sup>

The combination of affordability and disability access was raised by the Disability Coalition for Technology Transition:

---

<sup>39</sup> Michigan Public Service Commission, October 26, 2015 Comments, pp. 11-12, footnotes omitted, emphasis added.

<sup>40</sup> NASUCA, October 26, 2015 Comments, pp. 14-15.

<sup>41</sup> The Greenlining Institute, October 26, 2015 Comments, pp. 4-5.

<sup>42</sup> Public Knowledge, October 26, 2015 Comments, unnumbered pp. 4-5.

Some individuals with disabilities cannot afford Internet access, nor is there a reliable means of Internet access available in their area.<sup>43</sup>

Additionally, a consumer transitioning from a TTY to VRS should not be prevented from doing so due to the unaffordability of Internet service in comparison to a phone line.<sup>44</sup>

This needed transition off the public switched telephone network (PSTN) becomes an affordability issue for some individuals with disabilities, both in terms of the cost of Internet access, in addition to the cost of a phone line (where applicable), as well as the cost of devices needed to access the Internet.<sup>45</sup>

AARP strongly encourages the Commission to fully address, for any replacement services proposed in the section 214 process, the affordability of the replacement services. Absent protection of service affordability, the technology will result in harms to consumers.

### **CenturyLink’s “rebuttable presumption” approach should be rejected**

CenturyLink advances a “rebuttable presumption” approach, under which a carrier could seek a streamlined grant of relief if it can demonstrate “that all affected retail customers will have access to one or more . . . substitute services.”<sup>46</sup> The substitute services proposed by CenturyLink are interconnected VoIP, 3G/4G wireless, CAF-qualifying fixed wireless service, and TDM voice service—whether provided by the petitioner or a third party. CenturyLink argues that because these services are widely adopted, that “the market doesn’t lie.”<sup>47</sup> As the Commission is well aware, however, the market does not always tell the whole story, and with regard to its “rebuttable presumption” proposal, neither does CenturyLink. Elsewhere in CenturyLink’s comments CenturyLink points to the difficulties associated with the evaluation of third-party services.

---

<sup>43</sup> Disability Coalition for Technology Transition, October 26, 2015 Comments, p. 4.

<sup>44</sup> *Id.*, p. 6.

<sup>45</sup> *Id.*, p. 8.

<sup>46</sup> CenturyLink, October 26, 2015 Comments, p. 28.

<sup>47</sup> CenturyLink, October 26, 2015 Comments, p. 29.

It is unclear how an officer or representative from CenturyLink, for example, could ever acquire sufficient information to certify that Comcast's VoIP service or Sprint's 3G/4G service meets the FNPRM's defined metrics for latency, jitter, packet loss, and throughput, *satisfies the minimum service quality standards set by the state commission responsible for the relevant service area, and conforms to the FNPRM's other detailed requirements related to interoperability, disabilities access, PSAP and 9-1-1 service, communications security, service functionality, and coverage*. Even in the unlikely event such information were publicly available, a company officer or representative could not reasonably certify, under penalty of perjury, that such unsubstantiated information is accurate. Thus, it is highly unlikely that a third party's substitute service could trigger an automatic grant under the new rules proposed in the FNPRM.<sup>48</sup>

Because a petitioning carrier will have great difficulty in providing important information, CenturyLink lowers the bar with the "rebuttable presumption" proposal, and would allow the requesting carrier to make unsupported assertions that alternative services exist. Thus, CenturyLink's "rebuttable presumption" approach rests on nothing more than blind assertions on the part of the carrier that critical issues such as interoperability, coverage, PSAP and 9-1-1, and disability access will be provided by the alternative services identified by the petitioning carrier. The Commission should reject CenturyLink's rebuttable presumption approach as it would not assure in any way that reasonable alternatives are available to all customers in a geographic area. CenturyLink also admits that its rebuttal presumption approach could introduce disruptive outcomes.

This presumption would greatly streamline impacted Section 214 proceedings, because carriers would know upfront the showing necessary for this part of the Section 214 test, *and equipment manufacturers would be put on notice of the need to design equipment compatible with these networks, if feasible and in sufficient demand*.<sup>49</sup>

CenturyLink thus acknowledges that its approach to technology transition would result in the discontinuance of service functionality. The fact that equipment manufacturers would be "put on

---

<sup>48</sup> CenturyLink, October 26, 2015 Comments, pp. 16-17, emphasis added.

<sup>49</sup> CenturyLink, October 26, 2015 Comments, p. 28, emphasis added.

notice” would be of little consequence to consumers who experienced degraded network functionality, or who saw their ability to utilize some services disappear.

The Commission should also reject CenturyLink’s claim that “waiting to address such issues, on a case-specific basis, in the context of a Section 214 proceeding would be both inefficient and guaranteed to delay IP migration.”<sup>50</sup> As the Commission is now well aware, there may be sound reasons for delaying “IP migration” if that means moving customers to 3G/4G services (which are not currently IP in the first place), or to other sub-standard alternatives. The Commission learned first-hand regarding customer response to forced migration to wireless-only service in the Fire Island proceeding.<sup>51</sup> CenturyLink’s “rebuttable presumption” approach has already been rebutted as a policy approach through public comment (and outcry) when inferior services are foisted on the public by carriers.

In comments AARP, like CenturyLink, pointed to the problems associated with a requesting carrier “certifying” that a third-party provides an adequate substitute,<sup>52</sup> and AARP continues to believe that it is unreasonable for a requesting carrier to certify the performance of third-party services, whether in detail, or through unsupported assertions, which is what CenturyLink suggests with its “rebuttable presumption” approach. It is also notable that Verizon is in agreement with AARP on this count:

For example, some of the criteria appear to request information that is not obtainable if another provider offers a replacement service. A provider should not have to certify to all of the criteria in those instances, *since a provider may not be able to certify to another provider’s capacity, reliability, service quality, interoperability, or coverage.*<sup>53</sup>

---

<sup>50</sup> CenturyLink, October 26, 2015 Comments, p. 29.

<sup>51</sup> *Comments Invited on Application of Verizon New Jersey Inc. And Verizon New York Inc. to Discontinue Domestic Telecommunications Services*, WC Docket No. 13-150, Comp. Pol. File No. 1115 June 28, 2013.

<sup>52</sup> AARP, October 26, 2015 Comments, p. 9. Compare to CenturyLink, October 26, 2015 Comments, pp. 16-17, quoted above.

<sup>53</sup> Verizon, October 26, 2015 Comments, p. 10, emphasis added.

Given the difficulties in carrier certification, it is surprising to find that AT&T believes that carriers should be allowed to achieve streamlined section 214 relief, based solely on carrier assertions, and a corresponding elimination of any potential for public comment. In other words, AT&T's approach is similar to CenturyLink's "rebuttable presumption," only without the possibility of rebuttal:

If a carrier certifies compliance with the Commission's requirements with the "adequate substitute" standards, the Commission should automatically grant the 214 application based on that certification without public comment, absent a facial defect in the application or certification.<sup>54</sup>

AT&T argues that because the Commission's rules prohibit carriers from making false or misleading statements in applications, there is no need for anything other than the carrier's word on the matter.<sup>55</sup> However, the Commission's rules also prohibit carriers from making false or misleading statements to their customers, and as the Commission is well aware, those rules are not always sufficient, as evidenced by the recent \$100 million forfeiture levied on AT&T.<sup>56</sup>

AT&T's proposal should be rejected by the Commission.

### **CenturyLink's evaluation of the *AT&T High Seas* decision is not on point**

CenturyLink raises the International Bureau's decision in the 1999 *AT&T High Seas* order as support for the proposition that the FNPRM's approach to "adequate substitutes" is inappropriate.<sup>57</sup> CenturyLink asserts:

The International Bureau found that, although satellite-based radio telephone services imposed higher costs and offered less robust coverage than AT&T's High Seas service,

---

<sup>54</sup> AT&T, October 26, 2015 Comments, p. 15.

<sup>55</sup> AT&T, October 26, 2015 Comments, p. 15.

<sup>56</sup> *In the Matter of AT&T Mobility, LLC*, File No. EB-IHD-14-00017504, NAL/Acct. No. 201532080016. FRN: 0018624742, Notice of Apparent Liability for Forfeiture and Order, June 17, 2015.

<sup>57</sup> CenturyLink, October 26, 2015 Comments, p. 13, citing to *In the Matter of AT&T Corp.*, File No. ITC-MS-19981229-00905, Memorandum Opinion and Order, 14 FCC Rcd 13225, 13229 at ¶ 9 (rel. Aug. 9, 1999) (*AT&T High Seas Order*).

those differences did not render satellite-based service “nonviable as a substitute” for the High Seas service, and thus did not preclude approval of AT&T’s request to discontinue those offerings. Thus, the satellite-based service was a reasonable substitute, even though it was not an “exact” substitute.<sup>58</sup>

CenturyLink’s interpretation of the *AT&T High Seas Order* is not reasonable—in granting AT&T relief, the International Bureau looked at more than alternative satellite-based services. To support the assertion that it was alternative satellite service alone that led the International Bureau to allow discontinuance, CenturyLink cites to paragraph nine of the *AT&T High Seas Order*.<sup>59</sup> AARP’s review of the *AT&T High Seas* order shows a different conclusion than the one alleged by CenturyLink. Paragraph 9 of the *AT&T High Seas Order* is provided below in its entirety:

One alternative would be one of the satellite-based radio-telephone services such as AT&T’s INMARSAT satellite-based SeaCall service or Iridium’s low-earth-orbit satellite-based mobile telephone service. *Although both the satellite-based services and High Seas Service provide a similar voice communications service, we agree with the users that the two are not exact substitutes for each other.* First, use of SeaCall service would require current users of High Seas Service to incur an additional expense to purchase new equipment. For example, AT&T’s SeaCall service would require users to spend from \$5,000 to \$6,500 for an INMARSAT Mini-M satellite terminal, antenna and computer. While this cost is not substantially out of line with the \$2,000 to \$2,500 required to purchase a new HF single sideband (SSB) radio set, *we recognize that current High Seas Service customers have already bought their HF radios.* On the other hand, the charges for air time on satellite-based service are substantially lower than those imposed by AT&T for High Seas Service.<sup>60</sup>

As discussed in this paragraph, it is clear that with regard to satellite services the International Bureau found that the services were not exact substitutes, precisely because consumers had an installed base of equipment, and would face substantial costs in switching from existing equipment to the equipment required to use the alternative services.

---

<sup>58</sup> CenturyLink, October 26, 2015 Comments, p. 13.

<sup>59</sup> CenturyLink, October 26, 2015 Comments, p. 13, footnote 32.

<sup>60</sup> *AT&T High Seas* order, ¶9.

The International Bureau’s rationale for allowing discontinuance of AT&T’s High Seas service is better explained elsewhere in the *AT&T High Seas Order*, where it becomes clear that the International Bureau’s approach was not the narrow one alleged by CenturyLink. Following a discussion of other limitations of the satellite services, the International Bureau explained the alternatives that it found to be reasonable:

In any event, however, material filed by AT&T subsequent to its application has shown that High Seas Service customers have several alternatives that do not require them to purchase new equipment, including HF radio-telephone service from other providers. . .<sup>61</sup>

The International Bureau identified five (5) alternative providers that could be utilized with existing equipment, and concluded that:

While no single one of these providers serves the entire service area of AT&T's High Seas Service, taken together they cover all areas served by the AT&T stations and areas that AT&T's stations do not cover. AT&T's current customers can use any or all of these services by merely re-tuning their radio sets, without the need to purchase new equipment.<sup>62</sup>

Thus, the International Bureau’s focus on the user’s ability to rely on *existing equipment* is similar to the FNPRM’s focus on the compatibility of existing devices and service with alternative providers’ offerings. The *AT&T High Seas Order* actually supports the approach advanced in the FNPRM with regard to service functionality and device and service interoperability.<sup>63</sup>

### **Verizon’s “safe harbor” approach should be rejected**

Verizon advances a “safe harbor” test with the following components:

Under the proposed appropriate “safe harbor” test, the Commission should automatically grant a 214 discontinuance if both:

---

<sup>61</sup> *AT&T High Seas Order*, ¶11.

<sup>62</sup> *AT&T High Seas Order*, ¶12.

<sup>63</sup> FNPRM, ¶¶219 & 229.

(1) Discontinuing the service will not terminate the end user’s ability to call 9-1-1; and

(2) One or more of the following conditions are met:

- Fewer than 5% of customers in the affected geographic area subscribe to the service;
- The service is not used as a wholesale input by other providers;
- There is another provider that offers substantially the same service in the same area;
- There has been no new orders for the service during the past 6 months;
- The service relies on vendor equipment or inputs that have been discontinued; or
- The service is at or below 64 Kbps or functions in the analog bandwidth at or below 20000hz.

Providers filing under this “safe harbor” must certify their discontinuance meets this test and customer notification requirements, but would be exempt from the detailed criteria and certification contemplated in the *Further Notice*. Discontinuances meeting this safe harbor test would be automatically granted following the notice period, rather than subject to being taken off of the automatic grant track.<sup>64</sup>

Verizon’s proposal, as written, would allow an automatic grant if a customer resided in the service footprint of a wireless carrier. Because Verizon’s proposed “safe harbor” fails to address the performance of the replacement services, other than the ability of a customer to “call 9-1-1” (with no mention of PSAP issues, or 9-1-1 location accuracy), affordability, and other factors identified in the Public Knowledge criteria, the test is inappropriate and should be rejected.

Verizon’s “safe harbor” approach might be appropriate for non-voice services, but is not appropriate when applied to voice.

### **AT&T’s customer outreach and education proposals are inappropriate**

AT&T argues that the Commission should not evaluate a carrier’s customer outreach and

education activities. AT&T states “carriers do not need the Commission *flayspecking* its customer

---

<sup>64</sup> Verizon, October 26, 2015 Comments, p. 4.

education materials.”<sup>65</sup> AARP hopes that AT&T’s comment is the result of an erroneous word choice, as the term “flyspecking” is certainly not an appropriate term in the context of potential Commission action regarding the important matter of technology transition.<sup>66</sup> Given that the Commission has recently fined AT&T for misleading its customers,<sup>67</sup> the Commission should be prepared proactively to ensure that customer education is in fact educational, and not misleading.

## Conclusion

As discussed in AARP’s opening comments, there are many strong points in the FNPRM which can contribute to the potential “triumph” of technology transition.<sup>68</sup> However, as AARP also noted, there are areas where the FNPRM does not go far enough. For the transition to all IP networks to be a triumph, the Commission must continue to maintain its focus on fundamental issues such as service affordability and reliability. In its comments, AARP offered additional proposals that correct the shortfalls of the FNPRM, and the Commission should adopt those proposals. As the Commission works out the details of the process that will ultimately enable the discontinuance of legacy services, the Commission must not lose sight of the larger issues associated with IP transition, especially those associated with the affordability and reliability of broadband networks. The next-generation public network must offer affordability and reliability similar to the legacy PSTN, otherwise, consumers, competition, and innovation will be harmed.

---

<sup>65</sup> AT&T, October 26, 2015 Comments, p. 17, emphasis added.

<sup>66</sup> According to Merriam-Webster, “flyspecking” means either “a speck made by fly excrement,” or “something small and insignificant.” <http://www.merriam-webster.com/dictionary/flyspeck>. AARP is puzzled by AT&T’s perspective, as this Commission certainly does not have the characteristics of a fly. AARP also does not believe that Commission review of carrier customer-education materials, and the potential for improvements to carrier processes, bears any resemblance to excrement. Nor does AARP believe that such a process, reflecting the Commission’s statutory responsibilities, is something small and insignificant.

<sup>67</sup> *In the Matter of AT&T Mobility, LLC*, File No. EB-IHD-14-00017504, NAL/Acct. No. 201532080016. FRN: 0018624742, Notice of Apparent Liability for Forfeiture and Order, June 17, 2015.

<sup>68</sup> *Technology Transitions et al.*, GN Docket No. 13-5 et al., Order, Report and Order and Further Notice of Proposed Rulemaking, Report and Order, Order and Further Notice of Proposed Rulemaking, Proposal for Ongoing Data Initiative, 29 FCC Rcd at 1439, para. 15.