

In the Matter of )  
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Technology Transitions ) GN Docket No. 13-5

ensuring that new networks continue to support legacy or anachronistic devices and applications. The Commission should not increase these inefficiencies by expanding the adequate replacement test's interoperability list to include new devices or applications – particularly given the absence of proof that the test yields any benefit.

The goal of this proceeding is to streamline, not to complicate, the nation's IP transition. The Commission should therefore recognize that consumers are already voting with their wallets by migrating to services that do not depend on now-dated networks. For all these reasons, the Commission should eliminate or reduce the adequate replacement test's interoperability list – it certainly should not expand the list.<sup>3</sup>

**A. Special Discontinuance Criteria Are Unnecessary Because Market Data Confirms that Consumers Consider Modern Voice Services to Be Substitutes for Legacy Voice Services.**

There is no need for special criteria for discontinuing legacy voice services because customers are already rapidly abandoning legacy landline service in favor of VoIP and wireless alternatives. In the three years from June 2014 to June 2017, the number of interconnected VoIP subscriptions in the United States increased from 51 million to 64.5 million,<sup>4</sup> and the number is likely even higher today. And as of December 2016, more than 92 percent of Americans had access to 25/3 Mbps fixed broadband, over which they easily can receive VoIP or over-the-top

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<sup>3</sup> Ideally, the Commission should recognize the continued acceptance of all of the alternatives to legacy voice service including VoIP and wireless approaches, and thus the Commission should altogether eliminate its special (and heightened) tests for auto-grant treatment of an application to discontinue a legacy voice service as part of a technology transition, rather than continue to create multiple and complex tests for specific sub-circumstances. *See* Part A below (summarizing market data on adoption of modern voice services).

<sup>4</sup> *See* FCC, *Voice Telephone Services: Status as of June 30, 2017*, at Figs. 1, 2 (Nov. 2018), <https://docs.fcc.gov/public/attachments/DOC-355165A1.pdf>.

service from multiple providers.<sup>5</sup> Further, as of December 2017, 53.9 percent of American households had eliminated landline service entirely in favor of wireless-only voice service.<sup>6</sup> And among the minority of households that had not yet cut the cord despite having wireless phones, 40.9 percent received nearly all or all of their calls on their wireless phones.<sup>7</sup> All told, about 69 percent of American households are wireless-only or wireless-mostly.<sup>8</sup> Among households living in poverty, the abandonment of wireline offerings is even greater: 68.1 percent live in households with only wireless telephones, as do 58.1 percent of those living near poverty.<sup>9</sup> And, according to Form 477 data, “approximately 93 percent of the population is covered by at least four [mobile wireless] service providers,” and 100 percent of the population is covered by at least one provider.<sup>10</sup> Form 477 data also show that “as of December 2016, over 99 percent of the American population has access to mobile LTE with a minimum advertised speed of 5 Mbps/1 Mbps.”<sup>11</sup>

The Commission’s own data therefore show that consumers are comfortable with and regularly adopt market alternatives to legacy voice service. In light of this data, the Commission

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<sup>5</sup> See *Inquiry Concerning Deployment of Advanced Telecommunications Capability to All Americans in a Reasonable and Timely Fashion*, 2018 Broadband Deployment Report, 33 FCC Rcd 1660, ¶ 50 (2018) (“2018 Broadband Deployment Report”).

<sup>6</sup> See CDC, *Wireless Substitution: Early Release of Estimates From the National Health Interview Survey, July-December 2017*, at 2 (June 2018), <https://www.cdc.gov/nchs/data/nhis/earlyrelease/wireless201806.pdf>.

<sup>7</sup> *Id.* at 3-4.

<sup>8</sup> See *id.* at 2-4.

<sup>9</sup> *Id.* at 2-3.

<sup>10</sup> See *Implementation of Section 6002(b) of the Omnibus Budget Reconciliation Act of 1993; Annual Report and Analysis of Competitive Market Conditions With Respect to Mobile Wireless, Including Commercial Mobile Services*, Twentieth Report, 32 FCC Rcd 8968, ¶ 74 (2017) (estimated by census block).

<sup>11</sup> 2018 Broadband Deployment Report, ¶ 52.

should facilitate, rather than impede, technology transitions. But, the current rules require providers seeking to discontinue a legacy voice service as part of a technology transition to satisfy either the adequate replacement test or the alternative options test<sup>12</sup> to be eligible for the automatic-grant treatment that all other Section 214 discontinuance applications are eligible for. Those tests lead some providers to jump through additional hoops as they move to newer services, even as providers who initiate service using only VoIP are not required to make equivalent showings. The tests are unnecessary because consumers have already shown they are comfortable with market alternatives to legacy voice service as shown by the data above. The Commission should therefore consider removing these additional tests altogether.

**B. In the Alternative, the Commission Should Consider Reducing the List of Devices on the Adequate Replacement Test's Interoperability List.**

To the extent the Commission continues to impose special tests for discontinuing legacy voice service as part of a technology transition, there is no reason to expand the existing interoperability list under the adequate replacement test. The Commission should instead consider eliminating the list in its entirety or eliminating certain items.

The Commission's current interoperability list compels providers interested in the automatic grant of discontinuance applications to provide replacement services to support low-speed modem-dependent devices or applications absent the Commission's permission.<sup>13</sup> But

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<sup>12</sup> See *Office of Engineering and Technology and Wireline Competition Bureau Seek Comment on List of Interoperable Devices for Discontinuance Applications Under the Adequate Replacement Test*, Public Notice, GN Docket No. 13-5, DA 18-1110, at 1 n.1 (Oct. 29, 2018) (summarizing the test).

<sup>13</sup> See *Technology Transitions Order, et al.*, Declaratory Ruling, Second Report and Order, and Order on Reconsideration, 31 FCC Rcd 828, ¶ 159 (2016) (“*2016 Technology Transitions Order*”).

there is no reason to slow the evolution of the nation’s networks to support any of those outdated devices or applications. Fax machines’ once-unique function has now been replaced by better technology – most obviously by scanning and email,<sup>14</sup> but also by mobile apps that turn photos into PDFs.<sup>15</sup> Many alarm services sell options that run on modern wireless or IP networks;<sup>16</sup> indeed, the self-described “leader in home security” advertises its wireless offering by noting that it “adds convenience to the peace of mind you get with” home security services.<sup>17</sup> And many emerging, do-it-yourself home security services – such as Scout,<sup>18</sup> Nest,<sup>19</sup> and SimpliSafe<sup>20</sup> – run on a combination of IP and cellular networks. Popular medical-monitoring services advertise

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<sup>14</sup> See The Radicati Group, Inc., *Email Statistics Report, 2018-2022* at 3, [https://www.radicati.com/wp/wp-content/uploads/2018/01/Email\\_Statistics\\_Report,\\_2018-2022\\_Executive\\_Summary.pdf](https://www.radicati.com/wp/wp-content/uploads/2018/01/Email_Statistics_Report,_2018-2022_Executive_Summary.pdf) (“In 2018, the total number of business and consumer emails sent and received per day will exceed 281 billion, and is forecast to grow to over 333 billion by year-end 2022.”).

<sup>15</sup> E.g., Microsoft, *Images to PDF Pro*, <https://www.microsoft.com/en-us/p/images-to-pdf-pro/9n7t3f5mf7tl?activetab=pivot:overviewtab>.

<sup>16</sup> ADT, *Do I need a landline for my ADT monitored security system?*, <https://www.adt.com/help/faq/security-services-features/does-adt-system-need-landline> (“ADT monitoring realizes many homeowners choose to go without a home phone and rely solely on their cell phone. Even if you don’t have a home phone, you can still take advantage of ADT monitoring with CellGuard. CellGuard uses cellular technology instead of a landline to communicate with the ADT monitoring center. Some VoIP and digital phone services also connect to the ADT monitoring center.”).

<sup>17</sup> ADT, *Rest Easy with a Wireless Home Security System*, <https://www.adt.com/wireless-security>.

<sup>18</sup> Scout, *How It Works – Scout Alarm*, <https://www.scoutalarm.com/how-it-works> (security system running over WiFi, with 4G LTE backup).

<sup>19</sup> Nest, *Nest Secure / Home Security and Alarm System*, <https://nest.com/alarm-system/overview/> (security system that works over Wi-Fi).

<sup>20</sup> SimpliSafe, *Coverage Check*, <https://simplisafe.com/coverage-check> (security system that reaches almost all geographic markets through a cellular connection; “no phoneline or internet connection needed”).

robust options that use cellular networks.<sup>21</sup> And older point-of-sale terminals are giving way to modern alternatives such as Square<sup>22</sup> and PayPal<sup>23</sup> that work on many kinds of modern networks.

Innovative technologies are also providing new and diverse options for consumers with disabilities. More limited analog-only relay services and equipment are quickly being replaced by IP-based relay systems; analog-only caption telephone sets are being replaced by IP-captioned telephone sets while IP relay and Real Time Text (now emerging on mobile networks) provide improvements over TTY for text-based communications and Video Relay Service provides the ability for users to communicate natively in American Sign Language using video conferencing equipment.<sup>24</sup> Further, the Commission has recognized that Section 255 and the Twenty-First Century Communications and Video Accessibility Act (CVAA) already require compatibility with existing peripherals and devices and prohibit installing network features or functions that inhibit accessibility.<sup>25</sup> Accordingly, as we built our Fios network, we required vendors to confirm that their equipment would work with TTY and other assistive technologies, and – as the

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<sup>21</sup> MobileHelp, *Medical Alert System FAQs*, <https://www.mobilehelp.com/resources-information/learn-more/faqs.shtml> (“Do I need a landline or phone to use your medical alert system? No – a landline phone is not required.”); Bay Alarm Medical, *How Do Medical Alert Systems Work? / FAQs*, <https://www.bayalarmmedical.com/frequently-asked-questions/> (also offering a system that works over cellular networks).

<sup>22</sup> E.g., Square, *Square Register*, <https://squareup.com/hardware/register> (point-of-sale terminal that functions over WiFi).

<sup>23</sup> PayPal, *PayPal Here*, <https://www.paypal.com/us/brc/article/accepting-credit-cards-point-of-sale> (card readers that connect to mobile phones).

<sup>24</sup> See FCC, *Telecommunications Relay Service – TRS*, <https://www.fcc.gov/consumers/guides/telecommunications-relay-service-trs>; FCC, *Real -Time Text*, <https://www.fcc.gov/real-time-text>.

<sup>25</sup> *Accelerating Wireline Broadband Deployment by Removing Barriers to Infrastructure Investment*, Report and Order, Declaratory Ruling, and Further Notice of Proposed Rulemaking, 32 FCC Rcd 11,128, ¶¶ 152-54 (2017); see also 47 C.F.R. Pts. 6, 7, and 14 (setting out accessibility rules).

Commission is aware<sup>26</sup> – we have not seen evidence of systemic issues with the use of analog devices like TTYs or captioned telephones over Verizon’s fiber-based voice services. And if any disabled customer experiences difficulty with her equipment, our Center for Customers with Disabilities stands ready to help.<sup>27</sup>

In all events, there is no reason to expand the adequate replacement test’s ambit by adding devices or applications to the interoperability list. The test only recently took effect,<sup>28</sup> and has yet to our knowledge been used. The Commission should not therefore expand it without some evidence that the costs and delays it can cause are offset by real and substantive benefits.

Thus, as the Commission weighs any proposed additions to the list, it should abide several limitations. First, it must of course confine itself to interstate services, and leave intrastate services to be regulated (if at all) by the states. Second, it should carefully apply the four-part test it set forth in the *2016 Technology Transitions Order* for adding a device or application to the interoperability list.<sup>29</sup> In particular, the Commission should demand rigorous proof of any claimed reliance on particular devices or applications. As the marketplace evidence shows, even for devices or applications already on the list, innovators, providers, and developers

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<sup>26</sup> Ex Parte Letter from Katharine Saunders, Verizon, to Marlene H. Dortch, FCC, WC Docket 17-87 (Oct. 19, 2017).

<sup>27</sup> See generally Verizon, *Accessibility*, <https://www.verizon.com/about/accessibility/overview>.

<sup>28</sup> See 83 Fed. Reg. 36,467 (July 30, 2018) (specifying July 30, 2018, effective date for adequate replacement test).

<sup>29</sup> See *2016 Technology Transitions Order*, ¶ 162 (“These considerations include whether: (i) customers rely on the application or functionality for health or safety reasons; (ii) the application or functionality is used as a wholesale input by other providers; (iii) the application or functionality relies on vendor equipment or inputs that have been discontinued; and (iv) the service provider, as opposed to the end-user customer, is the least-cost avoider.”).

are rapidly inventing ways to take advantage of new networks' advanced functionalities. The Commission's rules should account for – indeed, should encourage – exactly that innovation.

### **CONCLUSION**

The Commission should not expand the interoperability list, but should instead reduce it.

Respectfully submitted,

VERIZON



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