



1212 New York Ave. N.W.
Suite 900
Washington, D.C. 20005
202-525-5717

Free Markets. Real Solutions.
www.rstreet.org

In the Matter of)
)
)
Modernizing Unbundling and Resale) WC Docket No. 19-308
Requirements in an Era of)
Next-Generation Network and Services)
)
)

Comments of R Street Institute¹

Tom Struble
Technology and Innovation Manager

Jeff Westling
Technology and Innovation Resident Fellow

February 4, 2020

¹ The R Street Institute (“R Street”) is a nonprofit, nonpartisan, public-policy research organization. R Street’s mission is to engage in policy research and educational outreach that promotes free markets as well as limited yet effective government, including properly calibrated legal and regulatory frameworks that support economic growth and individual liberty.

I. Introduction

As technology advances, so too must the Federal Communications Commission (“FCC” or “Commission”) and its regulatory regime. Over the last four years, the Commission has taken this mandate to heart, consistently updating or eliminating outdated rules that no longer make sense in the modern age.² This Notice of Proposed Rulemaking (“NPRM”)³ represents the next step in the FCC’s continuing work to update its rules for the modern communications marketplace.

With the goal of promoting competition in communications markets, the Telecommunications Act of 1996 (“1996 Act”)⁴ included, among other things, provisions requiring incumbent local exchange carriers (“ILECs” or “incumbent LECs”) to allow competitive local exchange carriers (“CLECs”) wholesale access to specific network elements on an unbundled basis on “rates, terms, and conditions that are just, reasonable, and nondiscriminatory.”⁵ Importantly, Congress gave the Commission discretion to determine which elements of an ILEC’s network must be unbundled.⁶ These determinations

² See, e.g., Declaratory Ruling and Third Report and Order, *In the Matter of Accelerating Wireless Broadband Deployment by Removing Barriers to Infrastructure Investment et al.*, WT Docket No. 17-79 et al. (Sept. 26, 2018), <https://bit.ly/2TP3hFQ>; Order on Reconsideration and Second Notice of Proposed Rulemaking, *In the Matter of 2014 Quadrennial Review — Review of the Commission’s Broadcast Ownership Rules Other Rules Adopted Pursuant to Section 202 of the Telecommunications Act of 1996 et al.*, MB Docket No. 14-50 et al. (Nov. 16, 2017), <https://bit.ly/2tq9Zr7>.

³ Notice of Proposed Rulemaking, *In the Matter of Modernizing Unbundling and Resale Requirements in an Era of Next-Generation Networks and Services*, WC Docket No. 19-308 (Nov. 22, 2019) [hereinafter NPRM], <https://bit.ly/2TTH5ui>.

⁴ Telecommunications Act of 1996, Pub. L. No. 104-104, 110 Stat. 56. (Feb. 8, 1996).

⁵ 47 U.S.C. § 251(c)(3).

⁶ 47 U.S.C. § 251(d)(2).

are made based on analyses of competition and barriers to entry in local communications markets. Therefore, the Commission's unbundling rules must be updated periodically in response to changes in the communications marketplace.

R Street supports the Commission's efforts in this proceeding to modernize its unbundling rules. Due to recent technological advances that lower barriers to entry and allow for more competition in the provision of voice, video, and broadband services, many of the Commission's existing unbundling rules should be eliminated. In particular, the FCC should find no impairment with respect to DS1 and DS3 loops subject to geographic restrictions, and DS0 and Narrowband Voice Grade Loops nationwide.

II. New Technologies Increasingly and Successfully Compete with the Traditional Wireline Services Provided by Incumbent LECs

The Commission's inquiry to determine whether a specific network element should be unbundled begins and ends with competition. The 1996 Act requires that the Commission consider whether a failure to provide access would impair a reasonably efficient competitor from providing service to the consumer.⁷ The Commission has interpreted this to establish the modern standard:

A requesting carrier's ability to provide the service is "impaired" if, taking into consideration the availability of alternative elements outside the incumbent LEC's network, including elements self-provisioned by the requesting carrier or acquired as an alternative from a third-party supplier, lack of access to that element poses a barrier or barriers to entry, including operational and economic barriers, that are likely to make entry into a market by a reasonably efficient competitor uneconomic.⁸

⁷ 47 U.S.C. § 251(c)(3).

⁸ 47 C.F.R. § 51.317(b); *see also* Order on Remand, *In the Matter of Unbundled Access to Network Elements: Review of the Section 251 Unbundling Obligations of Incumbent Local Exchange Carriers*, WC Docket No. 04-313 & CC Docket No. 01-338 (Dec. 15, 2004), <https://bit.ly/2GSiKNI>, *aff'd*, *Covad Commc'ns Co. v. FCC*, 450 F.3d 528 (D.C. Cir. 2006).

The key question, then, is whether a reasonably efficient competitor could enter the market and compete with the incumbent LEC, not whether a specific competitor could provide the exact same service in an existing market area. In other words, is mandatory unbundled access required for competition to take place?

For any competition analysis, the first step is to define the relevant market both in terms of the products or services at issue and the geography in which they are being sold. In the case of ILECs, the service at issue has traditionally been voice communications. Indeed, at the time of the 1996 Act, ILECs faced little or no competition in providing home voice service because they controlled the switched access copper networks that connect the individual user to the immediate service provider. As the Commission rightly points out, ILECs controlled nearly 100% of the local telephone market, meaning other carriers using the same technologies had little opportunity to compete.⁹ But it is important to distinguish switched access service from voice service generally. And indeed, as companies introduced new technologies to provide voice communications to consumers, consumer reliance on traditional ILEC telephony diminished.

Today, competition for voice service has drastically increased. Not only does interconnected VoIP offered by cable companies compete with the traditional “end-user” switched access offered by ILECs, but mobile carriers, wireless Internet service providers (“WISPs”), and fully over-the-top services like Skype now serve as direct substitutes in the

⁹ NPRM, *supra* note 3, at ¶ 5.

telephony market for millions of customers across the nation. For example, mobile carriers and cable VoIP offerings now account for 80% of voice lines nationwide.¹⁰

More importantly, the demand for voice service has fallen dramatically as high-speed broadband has become the most important telecommunications market for both residential and enterprise customers. And in the broadband market, ILECs face fierce intermodal competition from broadband providers utilizing an array of technologies—including cable companies, mobile carriers, WISPs and satellite services—to connect their users to the Internet. By 2017, for example, cable companies had deployed networks that “bypass ILEC transport networks to almost 90 percent of the population and households.”¹¹

This is not to say that a reasonably efficient competitor can compete in every geographic market without access to unbundled network elements. For that reason, maintaining the Commission’s unbundling rules for broadband-capable loops in rural areas may be sensible for now. However, as the Commission continues working to modernize its network unbundling rules, it must understand that new technologies and network operators increasingly and successfully compete in markets that were once dominated by ILECs and switched access networks. With this new competition already present in the market for these services—and with even more intermodal broadband competition on the horizon in the form of Low Earth Orbit satellite constellations—the need for mandatory access to specific parts of ILECs’ end-user switched access is diminished.

¹⁰ Comments of AT&T, WC Docket No. 18-141 et al., at 4–5 (May 9, 2019), <https://bit.ly/37DF3ma>.

¹¹ *Id.* at 3.

III. Advancement in Competitive Services Makes the Time Right for the Commission to Find No Impairment with Respect to a Variety of Network Elements.

As the Commission reexamines whether its rule mandating unbundled access to specific network elements should remain in place, it must understand the competitive impact that new technologies have in the broadband market.

A. The Commission Should Find No Impairment with Respect to Certain UNE DS1 and DS3 Loops

The Commission proposes to find no impairment with respect to UNE DS1 and DS3 Loops in (1) counties served by price cap incumbent LECs found to be competitive pursuant to the *Business Data Services Order*,¹² and (2) the study areas deemed competitive as a result of the Commission's decision to allow rate-of-return ILECs to elect incentive regulation for their business data services.¹³ We support this proposal.

DS1 and DS3 loops are primarily used to serve enterprise customers, but these loops no longer provide competitive speeds and are outclassed by other communications technologies. DS1 loops operate at only 1.544 Mbps, meaning that customers wanting to make a single HD Skype video call would be nearing the capacity for the line.¹⁴ DS3 loops provide considerably more speed than DS1 loops at 44.736 Mbps, but are still outclassed by

¹² Report and Order, *Business Data Services in an Internet Protocol Environment et al.*, WC Docket Nos. 16-143 et al. (Apr. 20, 2017) [hereinafter BDS Order], <https://bit.ly/36Jz266>.

¹³ NPRM, *supra* note 3, at ¶ 27.

¹⁴ *How much bandwidth does Skype need?*, Skype (last visited Feb. 4, 2020), <https://bit.ly/2Ob0LGx>.

other technologies that can easily surpass gigabit speeds.¹⁵ As the Commission has found in the past, this increased capacity has led to procompetitive outcomes as “higher bandwidth services are particularly attractive to competitive LECs.”¹⁶ Reasonably efficient competitors would likely use these other technologies to compete with ILECs, obviating the need for unbundled access to lower capacity loops.

Furthermore, communications technologies will continue to improve going forward. For example, 5G mobile networks can potentially offer speeds that are comparable to what ILECs and cable providers can offer. These services will soon be available nationwide,¹⁷ so they may present an attractive option for enterprise customers in the near future. Additionally, Cisco is developing communications equipment to use 5G wireless networks in conjunction with Wi-Fi 6 to offer enterprise broadband services, which will provide yet another competitive alternative to legacy ILEC services.¹⁸

Because of the substitutability of these various communications technologies, reasonably efficient competitors need not rely on unbundled access to DS1 and DS3 loops to compete in the broadband market. Instead, competitors will likely seek to use these newer technologies to offer superior service, which in turn will incentivize ILECs to deploy new infrastructure to better compete in both the wholesale and retail broadband service markets. This is precisely the goal Congress set forth in the 1996 Act, as it will afford both residential

¹⁵ See, e.g., *Comcast Enterprise Services*, Comcast Business (last visited Feb. 4, 2020), <https://bit.ly/317WLLZ>.

¹⁶ BDS Order, *supra* note 12.

¹⁷ See, e.g., Dan Jones, *T-Mobile Launches Lowband Near-Nationwide 5G Network*, Light Reading (Dec. 2, 2019), <http://bit.ly/38MsKnE>.

¹⁸ *5G Enterprise Technology*, Cisco (last visited Feb. 4, 2020), <https://bit.ly/2RFQNPB>.

and enterprise customers more options for connectivity than ever before. Therefore, the rules mandating unbundled access to DS1 and DS3 loops are not only unnecessary, they may in fact slow the deployment of new infrastructure going forward. As such, these rules should be eliminated.

B. The Commission Should Find No Impairment for UNE DS0 Loops Nationwide

The Commission proposes to find that “competitive LECs are no longer impaired without access to UNE DS0 Loops in urban census blocks.”¹⁹ The Commission should adopt this proposal, but perhaps also go further and find no impairment nationwide.

DS0 UNE loops are used to provide broadband and voice services to both enterprise and residential consumers. As described above, the market for broadband services has expanded dramatically in recent years. Along with offerings from ILECs, cable providers offer service to most all of the country, while WISPs, mobile carriers, and satellite providers have been expanding into the broadband market as well.²⁰ And in addition to the competition already provided by mobile carriers, the imminent deployment of 5G networks will allow these carriers to greatly expand their home broadband service offerings.²¹

The Commission’s unbundling analysis looks at whether a reasonably efficient competitor would be able to compete without mandatory access to specific network elements. The evidence is overwhelmingly clear that competition in the broadband market

¹⁹ NPRM, *supra* note 3, at ¶ 38.

²⁰ See, e.g., 2019 Broadband Deployment Report, *In the Matter of Inquiry Concerning Deployment of Advanced Telecommunications Capability to All Americans in a Reasonable and Timely Fashion*, GN Docket No. 18-238 ¶¶ 27–29 (May 8, 2019) [hereinafter 2019 Broadband Deployment Report], <http://bit.ly/2RGh5B9>.

²¹ See, e.g., *Verizon 5G Home Internet*, Verizon Wireless (last visited Feb. 4, 2020), <https://bit.ly/2GA0oz8>.

already exists from non-ILEC service providers.²² Therefore, the Commission should find that eliminating unbundling rules for DSOs will result in no impairment with respect to these loops.

However, the Commission's proposal arguably does not go far enough, as the Commission proposes to limit this non-impairment finding for DSO loops to urban census blocks only.²³ While this makes some sense, given the challenging economics of deploying broadband infrastructure in rural areas, the negative impacts of these unbundling rules arguably outweigh the benefits. Therefore, the Commission should consider extending the non-impairment finding to the entire nation.

It is undoubtedly true that rural communities face the most difficult challenges in the broadband market. However, by limiting the finding of non-impairment for DSO loops to urban census blocks, the Commission may actually delay the deployment of newer broadband technologies to these rural communities.²⁴ For example, WISPs often compete in rural and exurban areas where telephone and cable deployments are not cost effective. Similarly, satellite ISPs need continued adoption and subscriber growth to cover their deployment costs and make their services profitable. Rural areas with high deployment costs present an excellent business case for these nontraditional broadband service providers.²⁵ But by mandating continued wholesale access to DSO loops in rural areas, competitors may

²² See 2019 Broadband Deployment Report, *supra* note 20.

²³ NPRM, *supra* note 3, at ¶ 38.

²⁴ See Comments of the Wireless Industry Service Providers Association, WT Docket No. 19-250 & RM-11849, at 3 (Oct. 29, 2019), <https://bit.ly/2GA3gOg>.

²⁵ Comments of Viasat, GN Docket No. 19-285, at 1-2 (Nov. 22, 2019), <https://bit.ly/316tBgo>.

find it easier to simply piggyback on the existing infrastructure rather than deploy competing broadband technologies. This ultimately will hurt consumers over the long run as their choices for broadband service are limited to DS0-based services.

C. The Commission Should Eliminate Unbundling Requirements for Voice-Grade Loops Nationwide

The Commission rightly explains that consumers no longer rely on ILECs for the provision of voice service, as ILECs now constitute merely 12% of the voice market nationwide.²⁶ As explained above, reasonably efficient competitors can now enter and compete in the voice market without mandatory access to the voice-grade loops owned by ILECs.

To the extent that competition among voice providers in a specific geographic market remains limited, the Commission should recognize that incentivizing competition using voice-grade lines is not the best way to promote the public interest in the long run. While deploying communications infrastructure remains a significant challenge in rural communities, policies that limit the incentive for and ability of carriers to invest in newer broadband-capable services will only increase the digital divide over time.

By eliminating the unbundling requirements for voice-grade loops, the Commission can incentivize both ILECs and potential competitors to deploy new broadband infrastructure throughout the nation. Not only will this allow more voice providers to compete with the incumbent ILEC services, it will also bring the myriad of benefits that high-speed broadband connectivity delivers.

²⁶ NPRM, *supra* note 3, at ¶ 53.

We commend the Commission's actions thus far in promoting competition and reducing regulatory barriers in broadband markets. While it is important to ensure that incumbent firms cannot leverage their existing infrastructure to inhibit new competition, technological advancements in communications markets obviate the need for many outdated Commission rules. It is high time those legacy rules are put to rest.

Respectfully submitted,

_____/s/_____

Tom Struble
Technology and Innovation Manager

Jeff Westling
Technology and Innovation Resident Fellow

February 4, 2020