

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

In the Matter of

Petition of USTelecom for Forbearance
Pursuant to 47 U.S.C. § 160(c) to Accelerate
Investment in Broadband and Next-
Generation Networks

)
)
)
)
)
)
)

WC Docket No. 18-141

**OPPOSITION OF INCOMPAS, FISPA, MIDWEST ASSOCIATION OF COMPETITIVE
COMMUNICATIONS, AND THE NORTHWEST TELECOMMUNICATIONS
ASSOCIATION**

Daniel P. Friesen
President of the Board
FISPA
www.fispa.org
daniel@ideatek.com

Paula Foley
Midwest Association of Competitive
Communications
www.macctelecom.com
paula.foley@granitenet.com

Todd Way
Vice Chair
Northwest Telecommunications Association
www.nwta.biz
tway@dfn.net

John T. Nakahata
Henry Shi
Mengyu Huang*
HARRIS, WILTSHIRE & GRANNIS LLP
1919 M Street NW, Eighth Floor
Washington, DC 20036
(202) 730-1320
Counsel for INCOMPAS
*Admitted in Maryland only. Practicing
under the supervision of D.C. Bar members.

Karen Reidy
Vice President
INCOMPAS
www.incompas.org
kreidy@incompas.org

August 6, 2018

TABLE OF CONTENTS

I.	INTRODUCTION AND SUMMARY	2
II.	BACKGROUND	11
	A. Our Members Serve A Diverse Range of Voice and Data Customers	12
	1. <i>Our Members Offer Competitive Alternatives for Voice and Data Services to Small Businesses, Government Agencies, Schools, and Healthcare Providers Across the Country.....</i>	12
	2. <i>Our Members Offer Voice and Broadband Service to Residential Customers, Including Many in Underserved Rural and Urban Areas</i>	18
	B. The Current State of Unbundling and Resale Under Section 251(c)(3) and (c)(4)	20
	1. <i>Availability of UNEs</i>	20
	2. <i>Avoided-Cost Resale</i>	24
	C. Many of the Communities Served by Our Members Continue to Face High Barriers to Entry and Few If Any Competitive Choice in the Markets for Residential and Business Data Services	25
	1. <i>High Barriers to Entry Remain for Full Facilities-Based Entry in Many Geographic Markets</i>	26
	2. <i>There Are Few if Any Alternatives to UNEs and Avoided-Cost Resale, Reflecting Highly Concentrated Wholesale Markets</i>	30
III.	UNBUNDLING AND AVOIDED-COST RESALE HAVE OPENED UP MARKETS AND SPURRED INNOVATION AND INVESTMENT, AS CONGRESS HAD INTENDED IN ENACTING THESE PROVISIONS IN THE TELECOMMUNICATIONS ACT OF 1996	34
	A. Congress Rejected an Automatic Sunset for Section 251(c), Recognizing the Importance of Maintaining Access to UNEs and Avoided-Cost Resale Until a Full Transition to Facilities-based Competition	34
	B. Access to UNEs and Discounted Resale Is Vital to Promoting Innovation and Deployment of Fiber Networks by Competitive and Incumbent Providers	37
	1. <i>The Petition Grossly Mischaracterizes the Role that UNEs and Avoided-Cost Resale Play in the Marketplace</i>	37
	2. <i>Access to UNEs, Including Loops and Interoffice Transport, Promotes Investment and Innovation by Competitive Providers</i>	45
	3. <i>Forbearance Would Reduce ILEC Incentives to Their Upgrade Networks and Service Offerings.....</i>	50
	C. Nation-Wide Forbearance from Unbundling Obligations Would Be Disruptive and Would Leave Many Underserved Areas Without Any Provider of Many Advanced Services	52

D. US Telecom’s Modified Transition Plan Does Not Ameliorate the Anti-Competitive, Harmful Impacts of Forbearance on Consumers.	56
IV. NATION-WIDE FORBEARANCE REPRESENTS A RADICAL AND UNWARRANTED DEPARTURE FROM THE COMMISSION’S COMPETITION FINDINGS IN THE <i>BDS ORDER</i>	57
A. Forbearance from Unbundling Requirements Would be Premature Based on the BDS Order’s Predicted Timeframe for the Emergence of Competitive Providers	58
B. Forbearance Would Undermine the BDS Order’s Prediction of Competition.....	61
V. USTELECOM’S PETITION FAILS TO MEET THE STATUTORY SHOWING FOR FORBEARANCE UNDER SECTION 10 OF THE COMMUNICATIONS ACT	64
A. The Commission Should Not Forbear from Section 251(c)(3)’s Unbundling and Associated Section 252 Requirements	65
1. <i>UNEs Remain Necessary to Ensure Just and Reasonable Rates and to Prevent Unjust and Unreasonable Discrimination in the Wholesale and Retail Markets....</i>	65
2. <i>Forbearance from Unbundling Requirements Would Undermine Consumer Protection and Is Inconsistent with the Public Interest</i>	69
B. The Commission Likewise Should Not Forbear from Continuing to Apply Section 251(c)(4)’s Avoided-Cost Resale Obligations	71
1. Avoided-Cost Resale Is Necessary to Constrains Prices for Traditional TDM-Based Services	72
2. <i>Forbearing from the Avoided-Cost Resale Requirement Would Likewise Harm Consumers and the Public Interest</i>	74
C. The Commission Should Not Forbear from the Section 272(e)(1) Requirements .	75
VI. CONCLUSION	78

ATTACHMENTS

Economic Analysis

David E. M. Sappington, <i>Premature, Ubiquitous Forbearance Will Harm Consumers</i>	1
Declaration of William P. Zarakas	2

Competitive Provider Declarations

Access One (Declaration of John Hoehne)	3
Allstream Business US (Declaration of Douglas Denney)	4
Dialog Telecom (Declaration of James Bellina)	5
Digital West (Declaration of Jeff Buckingham)	6
Douglas Services d/b/a Douglas FastNet (Declaration of Todd Way)	7
Fusion Connect (Declaration of Gregory J. Darnell)	8
Gorge Networks (Declaration of Dan Bubb)	9
Biddeford Internet Corp. d/b/a GWI (Declaration of Fletcher Kittridge)	10
IdeaTek Telecom (Declaration of Daniel Friesen)	11
Origin Networks d/b/a InfoStructure (Declaration of Jeff Rhoden)	12
Mammoth Networks (Declaration of Brian Worthen)	13
Race (Declaration of Raul Alcaraz)	14
Socket Telecom (Declaration of Matthew Kohley)	15
Virginia Global (Declaration of Dusan Janjic)	16

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

In the Matter of)	
)	
)	
Petition of USTelecom for Forbearance)	WC Docket No. 18-141
Pursuant to 47 U.S.C. § 160(c) to Accelerate)	
Investment in Broadband and Next-)	
Generation Networks)	

**OPPOSITION OF INCOMPAS, FISPA, MIDWEST ASSOCIATION OF COMPETITIVE
COMMUNICATIONS, AND THE NORTHWEST TELECOMMUNICATIONS
ASSOCIATION**

INCOMPAS, the internet and competitive networks association;¹ FISPA;² the
Midwestern Association of Competitive Communications (“MACC”);³ and the Northwest
Telecommunications Association⁴ (collectively, the “Competitive Carriers Group”), on behalf of
themselves and their respective members, oppose USTelecom’s Petition for Forbearance
(“Petition”) insofar as it seeks forbearance from the core local telecommunications competition

-
- ¹ INCOMPAS is the preeminent national industry association for providers of internet and competitive communications networks, including both wireline and wireless providers in the broadband marketplace.
- ² FISPA is a national consortium of small to mid-range CLECs and service providers whose mission is to unite and advance our priorities of broadband choice, quality, and speed through member collaboration, advocacy, and education.
- ³ MACC is a leading Midwest trade association of competitive carriers formed to support an environment that fosters competition in the communications marketplace. MACC members supporting this filing include Birch Communications, First Communications, Granite Telecommunications, TDS Metrocom, and Allstream.
- ⁴ The Northwest Telecommunications Association (NWTa) is an association of Service Providers and small Competitive Carriers that offers broadband and voice service in all of Oregon, Washington, and Idaho. All providers serve some rural markets, and many provide only to rural markets.

requirements set forth in Section 251(c)(3), (c)(4) and associated requirements in Sections 251(d)(3) and 252 (“Category 1”); and 272(e)(1) (“Category 2”) of the Communications Act of 1934, as amended by the Telecommunications Act of 1996.⁵ As set forth in the Competitive Carriers Group’s accompanying Motion for Summary Denial, USTelecom’s Petition must be summarily denied, because USTelecom failed to provide the information needed to determine the impact forbearance would have on competition in both retail and wholesale markets and on consumers, and thus has not met its burden to establish its *prima facie* case that it meets all of Section 10’s requirements for forbearance.⁶ As described further below, the Petition also must be denied because it is manifestly against the public interest, and would harm competition and consumers.

I. INTRODUCTION AND SUMMARY

Like politics, telecommunications competition is local. Competitive choices in New York City do not provide any basis for assessing communications competition in Kansas, especially rural Kansas. Indeed, unless service can be expanded at relatively low costs with few operational barriers, competitive service at one location may not even be informative as to the competitive choices available to a neighbor a short distance away. And competitive networks are not ubiquitous. Data collected in the Commission’s Business Data Services proceeding showed that 77% of locations with business data services demand had only a single full facilities-based provider (i.e. a provider with its own loop facilities to the customer’s premises)

⁵ Petition of USTelecom for Forbearance Pursuant to 47 U.S.C. § 160(c) to Accelerate Investment in Broadband and Next-Generation Networks, WC Docket No. 18-141 (filed May 4, 2018) (“Petition”). Competitive Carriers Group is not endorsing USTelecom’s other forbearance requests.

⁶ Motion for Summary Denial, WC Docket No. 18-141 (filed Aug. 6, 2018) (“Motion for Summary Denial”).

available at their location – which jumped to 84% for locations with less than 100 Mbps of cumulative demand.⁷ With respect to mass market consumers – who even USTelecom recognizes most frequently purchase not just voice, but also broadband⁸ – FCC data show 13% of census blocks lack any provider of broadband at 25 Mbps download and 3 Mbps upload, with another 30% of census blocks having only one such provider.⁹ And measuring providers in a census block overstates the level of actual competitive choice. USTelecom, in its Petition, ignores this local variation in competitive conditions, seeking “one-size-fits-all” forbearance, as if the country had “one-size-fits-all” communications competition.

Contrary to USTelecom’s unsupported assertions, the facts are that competitive, facilities-based telecommunications providers today invest in reaching UNEs to provide a wide range of services across the country. For example, Digital West in San Luis Obispo County and Santa Barbara County, California and Virginia Global in rural Rockbridge County, Virginia, use unbundled loops (including subloops) and transport in combination with their own facilities and investment to provide voice and broadband to consumers that have no other alternative for wireline broadband internet access; neither the incumbent LEC nor cable company provide broadband. In other cases, companies such as Sonic in California, Socket in Missouri, Gorge in Oregon, First Communications in three midwestern states, and Allstream in eleven western states are utilizing UNE loops and transport in combination with their own facilities to push the ILECs and cable incumbent to improve their broadband offerings. In many locations for these

⁷ Letter from John T. Nakahata, Counsel to Windstream, to Marlene H. Dortch, Secretary, FCC, at 3, WC Docket Nos. 16-143 et al. (filed Oct. 21, 2016).

⁸ See Petition at 19.

⁹ See *Internet Access Service: Status as of December 31, 2016*, at fig. 4 (WCB Feb. 2018), available at <https://docs.fcc.gov/public/attachments/DOC-349074A1.pdf>.

companies, there may only be one other wireline broadband provider, and, in some, none at 25 Mbps downstream and 3 Mbps upstream. Many ILEC end offices are not Ethernet-enabled, but a CLEC using xDSL-capable copper loops can use its own electronics to deliver Ethernet to those locations.

In addition, many of these companies use UNEs as a bridge to the deployment of fiber loops (whether by themselves or by third parties) – and pushing ILECs and cable incumbents to up their game as well. Sonic, for example, has been building fiber-to-the-home and now serves 28% of its customers over its own fiber network. Sonic was the first provider in San Francisco, California, to engage in widespread deployment of Gigabit fiber-to-the-home service – which pushed AT&T and Comcast to respond with their own upgrades. Virginia Global has built fiber in rural Virginia, as is Gorge in Oregon, as are many others. Virginia Global also reports that CenturyLink did not start deploying high speed internet access from remote terminals in its service area *****BEGIN CONFIDENTIAL***** [REDACTED]

*****END CONFIDENTIAL*****. And UNEs as a bridge to fiber is not limited to two-pair copper: DS1s and DS3 loops are also important to reach customers that are too far from an ILEC central office or sit on hybrid loops behind remote terminals, and allow CLECs to build their customer base until they have a sufficient base to support extending their own fiber either to the remote terminal or to the customer premises. As the U.S. Small Business Administration recently explained in a letter to the Commission, the presence of CLECs using UNEs as a bridge to building fiber has pressured incumbents to do likewise. All of this shows that companies do not need to have large market shares, nationally or regionally, to have a significant competitive impact that benefits consumers.

UNEs and avoided-cost resale support CLEC last-mile fiber network builds in other ways as well. For example, CLECs that serve the principal locations of their multilocation customers on their own last-mile fiber networks need to be able to reach the customers' other, remote locations and use UNEs and resale to do so. Without the ability to use UNEs or avoided-cost resale to reach those remote sites of multilocation customers, the economic case for CLEC fiber deployment to the principal location also falters.

USTelecom wholly ignores the role that UNE interoffice dark fiber plays in supporting rural fiber deployment, as well as the other competitive alternatives in rural areas. UNE interoffice dark fiber, by definition, uses excess fiber capacity to allow CLECs cost-effectively to backhaul traffic out of rural areas. For CLECs building rural last-mile fiber networks, UNE dark fiber allows them to connect disparate service areas of last mile fiber into a coherent network on a cost-effective basis.

Furthermore, UNEs and avoided-cost resale allow CLECs to focus on benefitting consumers by providing improved service delivery and support to specialized customer niches, including governments, public safety services (including PSAPs), health care providers, schools and other educational institutions, and small and medium-size businesses. The quality of service delivery and support is extremely difficult to promote except through competition. Large providers, such as the ILECs (including their CLEC affiliates), cannot serve all customers well. They will focus on the customers that bring them the most revenue for the lowest customer acquisition costs. But smaller entities can use UNEs and avoided-cost resale to specialize in these niches which may otherwise not receive top-level attention. Allstream, for example, focuses on health care providers and financial institutions that have specific needs for highly secure private networks, but whose smaller size and higher customer acquisition costs make

them less attractive customers to the ILECs. As another example, Socket distinguishes itself, among other ways, by committing additional resources to achieve significantly higher customer satisfaction than its ILEC competitors. Granite combines high quality service and convenience with avoided-cost resale. Competition for UNEs and resale, even if not a large share of the overall market, helps improve service to high-need, higher cost customers.

Avoided-cost resale enables the provision of products tailored to the needs of multi-location businesses that demand reliable, low bandwidth service. Importantly, traditional TDM-based business telephone services remain vital to business and government users. Competitive providers rely on avoided-cost resale to offer traditional TDM-based business telephone services to such multi-location businesses as retailers, restaurants, hospitality companies, real estate companies, healthcare providers, banks and financial service companies, public utilities, non-profit organizations, and governmental agencies. As David Redl, Assistant Secretary for Communications and Information for NTIA, explained in a letter to Chairman Pai, many federal government users rely on traditional TDM-based services. He cautioned that discontinuance of services provided over copper networks could place federal departments and agencies in the untenable position of losing access to critical national security and public safety communications. Contrary to USTelecom's assertion, the use of traditional TDM-based business telephone service is not about to disappear among business users that rely on its special characteristics, including the advantages of a self-powered network.

Multi-location business customers that rely on competitive providers using traditional TDM as an input to value-added services would be harmed by the elimination of the avoided-cost resale requirement. For example, multi-location business customers value competitors' position as "one-stop shops" that coordinate billing and provide enhanced customer service

across multiple ILEC regions. Without these value-added innovations, customers would almost need to coordinate and negotiate with many ILEC vendors – sometimes even hundreds of them. And for each ILEC vendor, customers would need to review and pay separate monthly telephone bills.

USTelecom’s Petition addresses none of this diversity both in the competitive environment and among consumers. USTelecom asks the Commission to grant a blunt “one-size-fits-all” forbearance from the Telecommunications Act of 1996’s landmark pro-competition provisions that enable this wide variety of additional, improved or specialized options for residential and business consumers. And USTelecom provides no data from which the Commission could assess the impact of forbearance.

What is clear is that a grant of USTelecom’s petition will make some wholesale options entirely unavailable, and dramatically raise the price for others. There is no wholesale product in the market today that is a substitute for a two-wire or four-wire copper UNE loop. Carriers that purchase these UNEs cannot obtain the same functionality from a special access line, because they cannot add their own electronics to offer a better service. Similarly, it is extremely difficult to obtain dark fiber, especially on the routes to rural areas where UNE interoffice dark fiber is available. Special access DS1 and DS3 channel terminations as well as transport services are all priced substantially higher than UNEs – rates which increased in so-called “competitive” areas after the Commission’s *BDS Order* took effect.

The plain impact of a grant of USTelecom’s Petition would be to either make UNE and resale-based wholesale services unavailable entirely or to raise their price. Either result harms consumers. If ILECs are no longer required to provide UNE transport or loops, then carriers such as IdeaTek and Digital West could be stopped in their tracks and may have to cease

providing broadband in areas where they are the only provider. Moreover, they and other partial facilities-based carriers would no longer be able to use UNEs to create a bridge to building and deploying their own last-mile fiber, reducing the competitive pressure on ILECs and cable incumbents to do the same. And the impetus for improved broadband service quality would also decline, as CLECs would no longer be able to use xDSL-qualified copper UNE loops to introduce higher speed and quality broadband services to residential and business consumers, putting competitive pressure on the ILEC and cable provider to do the same. Consumers with specialized needs that create higher customer acquisition costs, such as banks, health care providers, and public safety services, would lose the availability of a niche or specialized service provider that was uniquely attentive to their needs – or, at a minimum, face higher prices for those services.

Faced with these on-the-ground realities, USTelecom’s petition cannot meet any of Section 10’s requirements for forbearance. Forbearance will undermine competitive pressures on ILECs and cable incumbents to keep rates for combined voice and broadband services, as well as private line services, low, rather than settling into a stable duopoly. It will also create upward pressures on retail rates by raising rivals’ costs. Forbearance will undermine protection for consumers by reducing competition that is the best method for ensuring continued investment in improved services, service quality, and support. Forbearance will undermine the public interest by reducing competition and choice, especially for consumers that are in niches that are higher cost that larger players may not wish to devote the resources to serve. The “benefits” of forbearance will accrue to ILECs, by enabling them to raise rivals’ costs, sustain higher end user prices, and delay making investments to improve their networks and services.

USTelecom’s Petition cannot be justified based on arguments that it will promote broadband deployment. In fact, forbearance will do the opposite. Current rules give ILECs a path out of UNE loop unbundling requirements: when ILECs deploy fiber and retire copper, their obligation to unbundle DS0 loops, and potentially DS1 and DS3 loops,¹⁰ ends.¹¹ This “natural forbearance” already built into the UNE rules gives both ILECs and CLECs an incentive to deploy fiber rapidly – for the ILEC so that it can end loop unbundling obligations and for the CLEC so that it can have a way to serve its customers when the ILEC retires the copper loop. Similarly, the Commission’s existing rules with respect to interoffice transport phase out the availability of those UNEs as transport competition to those wire centers increases. With forbearance, the ILEC gets rid of UNE obligations without deploying fiber, and the CLEC loses the time needed to build additional fiber. Without the competitive pressure from partial facilities-based CLECs, ILECs would have even less incentive to build out fiber to those communities that they have already passed over. ILECs are seeking to move from a regime of “show me the buildout” to one of simply “trust me,” without accountability for results.

USTelecom’s Petition also cannot be justified by the *BDS Order*. Although we believe that the *BDS Order* was wrongly decided and have petitioned for judicial review of that order, even that order found some BDS markets to be non-competitive. Yet the Petition seeks forbearance even in these non-competitive markets, with no explanation as to how that can be

¹⁰ The question of whether unbundling obligations continue for DS1 and DS3 loops after conversion to fiber or Internet Protocol is separately pending before the Commission. *See* Petition for Declaratory Ruling to Clarify That Technology Transitions Do No Alter the Obligation of Incumbent Local Exchange Carriers to Provide DS1 and DS3 Unbundled Loops Pursuant to 47 U.S.C. § 251(c)(3), GN Docket No. 13-5 (filed Dec. 29, 2014).

¹¹ *See* 47 C.F.R. § 51.319(a)(2) (stating that ILECs must provide unbundled access to “the time division multiplexing features, functions, and capabilities of that hybrid loop, including DS1 or DS3 capacity”); *id.* § 51.319(a)(3) (describing limited requirements for fiber loops).

reconciled with the *BDS Order*. Even in markets that the *BDS Order* deemed competitive, that Order was based on the Commission's predictive judgment that adequate competition would arise within five years (which would be by 2022) to protect BDS consumers against monopoly pricing. UNEs, however, provide a means for consumers to obtain the benefits of competition before those competing facilities can be built (if they are feasible) over that five-year period, as well as providing a customer-driven path to building those facilities. And they also provide a hedge against the Commission once again being too optimistic about the pace of the arrival of competitive alternatives for the 77% of BDS locations that had no service from anyone other than the ILEC.

Finally, the ill-conceived forbearance sought in the Petition cannot be saved by its transition plan. Even as modified, the transition plan would immediately end the availability of UNEs where they have not already been ordered. By itself, in a flash-cut, this ends the ability of partial facilities-based CLECs to add the customers necessary to reach critical mass to support fiber deployment to the customers' premises. It would immediately halt the competitive pressure the partial facilities-based carriers exert to spur additional upgrades by ILECs and cable incumbents, as well as the ability of partial facilities-based carriers to deliver their targeted and tailored offerings to customers in specialized niches or in need of higher quality customer service. This flash-cut will have its greatest impact in rural markets where competition is least developed – and least likely to develop because of lower density – but will have effects across a much broader sweep of markets, including in urban areas, where partial facilities-based carriers are introducing higher capacity ahead of incumbents or otherwise tailoring their offerings to specific users. The proposed 18-month transition also does not provide nearly enough time for every competitive provider that uses UNEs to build alternative inputs because of endemic

operational barriers, including local permitting, rights of way and building access, and other practical impediments, all of which would be exacerbated by a nation-wide, simultaneous demand for limited engineering, make-ready, utility locates, and other specialized labor needed to deploy fiber networks.

For all these reasons, and because USTelecom has failed entirely to put forward evidence sufficient to establish its *prima facie* case in any relevant product and geographic retail and wholesale markets, as required by *Qwest Phoenix Forbearance Order*, USTelecom's Petition must be denied. The harms from forbearance are real; the purported benefits, unsubstantiated and conjectural.

II. BACKGROUND

The Petition fails to provide an accurate and sufficiently detailed account of the market conditions, services, and customers that would be severely affected by the forbearance it seeks. Competitive Carriers Group and their members are providing, in this Opposition, additional relevant factual context for how UNEs and avoided-cost resold lines are used in today's communications markets. This section first describes the various types of customers and communities that competitive providers serve using a combination of their own facilities and equipment, commercially available wholesale services (in sufficiently competitive wholesale markets), as well as UNEs and avoided-cost resold lines. Next, this section provides an overview of the Commission's unbundling and avoided-cost resale requirements. Third, this section summarizes the evidence of high entry barriers and market concentration that limit current and prospective competition in the wholesale markets for customer access inputs, where UNEs and avoided-cost resale are crucial to competitive providers' ability to offer service.

A. Our Member Providers Serve A Diverse Range of Voice and Data Customers

The Petition largely focuses on voice service and ignores all the other ways in which providers use UNEs and resold lines to offer competitive alternatives to, or innovative improvements upon, a host of ILEC voice and data services for residential and business, government, and nonprofit customers alike. For the Commission to appreciate the scope and potential impact of the forbearance sought in the Petition, it needs to consider the wide-range of customers served by competitive providers. Moreover, as discussed in Section III.A, the Commission also needs to consider how competitive providers are using UNEs and resold lines to reach underserved urban and rural areas, to deliver innovative and differentiated services not offered by the incumbents, and to incrementally build-out their own fiber networks.

1. Our Member Providers Offer Competitive Alternatives for Voice and Data Services to Small Businesses, Government Agencies, Schools, and Healthcare Providers Across the Country

Our members provide voice and data services to a variety of enterprise customers across the country, from small and medium size businesses (“SMBs”) to government agencies, Universal Service Fund recipients, schools, emergency services, and healthcare providers.¹² The

¹² See Declaration of John Hoehne ¶¶ 2, 8, attached hereto as Attachment 3 (“Access One Decl.”); Declaration of Douglas Denney ¶¶ 2, 14, attached hereto as Attachment 4 (“Allstream Decl.”); Declaration of James Bellina ¶ 3, attached hereto as Attachment 5 (“Dialog Decl.”); Declaration of Jeff Buckingham ¶ 2, attached hereto as Attachment 6 (“Digital West Decl.”); Declaration of Todd Way ¶ 2, attached hereto as Attachment 7 (“DFN Decl.”); Declaration of Gregory J. Darnell ¶ 2, attached hereto as Attachment 8 (“Fusion Decl.”); Declaration of Dan Bubb ¶ 2, attached hereto as Attachment 9 (“Gorge Decl.”); Declaration of Fletcher Kittredge ¶ 2, attached hereto as Attachment 10 (“GWI Decl.”); Declaration of Daniel Friesen ¶ 2, attached hereto as Attachment 11 (“IdeaTek Decl.”); Declaration of Jeff Rhoden ¶ 2, attached hereto as Attachment 12 (“InfoStructure Decl.”); Declaration of Brian Worthen ¶¶ 2, 9, attached hereto as Attachment 13 (“Mammoth Decl.”); Declaration of Raul Alcaraz ¶ 2, attached hereto as Attachment 14 (“Race Decl.”); Declaration of R. Matthew Kohly ¶¶ 3, 8, attached hereto as Attachment 16 (“Socket Decl.”); Declaration of Dusan Janjic ¶ 2, 10, attached hereto as Attachment 16 (“Virginia Global Decl.”); *see also* Declaration of Margi Shaw ¶ 2, attached to Opposition of First

services they offer range from traditional voice and data services to IP telephony, cloud and data security, SIP services, advanced Primary Rate Interface ISDN (“PRI”), Multiprotocol Label Switching (“MPLS”), and other innovative offerings.¹³

Our members use and pay the incumbents for a wide range of UNEs, including the copper-pairs (or DS0), DS1, and DS3 categories of loops, subloops, and interoffice transport, interoffice dark fiber transport, and enhanced extended loops (“EELs”).¹⁴ Many competitive providers use UNEs as cost-effective last mile connections to customer premises and use interoffice transport UNEs as cost-effective backhaul to carry voice and data traffic to

Communications, LLC, WC Docket No. 18-141 (filed Aug. 6, 2018) (“First Communications Decl.”); Declaration of Dane Jasper ¶ 2 (“Sonic Decl.”), attached to Comments of Sonic Telecom, LLC, WC Docket No. 18-141 (filed Aug. 6, 2018); Declaration of Mark Iannuzzi ¶ 2 (“TelNet Decl.”), attached to Comments of the Michigan Internet and Telecommunications Alliance, WC Docket No. 18-141 (filed Aug. 6, 2018) (“MITA Comments”); Declaration of Russell Shipley ¶ 5, attached as Exhibit 1 to Opposition of U.S. TelePacific Corp., WC Docket 18-141 (filed Aug. 6, 2018) (“TPx Decl.”); Declaration of Thane Namy ¶ 3, attached to Comments of the Michigan Internet and Telecommunications Alliance, WC Docket No. 18-141 (filed Aug. 6, 2018) (“Clear Rate Decl.”); Declaration of Larry Antonellis ¶¶ 10-11, Attachment A to Opposition of Granite Telecommunications, LLC, WC Docket No. 18-141 (filed Aug. 6, 2018) (“Granite Decl.”)

¹³ See, e.g., Access One Decl. ¶¶ 3, 8 (MPLS); Allstream Decl. ¶ 4 (SIP); Digital West Decl. ¶ 11 (SIP and PRI); Gorge Decl. ¶ 9 (PRI); First Communications Decl. ¶ 10 (SD-WAN; managed and cloud services); IdeaTek Decl. ¶ 3 (PRI, VOIP/SIP trunking); Socket Decl. ¶ 11 (PRI), 6, 35 (MPLS, hosted voice services, failover capabilities); TelNet Decl. ¶ 2; *see also* GWI Decl. ¶ 15 (“In 2004, GWI became the first provider in the U.S. to offer ADSL2+ service [using UNEs] and we deployed it to more than 50 [central offices]. It took years for the ILEC to deploy ADSL2+ to those markets.”); TPx Decl. ¶ 5 (unified communications); Clear Rate Decl. ¶ 5; Declaration of William H. Oberlin ¶ 2 (PRI), attached to Comments of the Michigan Internet and Telecommunications Alliance, WC Docket No. 18-141 (filed Aug. 6, 2018) (“Bullseye Decl.”); Declaration of Kevin Schoen ¶ 1 (DSC, T1, ISDN-PRI), attached to Comments of the Michigan Internet and Telecommunications Alliance, WC Docket No. 18-141 (filed Aug. 6, 2018) (“ACD Decl.”).

¹⁴ Access One Decl. ¶¶ 10-11; Allstream Decl. ¶ 6; Dialog Decl. ¶ 3; Digital West Decl. ¶ 5; DFN Decl. ¶ 5; First Communications Decl. ¶ 8; Fusion Decl. ¶ 3; Gorge Decl. ¶ 4; GWI Decl. ¶ 5; IdeaTek Decl. ¶ 4; Mammoth Decl. ¶ 6; Socket Decl. ¶ 11; Sonic Decl. ¶¶ 4, 5, 7; Virginia Global Decl. ¶ 6; TPx Decl. 10.

centralized switches or the providers' own network, when its own transport is unavailable.¹⁵

Some providers like Socket, IdeaTek, and Sonic use unbundled interoffice dark fiber transport as the critical middle-mile fiber to connect to their own last-mile facilities to reach consumers and to connect to the ILEC central offices where the providers' electronics are collocated.¹⁶ Other providers, such as Gorge Networks, First Communications, and Digital West also use unbundled subloops or EELs, which are sometimes the only way to reach customers and their remote terminals.¹⁷

Access to UNEs enable competitive providers to offer differentiated services from their incumbent counterparts in several ways.¹⁸ First, competitive providers use UNEs to increase the service quality and reliability of their voice and data offerings. For example, Sonic bonds DS0 UNE loops to offer enterprise customers Ethernet-over-Copper ("EoC") at speeds of up to 100 Mbps for symmetric and up to 400 Mbps/50 Mbps for asymmetric broadband.¹⁹ Indeed, Sonic offers faster broadband service than AT&T in nearly all of the census blocks Sonic serves.²⁰ Other providers offer similar speed or reliability benefits based on UNEs.²¹ CLECs use DS1

¹⁵ Allstream Decl. ¶¶ 7, 6; DFN Decl. ¶ 5; First Communications Decl. ¶¶ 7, 8; Socket Decl. ¶ 36; Sonic Decl. ¶ 7; Virginia Global Decl. ¶ 6.

¹⁶ Socket Decl. ¶ 36; Sonic Decl. ¶ 7; *see also* IdeaTek Decl. ¶ 5; Digital West Decl. ¶ 10; Mammoth Decl. ¶¶ 9, 11.

¹⁷ Gorge Decl. ¶ 9; First Communications Decl. ¶ 12; Digital West Decl. ¶¶ 5, 11.

¹⁸ *See* David E. M. Sappington, *Premature, Ubiquitous Forbearance Will Harm Consumers*, at 11, attached hereto as Attachment 1 ("Sappington Report") ("A single firm is seldom best-equipped to meet the diverse needs of all potential customers. Instead, different firms develop the skills, expertise, and resources required to best meet specialized needs.").

¹⁹ Sonic Decl. ¶ 5.

²⁰ Declaration of William P. Zarakas ¶ 18 and Figure 2, attached hereto as Attachment 2 ("Brattle UNE Decl.").

²¹ *See, e.g.*, Dialog Decl. ¶ 5 ("Using DS0 UNEs, Dialog offers broadband speeds to customers of up to 30 Mbps download and 30 Mbps upload."); InfoStructure Decl. ¶ 9 ("The use of

UNE loops, sometimes combined with UNE transport (EELs), to serve customers located too far from the control office to be served by bare copper, or in an end office other than where the CLEC is collocated.²² Second, CLECs use UNEs to offer services tailored for specialized customer niches, including governments, public safety services (including PSAPs), healthcare providers, banks, schools and other educational institutions. In many cases, these customers want a private network and cannot find suitable ILEC or incumbent cable services to meet their security needs.²³ For example, Allstream provides integrated voice and data service to healthcare providers that require secure networks to comply with specific HIPAA requirements.²⁴ Similarly, in areas in rural Missouri that lack PRI, Socket uses UNE DS1 EELs to provide enterprise customers, including state law enforcement agencies, and emergency services, with this service.²⁵ For Socket customers, “local ISDN-PRI allows [them] to send multiple Caller ID numbers letting them differentiate specific locations or departments, which “is critical for customers in a campus environment needing to make emergency calls to law

UNEs enables InfoStructure to . . . provide faster more reliable service than the ILEC due to bonding copper loops and providing higher feeder capacity”); Gorge Decl. ¶ 6 (“The use of UNEs enables Gorge Networks to . . . provide faster more reliable service than the ILEC due to bonding copper loops and providing higher feeder capacity”); Mammoth Decl. ¶ 12 (“We are the only route redundant option to three rural hospitals (in Douglas, Wyoming; Torrington, Wyoming; and Steamboat Springs, Colorado), the two largest PSAPs in Wyoming, five counties including their Sheriff’s Offices, and 14 towns and cities.”); TPx Decl. ¶ 10 (TPx offers EoC at speeds ranging from 5 to 100 Mbps to nearly 14,000 customer locations).

²² Socket Decl. ¶¶ 9, 15; Allstream Decl. ¶ 6.

²³ Access One Decl. ¶ 10; Allstream Decl. ¶ 16; Digital West Decl. ¶ 9; Gorge Decl. ¶ 7; GWI Decl. ¶ 11; InfoStructure Decl. ¶ 9.

²⁴ Allstream Decl. ¶ 16.

²⁵ Socket Decl. ¶ 11; *see also* Gorge Decl. ¶ 9 (providing PRI to schools and businesses in rural Oregon).

enforcement or emergency response agencies to let them know the specific location of the emergency.”²⁶

Competitive providers similarly rely on avoided-cost resale services to offer enterprise customers voice and data services tailored to those customers’ needs, including in markets where these CLECs provide the only TDM-based business telephone service alternative to the ILEC.²⁷ Companies like Granite and TPx use resold services to deliver voice, basic data, trouble-shooting, and coordinated billing services to consumers with low-bandwidth needs.²⁸ These consumers range from single-location mom-and-pop shops to multi-location customers, spread across multiple ILEC footprints, “operat[ing] simultaneously at hundreds, if not thousands, of dispersed locations throughout the nation.”²⁹ For example, Granite coordinates with ILECs for the provision of traditional TDM-based business telephone services to its customers and handles the processing and payment of dozens or hundreds of separate bills.³⁰ The role of Granite and other competitive carriers in providing these and other benefits is well recognized.³¹ Granite alone serves about 400,000 customer locations nation-wide, and its customers include banks,

²⁶ Socket Decl. ¶ 11; *see also* First Communications Decl. ¶ 13 (“We have numerous schools, libraries, health care providers and government institutions that use our service and rely on the network we have built and connected with them.”).

²⁷ *See* Granite Decl. ¶¶ 10-11.

²⁸ *See, e.g., id.* ¶¶ 4-8; TPx Decl. ¶ 34.

²⁹ Sappington Report at 13; *see also* Granite Decl. ¶ 4.

³⁰ Granite Decl. ¶ 7.

³¹ Declaration of Dr. John Mayo ¶¶ 12-14, appended as Exhibit A to Comments of CTIA, WC Docket Nos. 17-287, 11-42, and 09-197 (filed Feb. 21, 2018) (describing then role of telecommunications resellers in promoting economic efficiency, invigorating competition, driving price reductions, and satisfying the nuanced needs of consumers that would otherwise go unfulfilled).

retailers, and government agencies.³² Indeed, Granite provides service to more than 80 of the Fortune 100 companies.³³ Without these value-added services, customers would almost certainly need to coordinate and negotiate with many ILEC vendors – sometimes even hundreds of them. And for each ILEC vendor, customers would need to review and pay separate monthly telephone bills.

To provide its services, Granite purchases a significant amount of resale services, *****BEGIN HIGHLY CONFIDENTIAL***** *****END HIGHLY CONFIDENTIAL***** of its POTS lines.³⁴ While Granite most often enters into commercial arrangements with ILECs to purchase traditional TDM-based business telephone services, ILECs do not offer commercial wholesale voice platform agreements in all markets.³⁵ And in other markets where commercial wholesale platform agreements are available, ILECs may restrict the types of customers (*e.g.*, customers served by fiber), while other ILECs restrict the services and features (*e.g.*, remote call-forwarding) that can be served using those commercial agreements.³⁶ In these cases, CLECs such as Granite rely on purchasing resale services to offer customers competitive alternatives. And even where CLECs rely on commercial arrangements, the existence of the option of avoided-cost resale effectively limits the ability of any particular ILEC to demand higher rates under commercial wholesale agreements.³⁷ A core effect of the avoided-

³² See Granite Decl. ¶¶ 4, 6; Access One Decl. ¶ 18.

³³ See Granite Decl. ¶ 4.

³⁴ See Granite Decl. ¶ 40; *see also* Socket Decl. ¶ 4; Fusion Decl. ¶ 10; Bullseye Decl. ¶ 5; TPx ¶ 35.

³⁵ Granite Decl. ¶ 40.

³⁶ *Id.* ¶ 10.

³⁷ Granite Decl. ¶ 34.

cost discount is to counter the monopoly power of the ILEC by providing competitive carriers with a market alternative, namely the ability to rely on Section 251(c)(4) if ILECs demand supra-competitive prices for their commercial wholesale agreements.

In addition to offering differentiated services to specific customer segments, competitive providers also use UNEs and resold services to reach customers in underserved areas, including in remote rural locations. Competitive providers like Digital West in California supply broadband service to enterprise customers in rural regions that lack broadband service options from ILECs.³⁸ TPx, which provides telecommunications services in California, Nevada, and Texas, and managed services nation-wide, notes that only 25% of its customers have existing fiber alternatives in their respective buildings.³⁹ Access One, which primarily provides voice and data services to SMBs in the greater Chicago area, serves customers including nonprofits, hospitals, and schools districts in lower-income urban neighborhoods.⁴⁰

2. Our Members Offer Voice and Broadband Service to Residential Customers, Including Many in Underserved Rural and Urban Areas

Our members also offer residential voice and broadband service, and many use the same UNEs discussed above to reach residential customers in underserved rural and urban areas.⁴¹ For

³⁸ Digital West Decl. ¶ 12. Additionally, Mammoth, a CLEC serving rural areas in Montana, Colorado, and Wyoming, notes that it is the “only route redundant option to three rural hospitals ... the two largest PSAPs in Wyoming, five counties including their Sheriff’s Offices, and 14 towns and cities.” Mammoth Decl. ¶ 12.

³⁹ TPx Decl. ¶ 14.

⁴⁰ Access One Decl. ¶ 14.

⁴¹ IdeaTek Decl. ¶ 4 (using interoffice dark fiber transport UNEs to support its services to rural and underserved markets. “Even where an ILEC central office may have broadband service, we often extend our service outside the ILEC service coverage area and start serving the rural farms and homes often underserved or served with lower-speed broadband.”); First Communications Decl. ¶ 9.

example, CLECs like IdeaTek in Kansas and Virginia Global in rural Rockbridge County, Virginia, respectively use unbundled dark fiber interoffice transport and unbundled UNE loops (including subloops) to provide voice and broadband to residential consumers that have no other alternative for wireline broadband internet access.⁴² Virginia Global combines its own equipment with copper loops to provide DSL service to rural customers that live beyond the reach of ILEC ADSL service.⁴³ IdeaTek uses interoffice dark fiber transport UNEs to connect from an urban central office to rural unserved central offices, from which it builds its own local facilities – utilizing the ILEC’s unused transport fiber to support its services in rural and underserved areas.⁴⁴

Competitive providers also offer residential voice and data services in urban markets. Sonic uses UNE DS0 loops with vDSL2 to deliver broadband services to residential customers at speeds up to 50 Mbps (or 100 Mbps over a bonded pair), and offers complements to basic voice service (*e.g.*, robocall blocking) that customers often cannot obtain from ILECs.⁴⁵ Sonic reports that it was the first company to deliver fiber-to-the-home in several regions of California; in many neighborhoods, the incumbent AT&T only began offering the service in response to Sonic’s initiative.⁴⁶ Similarly, Sonic was the first provider in San Francisco, California, to

⁴² IdeaTek Decl. ¶ 2; Virginia Global Decl. ¶ 2.

⁴³ Virginia Global Decl. ¶ 8.

⁴⁴ IdeaTek ¶ 4; *see also* Race Decl. ¶ 6 (“UNEs uniquely assist our ability to build fiber facilities to remote areas with particularly challenging terrain . . .”).

⁴⁵ *See* Sonic Decl. ¶¶ 3-4.

⁴⁶ Sonic Decl. ¶ 19; *see also* Sappington Report at 16.

engage in widespread deployment of Gigabit fiber-to-the-home service, which in turn pushed AT&T, Comcast, and Wave to respond with their own upgrades.⁴⁷

B. The Current State of Unbundling and Resale Under Section 251(c)(3) and (c)(4)

Following the Commission’s decisions in the *Triennial Review Order* (“TRO”)⁴⁸ and *Triennial Review Remand Order* (“TRRO”)⁴⁹, ILECs are required to make available the following unbundled network elements: local loops (including DS0, DS1, and DS3 loops, but not dark fiber loops), subloops (including copper subloops and inside wire), network interface devices (“NIDs”), interoffice transport, 911 and E911 databases, and operations support systems (“OSS”).⁵⁰ The obligation to provide UNEs, however, is not unqualified and is subject to a myriad of exceptions designed to tailor unbundling requirements to actual or potential competition, including the restrictions detailed below.⁵¹ In addition, the Act provides mechanisms for ILECs to revise rates that they believe are unlawfully low.⁵²

1. Availability of UNEs

DS0 Loops. While ILECs are required to unbundle DS0 copper loops for local exchange services, they are not required to unbundle fiber loops, whether fiber-to-the-home or fiber-to-the-

⁴⁷ Sonic Decl. ¶¶ 13, 19.

⁴⁸ *Review of the Section 251 Unbundling Obligations of Incumbent Local Exch. Carriers*, Report and Order, Order on Remand, and Further Notice of Proposed Rulemaking, 18 FCC Rcd. 16978 (2003) (“TRO”).

⁴⁹ *Unbundled Access to Network Elements*, Order on Remand, 20 FCC Rcd. 2533 (2005) (“TRRO”).

⁵⁰ 47 C.F.R. § 51.319.

⁵¹ See 47 U.S.C. § 251(d)(2) (impairment standard); 47 C.F.R. § 51.319.

⁵² See 47 C.F.R. §§ 51.503, 51.505.

curb, and are no longer required to unbundle a 64 kbps channel over fiber loops.⁵³ When an ILEC overbuilds its existing copper network, it must leave the copper loop in place until the ILEC retires that loop under the copper retirement procedures,⁵⁴ which the Commission is streamlining.⁵⁵ The Commission has recognized that CLECs use DS0 loops to serve both residential and small business customers, and to offer not just voice, but also data services.⁵⁶ CLECs can use the entire frequency range (low and high) of the loop to provide voice and broadband.⁵⁷

For hybrid loops, an ILEC is only required to provide access to the TDM features of the DS0 hybrid loop, or to make a fully copper loop available, but it has no obligation to unbundle any packet-based features of the hybrid loop.⁵⁸

DS1 Loops. ILECs are not required to provide access to unbundled DS1 loops in wire centers with at least 60,000 business lines and at least four fiber-based collocators.⁵⁹

Additionally, a CLEC cannot obtain more than ten UNE DS1s to any single location (a total

⁵³ 47 C.F.R. § 51.319(a); Petition of USTelecom for Forbearance Pursuant to 47 U.S.C. § 160(c) from Enforcement of Obsolete ILEC Legacy Regulations That Inhibit Deployment of Next-Generation Networks, Memorandum Opinion and Order, WC Docket No. 14-192, 31 FCC Rcd. 6157, 6162, ¶ 11 (2015) (“USTelecom 2015 Forbearance Order”).

⁵⁴ 47 C.F.R. § 51.333.

⁵⁵ *Accelerating Wireline Broadband Deployment by Removing Barriers to Infrastructure Investment*, WC Docket No. 17-84, Report and Order, Declaratory Ruling, and Further Notice of Proposed Rulemaking, 32 FCC Rcd. 11128, 11141-59 ¶¶ 31-79 (2017) (streamlining the copper retirement process by eliminating or scaling back the Commission’s 2015 copper retirement rules).

⁵⁶ *TRO* ¶ 210.

⁵⁷ See 47 C.F.R. § 51.319(a)(1).

⁵⁸ 47 C.F.R. § 51.319(a)(2); *TRO* ¶ 213.

⁵⁹ 47 C.F.R. § 51.319(a)(4).

equivalent to 15.44 Mbps).⁶⁰ There is a Petition for Declaratory Ruling pending before the Commission to resolve a dispute as to whether the obligation to unbundle a DS1 UNE loop continues after the ILEC converts its network to IP from TDM or to fiber from copper.⁶¹

DS3 Loops. ILECs are only required to provide access to unbundled DS1 loops if the wire center does not have at least 38,000 business lines and at least four fiber-based collocators.⁶² A CLEC cannot obtain more than one UNE DS3 at any single location (*i.e.*, it cannot obtain more than 44.736 Mbps in UNE DS3 capacity at that location).⁶³ As with DS1s, there is a dispute and pending Petition for Declaratory Ruling as to whether the obligation to unbundle a UNE DS3 continues after the ILEC converts its network to IP from TDM or to fiber from copper.⁶⁴

Interoffice Transport. UNE DS1 interoffice transport is only required to be provided when neither of the two ILEC wire centers being connected has at least 38,000 business customers, at least four fiber-based collocators, or both.⁶⁵ CLECs are limited to ten unbundled DS1 transport circuits on a given route.⁶⁶ UNE DS3 interoffice transport is only required to be provided when neither of the two ILEC wire centers being connected has at least 24,000 business

⁶⁰ *Id.*

⁶¹ Petition for Declaratory Ruling of Windstream Corporation, WC Docket No. 13-5 (filed Dec. 29, 2014) (arguing that the obligation to unbundle DS1 UNE loops continues) (“Windstream PDR”). Interested parties fully briefed the FCC on the issues in 2015.

⁶² 47 C.F.R. § 51.319(a)(5).

⁶³ *Id.*

⁶⁴ Windstream PDR at 3 (arguing that the obligation to unbundle DS3 UNE loops continues).

⁶⁵ 47 C.F.R. § 51.319(d)(2)(ii).

⁶⁶ *Id.*

customers, at least three fiber-based collocators, or both.⁶⁷ CLECs are limited to 12 unbundled DS3 transport circuits on a given route.⁶⁸ Dark fiber interoffice transport UNEs only are required to be provided when one of the ILEC wire centers does not have at least 24,000 business customers, at least three fiber-based collocators, or both – i.e., at least one end must be in a Tier 3 wire center.⁶⁹

Subloops. ILECs are required to provide unbundled access to copper subloops only where the subloop “acts as a transmission facility between any point of technically feasible access in an incumbent LEC’s outside plant . . . and the end-user customer premises.”⁷⁰ A “technically feasible” point is one “where a technician can access the copper wire within a cable without removing a splice case.”⁷¹ ILECs are not required to provide unbundled access to their feeder loop plant as standalone UNEs.⁷² Subloop unbundling obligations only apply to ILECs’ distribution loop plant.⁷³ Only for subloops for access to multiunit premises wiring do ILECs have to provide unbundled access without regard to the capacity level or type of loop.⁷⁴ The same subloop UNE limitations apply to inside wire owned or controlled by the ILEC.⁷⁵

Network Interface Devices. Network interface devices are required to be provided either as part of an unbundled loop or subloop, or where the requesting carrier is using the ILEC’s NID

⁶⁷ 47 C.F.R. § 51.319(d)(2)(iii).

⁶⁸ *Id.*

⁶⁹ 47 C.F.R. § 51.319(d)(2)(iv).

⁷⁰ 47 C.F.R. § 51.319(b).

⁷¹ *Id.*

⁷² *TRO* ¶ 254.

⁷³ *Id.*

⁷⁴ 47 C.F.R. § 51.319(b)(2).

⁷⁵ 47 C.F.R. § 51.319(b).

to connect its own loop facilities to on-premises wiring.⁷⁶ As a practical matter, competitive providers do not purchase network interface device elements separate from unbundled loops.

911 and E911 Databases. ILECs are required to provide unbundled access to 911 and E911 databases but are otherwise not required to offer unbundled access to call-related databases.⁷⁷

Operations Support Systems. ILECS are only required to provide unbundled access to OSS for qualifying services.⁷⁸ OSS is limited to the pre-ordering, ordering, provisioning, maintenance and repair, and billing functions supported by the ILECs' databases and information.⁷⁹

2. Avoided-Cost Resale

An ILEC that is not subject to the rural exemption must offer for resale at wholesale rates any telecommunications service the ILEC provides at retail to subscribers that are not telecommunications carriers.⁸⁰ The ILEC cannot prohibit or impose "unreasonable or discriminatory conditions or limitations" on the resale, although states may prevent resellers from offering a service to a category of consumers other than the category of consumers to which the ILEC offers that service.⁸¹

Under section 251(c)(4), ILECs only need to provide a resale discount for retail telecommunications services that the ILEC provides to subscribers; therefore, competing carriers

⁷⁶ 47 C.F.R. § 51.319(c).

⁷⁷ 47 C.F.R. § 51.319(e).

⁷⁸ *TRO* ¶ 562.

⁷⁹ 47 C.F.R. § 51.319(f).

⁸⁰ 47 U.S.C. § 251(c)(4).

⁸¹ *Id.*

generally have no resale rights to ILEC services such as wholesale-only services, private carriage and information services.⁸² And unlike under section 251(c)(3)'s UNE requirements, competing carriers purchasing resale services under section 251(c)(4) can only provide the same service that the ILEC offers at retail.⁸³

C. Many of the Communities Served by Our Members Continue to Face High Barriers to Entry and Few If Any Competitive Choices in the Markets for Residential and Business Data Services

The Petition repeatedly states that “communications markets today are competitive,”⁸⁴ that “ILEC voice services are subject to intense and durable competition,”⁸⁵ and that “the marketplace is irrevocably open to competition.”⁸⁶ The Petition’s focus on declining ILEC voice service customers sidesteps the commercial reality that residential and business customers frequently purchase voice and data (and other) capabilities as integrated services, and the ILECs overwhelmingly control the facilities necessary to provide these services. Given high entry barriers, the Commission should not assume that full facilities-based alternatives will appear post-forbearance on a nation-wide basis, and the Petition has provided no reason for the Commission to find otherwise.

⁸² *Id.*; see also *Business Data Services in an Internet Protocol Environment; Technology Transitions; Special Access for Price Cap Local Exchange Carriers; AT&T Corporation Petition for Rulemaking to Reform Regulation of Incumbent Local Exchange Carrier Rates for Interstate Special Access Services*, Report and Order, 32 FCC Rcd. 3459 ¶ 270 (2017) (“BDS Order”).

⁸³ 47 U.S.C. § 251(c)(4).

⁸⁴ Petition at 7.

⁸⁵ *Id.* at 10.

⁸⁶ *Id.* at 26.

1. High Barriers to Entry Remain for Full Facilities-Based Entry in Many Geographic Markets

The Commission should not credit the Petition’s assertion that full facilities-based competition would suddenly emerge to fill the gaps left by UNE-based competitive providers if forbearance were granted. A basic premise of unbundling requirements is that UNEs are available only in those areas that meet the Commission’s impairment standard, meaning that the Commission has determined that lack of access to UNEs “poses a barrier or barriers to entry . . . that are likely to make entry into a market uneconomic” for a reasonably efficient competitor.⁸⁷ The Petition does not cite any evidence that the structural barriers to entry have been reduced anywhere in the intervening period since the Commission promulgated its impairment standard.

Competitive providers’ experiences confirm that significant barriers remain that make entry uneconomic, and that access to UNEs helps overcome these barriers. For example, ILEC control of utility poles continues to be an impediment to competitive providers’ ability to deploy last-mile facilities, which requires timely access to a large number of poles.⁸⁸ As several competitive providers note, they face obstacles to attaching to poles, such as delayed access to information and poles that need reinforcement.⁸⁹ Likewise, competitive providers explain that

⁸⁷ *TRRO* ¶ 22.

⁸⁸ *See TRO* ¶ 91 (noting that “barriers to entry that are solely or primarily within the control of the incumbent LEC” are relevant to impairment analysis).

⁸⁹ *See, e.g.,* Sonic Decl. ¶ 11. The Commission’s recent “one-touch make ready” order will help reduce pole issues once implemented, but will not address all impediments from pole attachments.

ILECs continue to enjoy significant first-mover advantages with respect to right-of-way access, particularly through utility easements across privately owned property.⁹⁰

Additional barriers including state and local permitting delays and physical obstacles like waterways and railroad crossings make some existing ILEC routes “extremely costly, if not impossible, for [CLECs] to re-create.”⁹¹ For example, competitive fiber provider Southern Light LLC has submitted data showing that the time it took to receive permits from one state agency in 2017 totaled over 50 days, and the approval times across different regions subject to the agency’s jurisdiction varied from 32 days to over 114 days.⁹²

Econometric analysis of the Commission’s BDS data collection also supports the conclusion that entry barriers to facilities-based competition remain high. Using the Commission’s extensive data on BDS prices and the location of non-ILEC fiber, Dr. Jonathan Baker found that the presence of one or two nearby (but not in-building) competitors does not impact ILEC prices.⁹³ The high sunk costs of expanding the nearby network to serve customers in an off-net building often makes deployment uneconomical in the absence of outsized demand.⁹⁴ Dr. Baker’s analysis examined the effect (or lack thereof) from providers with

⁹⁰ See First Communications Decl. ¶ 19; Socket Decl. ¶¶ 28-29; *see also* TRO ¶ 89 (noting that first-mover advantages, including access to the rights-of-way, are barriers relevant to impairment analysis).

⁹¹ See Letter from Jeffrey R. Strenkowski, Vice President, Deputy General Counsel of Government Affairs, Uniti Fiber, to Marlene H. Dortch, Secretary, FCC, at 1, WC Docket No. 18-141 (filed July 13, 2018) (“Uniti Ex Parte”).

⁹² See Comments of Conterra Broadband Services, Southern Light, LLC, and Uniti Group, WC Docket No. 17-79, WT Docket No. 17-84, at 9-10 (filed June 15, 2017).

⁹³ Reply Declaration of Jonathan B. Baker on Market Power in the Provision of Dedicated (Special Access) Services, WC Docket No. 05-25, RM-10593 ¶ 14 (filed Feb. 19, 2016) (refiled Apr. 14, 2016).

⁹⁴ See *id.*

facilities within 2,000 feet of the customer location.⁹⁵ The CostQuest study submitted in the BDS Proceeding similarly shows the importance of a critical mass of customers and customer density to the business case for building additional fiber facilities.⁹⁶ In many of the communities served by our members, the closest fiber is more than 2,000 feet and the demand consists of primarily residential customers, both of which make it even more unlikely that a competitive provider can overcome the barriers to entry. Their actual on-the-ground experience confirms the difficulty of deploying new fiber networks, and the need to have amassed a group of customers prior to building out.⁹⁷

Owners of multitenant dwelling units erect further significant barriers to entry by raising the costs of building to higher density customer locations. As INCOMPAS explained in a separate proceeding, would-be competitive entrants have “routinely had property owners refuse access to [multitenant environments (“MTEs”)] despite receiving unsolicited orders for high-speed broadband service from tenants that were dissatisfied by the choices presented to them,”⁹⁸ Furthermore, revenue-sharing arrangements between landlord and incumbent providers, which have become common, mean that landlords “have no incentive to grant access to competitive

⁹⁵ See *id.*

⁹⁶ See CostQuest, *Analysis of Fiber Deployment Economics for Efficient Provision of Competitive Service to Business Locations* at 13-15 (estimating that, for a given building density, a decrease from the national aggregate ILEC market share of 58 percent to the national aggregate CLEC market share of 26 percent results in a 32 percent increase in the per-building cost), attached as Attachment A to Letter from Jennie B. Chandra, Vice President, Public Policy and Strategy, Windstream Corporation, to Marlene H. Dortch, Secretary, FCC, GN Docket Nos. 13-5 & 12-353, RM10593, WC Docket Nos. 05-25 & 15-1 (filed June 8, 2015).

⁹⁷ See, e.g., Allstream Decl. ¶ 20 (“Without a sufficient customer base to justify the deployment of fiber facilities, it is much less likely that Allstream would be able to justify the investment in new fiber facilities.”); Socket Decl. ¶¶ 22-31; Sonic Decl. ¶¶ 18.

⁹⁸ Comments of INCOMPAS, GN Docket No. 17-142, at 4 (filed July 24, 2017).

providers when any subscriber gained by that provider means reduced income to the landlord.”⁹⁹

Without access to higher density MTEs, competitive providers are even less likely to clear the revenue hurdles — like those identified by CostQuest — that are necessary to make fiber deployment economically viable. Because they already have access and revenue-sharing agreements with these landlords, incumbent providers are far less likely to face this kind of entry barrier within their legacy service territories.

Indeed, even ILECs’ own fiber growth strategy indicates that wireline network deployment faces inherently high barriers to entry. For example, Verizon’s FiOS fiber deployment ceased entering new markets in 2010,¹⁰⁰ and since then has mostly halted expansion even in existing markets.¹⁰¹ More recently, the ILECs’ method for growing their fiber networks has been through acquiring existing competitors and their networks, such as CenturyLink’s merger with Level 3 and Verizon’s purchase of XO, rather than building out their out-of-region networks.¹⁰² Consolidation in the cable industry likewise suggests that overbuilding the

⁹⁹ *Id.* at 10.

¹⁰⁰ See Roger Cheng, “Verizon to End Rollout of FiOS,” Wall St. J. (Mar. 30, 2010).

¹⁰¹ See Samantha Bookman, “5 reasons Verizon needs to restart its FiOS rollout,” FierceTelecom (Mar. 26, 2013), <https://www.fiercetelecom.com/telecom/5-reasons-verizon-needs-to-restart-its-fios-rollout>.

¹⁰² See Consolidated Applications to Transfer Control of Domestic and International Section 214 Authorizations, at 7, WC Docket No. 16-70 (filed Mar. 4, 2016) (“The transaction will also allow Verizon to reduce its dependency on the leased fiber it currently uses to serve enterprise and wholesale customers. Verizon owns and operates fiber networks within portions of its remaining ILEC footprint, but it must often lease fiber both inside and outside of that footprint to support its business customers.”) (citation omitted). The Commission’s independent economist Dr. Marc Rysman noted the “striking result” in the BDS data collection showing the “low number of buildings connected by facilities-based service from ILEC-affiliated CLECs.” Marc Rysman, “Empirics of Business Data Services,” Revised June 2016 at Table 4, <https://docs.fcc.gov/public/attachments/DOC-340040A6.pdf>. (“Rysman White Paper”).

incumbents' networks presents daunting economic challenges and risks. Competitive providers throughout the country face the same and even greater challenges and risks due to their lack of scale compared to their much larger incumbent counterparts. The Commission has no reason to conclude that entry barriers have been reduced, especially in those markets where the Commission had already concluded competitors would be impaired without access to UNEs.

2. There Are Few if Any Alternatives to UNEs and Avoided-Cost Resale, Reflecting Highly Concentrated Wholesale Markets

Given the high entry barriers, it is not surprising that markets in many parts of the country remain highly concentrated for the services at issue in the Petition. Although the Petition barely discusses wholesale markets, the discussion above and supporting declarations from providers show that UNE and avoided-cost resale have enabled the development of innovative services in areas unserved or underserved by the incumbents. Without these requirements, there is no functional wholesale market, especially for DS0 copper loops. Forbearance, if granted, would effectively shut down the wholesale market in many areas, particularly with respect to two-wire and four-wire copper loops, and cause sharp price increases in other areas. The associated burdens will be borne by residential consumers, small and medium businesses, and government and nonprofit users.

First, the Commission's data collection in both the BDS proceeding and through its Form 477 show that robust competition is far from ubiquitous. The baseline for competition, according to the data analyzed by Dr. Marc Rysman for the Commission, is that more than 77 percent of buildings have only one in-building full facilities-based business data services provider, nearly always the ILEC, and more than 99 percent of buildings have at most two

facilities-based providers.¹⁰³ Among locations with bandwidth demand at or below 100 Mbps, which necessarily covers most of the end user locations served using UNE loops, the concentration is even higher, with approximately 84 percent of locations served only by the ILEC.¹⁰⁴ This means that in the great majority of cases, competitive providers have no source of wholesale customer access other than the ILEC.

Including cable providers' hybrid fiber-coaxial (HFC) networks does little to solve the problem of lack of wholesale competition. Cable providers often do not offer a wholesale customer access service on HFC networks comparable to unbundled loops and transport. Even where this is offered in buildings lit with cable providers' fiber, the rates and terms are significantly worse than what is currently available.¹⁰⁵ Moreover, cable providers' HFC networks are unsuitable for certain requirements of government and of some business users such as private networks and robust service level guarantees, nor do cable companies provide the outage response times necessary for businesses that rely on cloud services.¹⁰⁶ Cable providers' networks also do not provide nation-wide coverage and are not present at all in some communities, particularly in rural areas.¹⁰⁷

Second, there are no commercially available substitutes for copper-pair (DS0) loops and, in many cases, dark fiber transport to Tier 3 central offices. Competitive providers such as

¹⁰³ See Rysman White Paper at Table 7.

¹⁰⁴ Letter from John T. Nakahata, Counsel to Windstream, to Marlene H. Dortch, Secretary, FCC, at 3, WC Docket Nos. 16-143 et al. (filed Oct. 21, 2016).

¹⁰⁵ See First Communications Decl. ¶ 11 (describing cable rate for the lowest bandwidth service that both is over 400% greater than its comparable UNE DS1 loop and EEL rate and requires a multiyear term commitment).

¹⁰⁶ See Access One Decl. ¶ 10; Allstream Decl. ¶ 18.

¹⁰⁷ See IdeaTek Decl. ¶ 2; Virginial Global Decl. ¶ 2.

Sonic, Allstream, and Socket use DS0 loops with their own equipment to offer customers high-speed broadband services. However, there simply is no special access or Ethernet equivalent to unbundled copper pairs.¹⁰⁸ DS1 and DS3 special access service by definition include ILEC electronics, meaning that competitive providers have no ability to customize or upgrade the electronics to deliver better performance.¹⁰⁹ Ethernet service likewise is furnished end-to-end, and wholesale purchasers likewise have no control over the electronics used by the facilities owner.

Competitive dark fiber transport is generally not available between ILEC central offices,¹¹⁰ which is where competitive providers using UNEs have made investment by collocating their equipment. Dark fiber owners typically commercially offer only lit transport services, and where dark fiber is commercially available, the cost is orders of magnitude greater than that for unbundled dark fiber. For example, Sonic estimates that purchasing commercial wholesale Ethernet transport would cost over 700 times more than its current unbundled dark fiber to provide the capacity that Sonic is able to achieve using its own electronics.¹¹¹

Third, even for unbundled DS1 and DS3 loops, ILEC special access and Ethernet rates likewise are often prohibitively expensive and come with multiyear commitments. For example, one competitive provider estimates that replacing its DS1 UNE loops with special access

¹⁰⁸ See Socket Decl. ¶ 46; Sonic Decl. ¶ 15; Allstream Decl. ¶11; *see also* TPx Decl. ¶ 19 (noting that “[u]nbundled copper loops are a crucial bridge between today’s copper-based networks and the mainly-fiber networks of the future.”).

¹⁰⁹ TPx Decl. ¶ 9 (“TPx can deploy its own electronics on either end of the DS0 loop, customizing and controlling the services provided over the loop, including service quality and security.”).

¹¹⁰ See Socket Decl. ¶ 50; Sonic Decl. ¶ 16.

¹¹¹ See Sonic Decl. ¶ 16.

services would involve monthly prices increases of more than 400%.¹¹² Another provider estimated that the cost of a DS1 special access channel termination and mileage would be up to 390% higher than the cost of its DS1 EEL.¹¹³

For many customers, there also are no adequate substitutes for traditional TDM-based services that rely on ILEC-controlled facilities. Granite's customers rely on traditional TDM-based business telephone service because of the benefits it provides, including the reliability that results from self-powered lines.¹¹⁴ Alternative forms of voice service, such as most managed VoIP offerings and fixed and mobile wireless services, are not line-powered and lack the reliability of traditional TDM-based business telephone service.¹¹⁵ Granite's customers therefore do not regard these alternatives as substitutes for traditional TDM-based business telephone service.¹¹⁶ Furthermore, because traditional TDM is a low-revenue service, it is uneconomic for competitors like Granite to construct network facilities to provide low-bandwidth services. This is particularly true in rural areas. Granite and other competitors therefore must purchase traditional TDM-based business telephone services from ILECs because no provider other than the ILEC in its home territory has the physical infrastructure in place to provide traditional TDM to and from multi-location business customers' locations.

¹¹² First Communications Decl. ¶ 11.

¹¹³ See Socket Decl. ¶ 46.

¹¹⁴ See Granite Decl. ¶¶ 9, 12-27.

¹¹⁵ See Granite Decl. ¶¶ 12-13.

¹¹⁶ See *id.*

III. UNBUNDLING AND AVOIDED-COST RESALE HAVE OPENED UP MARKETS AND SPURRED INNOVATION AND INVESTMENT, AS CONGRESS HAD INTENDED IN ENACTING THESE PROVISIONS IN THE TELECOMMUNICATIONS ACT OF 1996

Competitive providers have been able to use the market-opening mechanisms of Section 251(c) as they were intended by Congress, as a bridge to building out their own facilities, and thus promoting investment incentives. The Petition would blow up that bridge.

A. Congress Rejected an Automatic Sunset for Section 251(c), Recognizing the Importance of Maintaining Access to UNEs and Avoided-Cost Resale Until a Full Transition to Facilities-based Competition

Maintaining access to UNEs and discounted resale until providers have completed the transition to full facilities-based competition is consistent with congressional intent and the Telecommunications Act of 1996's overarching goals.¹¹⁷ Congress enacted Section 251 “to foster development of competition for telecommunications services by allowing competitive LECs to use the incumbent LECs’ networks (through resale or unbundled network elements), rather than forcing the new market entrants to rely exclusively on their own facilities.”¹¹⁸ As the Commission has acknowledged, “Congress recognized that it might be inefficient or impossible for competitive LECs to duplicate the entire incumbent LEC telecommunications network to

¹¹⁷ See Preamble, Telecommunications Act of 1996, Pub. L. No. 104-104, 110 Stat. 56 (1996) (“1996 Act”) (“An Act [t]o promote competition and reduce regulation in order to secure lower prices and higher quality services for American telecommunications consumers and encourage the rapid deployment of new telecommunications technologies.”); *see also* Remarks of Sen. Kerrey (Neb.) on Pub. L. 104-104 (1995), 141 Cong. Rec. S8139, S8164 (1995) (describing competition envisioned under the 1996 Act as “competitive choice not for the existing line of businesses, but . . . for a package of information services” at the consumer’s desired quality and at a competitive price).

¹¹⁸ Petition for Declaratory Ruling to Clarify 47 U.S.C. § 572 in the Context of Transactions Between Competitive Local Exchange Carriers and Cable Operators, WC Docket No. 11-118, Order, 27 FCC Rcd. 11532, 11541 ¶ 20 (citing 47 U.S.C. §§ 251, 252) (2012).

enter a market.”¹¹⁹ Consequently, Congress “established several modes of possible market entry, including resale and UNEs, as well as full facilities deployment.”¹²⁰

The language and structure of the 1996 Act recognize the long, uncertain timeframe for transitioning to full facilities-based competition. “Where Congress includes particular language in one section of a statute but omits it in another section of the same Act, it is generally presumed that Congress acts intentionally and purposely in the disparate inclusion or exclusion.”¹²¹

Importantly, Congress declined to establish an automatic sunset provision for Section 251(c), including its UNE and resale obligations, even as it established clear sunset clauses in other provisions within the 1996 Act.¹²² As Senator Larry Pressler, then-Chairman of the Senate Committee on Commerce, Science and Transportation and a principal author of the 1996 Act, explained, the problem with setting a “certain date” is that a competitor “ha[s] to use the other guy’s [*i.e.*, the ILEC’s] wires and interconnections and unbundling of his system before [the competitor] can compete.”¹²³ Similarly, when explaining the “basic thrust of the bill,” Senator Fritz Hollings, a key backer of the 1996 Act and the ranking minority member of the Senate Commerce Committee, stated, “Timing is everything. Telecommunications services should be

¹¹⁹ *TRO* ¶ 36 n.116; *see also* S. Conf. Rep. No. 104-230, at 148, 142 Cong. Rec. H. 1078 (1996) (“This conference agreement recognizes that it is unlikely that competitors will have a fully redundant network in place when they initially offer local service, because the investment necessary is so significant.”).

¹²⁰ *TRO* ¶ 36 n. 116

¹²¹ *Bates v. U.S.*, 522 U.S. 23, 29-30 (1997) (internal quotation marks omitted).

¹²² *Compare* 47 U.S.C. § 251(c) *with* 47 U.S.C. §§ 272(f), 274(g)(2), 543(c)(4).

¹²³ Remarks of Sen. Pressler (S.D.) on Pub. L. 104-104 (1995), 141 Cong. Rec. S8163 (1995) (discussing competitive checklist in 1995 bill version of Section 251).

deregulated *after, not before*, markets become competitive.”¹²⁴ Congress’s rejection of a sunset for Section 251(c) suggests that it recognized the danger of prescribing precise, binding expiration dates for unbundling and resale without understanding the extent and the pace that competition would develop in different markets.

Instead of a rigid, nation-wide expiration date for Section 251(c)’s UNE and resale obligations, Congress directed the Commission to follow an impairment standard to determine which network elements to unbundle.¹²⁵ As the Commission and courts have recognized, impairment requires a “granular analysis” of local telecommunications markets, including customer class, and geography.¹²⁶ In particular, the Commission considers whether, for a reasonably efficient requesting carrier, “lack of access to an incumbent LEC network element poses a barrier or barriers to entry, including operational and economic barriers, that are likely to make entry into a market uneconomic.”¹²⁷ The Commission focuses particularly on “(1) economies of scale; (2) sunk costs; (3) first-mover advantages; (4) absolute cost advantages; and (5) barriers within the control of the incumbent.”¹²⁸ The impairment standard’s call for market-specific determinations implements Congress’s intent to maintain the market-opening provisions of Section 251(c) until there is actual evidence of competitive conditions in the relevant marketplace. Thus, the history and structure of Section 251(c) and the Commission’s

¹²⁴ Remarks of Sen. Hollings (S.C.) on Pub. L. 104-104 (1995), 142 Cong. Rec. S688 (1996) (emphasis added).

¹²⁵ See 47 U.S.C. § 251(d)(2).

¹²⁶ *TRRO* ¶ 10; *United States Telecom Ass’n v. FCC*, 359 F.3d 554, 571-572 (D.C. Cir. 2004).

¹²⁷ *TRRO* ¶ 10.

¹²⁸ *Id.*

decisions in the *TRO* and *TRRO Order* all support the Commission’s framework adopted in the *Qwest Phoenix Forbearance Order* to require granular market analysis when evaluating a petition to forbear from Section 251(c) unbundling requirements.

What is more, Congress designed avoided-cost rate regulation of Section 215(c)(4) as an efficient means of promoting competition that would remain in place even where competitors are no longer “impaired” without access to unbundled elements. For example, in selecting the avoided-cost rate setting methodology which preserves ILEC profit margins when selling to wholesale customers, Congress ensured that the costs associated with indefinitely retaining Section 251(c)(4) resale are minimal. In addition, the scope of the statutory avoided-cost resale requirement is broad and specifies no duration. Section 251(c)(4) applies to “any” telecommunications services offered to retail customers, without qualification and without regard to the level of competition in the relevant market. In contrast to Section 251(c)(3) unbundling, there is no statutory requirement that the Commission conclude that competitors are impaired in the absence of avoided-cost resale. The logical inference is that Congress expected that the Section 251(c)(4) avoided-cost resale mandate would remain in place even where ILECs have been relieved of the obligation to provide access to UNEs. Thus, Congress expected that forbearance from Section 251(c)(4) would be appropriate only in rare circumstances.

B. Access to UNEs and Discounted Resale Is Vital to Promoting Innovation and Deployment of Fiber Networks by Competitive and Incumbent Providers

1. The Petition Grossly Mischaracterizes the Role that UNEs and Avoided-Cost Resale Play in the Marketplace

The Petition and its supporting economists’ paper mischaracterize the important functions that UNEs and avoided-cost resale continue to serve in promoting investment in facilities and innovation in service offerings. As explained above, competitive providers use UNEs in a variety of ways to provide voice and innovative data services to residential and business

customers, often in underserved rural and urban pockets, but also in denser metropolitan areas as a competitive force pushing the incumbents to improve their own technology, prices and offerings. USTelecom quotes a Commission order recognizing that “[u]nbundling rules that encourage competitors to deploy their own facilities in the long run will provide incentives for both incumbents and competitors to invest and innovate, and will allow the Commission and the states to reduce regulation once effective facilities-based competition develops.”¹²⁹ However, the Petition ignores the mechanisms the Commission subsequently established in the *TRO* and *TRRO* to do that. Instead, the Petition and the economists’ report paint a simplistic and inaccurate picture of the role that UNEs play in the relevant markets. Understanding how competitive providers use the UNE loops also highlights the flawed assumptions of the Petition and its supporting economists’ paper.

First, copper facilities and TDM-based services continue to play a vital role in the delivery of communications services to residential, business, government, and nonprofit customers in large parts of the country. The Petition asserts that UNEs “today play a very minor and diminishing role” in the residential and business markets.¹³⁰ As support, the Petition cites nation-wide totals for the number of UNE loops in use, as well as totals showing declining ILEC-owned switched-access voice and VoIP end users.¹³¹ These numbers gloss over important details on where and how competitive providers use UNEs to provide service, details that are

¹²⁹ Petition at 6 (quoting *Implementation of the Local Competition Provisions of the Telecommunications Act of 1996*, Third Report and Order and Fourth Further Notice of Proposed Rulemaking, 15 FCC Rcd. 3696, 3700 ¶ 6 (1999) (internal quotation marks omitted)).

¹³⁰ Petition at 15.

¹³¹ See *id.* at 15-18.

necessary for the Commission to consider in how forbearance would impact prices, consumer protection, and the public interest.¹³²

Geographic granularity is essential because the two million UNE loops cited in the Petition are not equally distributed about the country. As discussed above, competitive providers use UNEs in many underserved rural and urban areas that have no other competitive alternative, and in some cases no alternative at all including the ILEC. Thus, that the total number of UNEs constitute a relatively small percentage of the total number of fixed and mobile voice lines in the country does not provide any useful information about the actual geographic markets in which they are used.¹³³ In many underserved areas, UNE loops and transport enable competitive providers to offer route diversity and redundancy to businesses and essential service providers that would otherwise not be available.¹³⁴

The Petition does not differentiate between UNEs used for voice services, for data services, or bundled services.¹³⁵ As a result, the numbers cited by the Petition in support of its claim that there is robust competition likewise do not identify specific relevant product markets, and largely focus on voice service. However, as explained above, competitive providers use

¹³² See Comments Submitted on Behalf of the Public Utilities Commission of Ohio at 6-7, WC Docket No. 18-141 (filed Aug. 3, 2018) (“Ohio PUC Comments”) (“The Ohio Commission submits that, a simple checklist approach will likely not be sufficient in determining whether a market is competitive.”).

¹³³ See Socket Decl. ¶ 10.

¹³⁴ See IdeaTek Declaration ¶ 4; Mammoth Decl. ¶ 12; *see also* Letter from Jason B. Williams, Chief Executive Officer, Blackfoot Communications, Inc., to Marlene H. Dortch, Secretary, FCC, WC Docket No. 18-141, at 2 (filed Aug. 2, 2018) (“Blackfoot Ex Parte”) (“Having access to UNE loops enables Blackfoot to use its own fiber or fixed-wireless solution as the primary connection for one path and utilize a UNE loop connection as an alternative path [for hospital and bank customers].”).

¹³⁵ See Petition at 16-17.

UNE loops, subloops and transport for voice, data, and other services, to residential, small business, and enterprise customers, including other downstream service providers.

Second, the Petition completely ignores the critical role that unbundled dark fiber transport plays in a variety of downstream services. As Mammoth explains, it uses its own electronics attached to a single unbundled dark fiber between ILEC central offices to provide transport for thousands of customers including enterprise end users like a utility, a county government, school districts, and a college; and wireless and fiber-to-the-home internet service providers that serve residential and business users.¹³⁶ Unbundled dark fiber provides an economical option to carry traffic from users served by remote (Tier 3) central offices, where there are no competitive transport providers, to central offices in denser areas, where competitive providers can then use their own networks or commercial transport services.¹³⁷

Third, competitive providers use UNEs and resold circuits as inputs into their own services that are differentiated from ILEC and cable offerings in multiple ways that are valuable to customers. The economists' paper supporting the Petition incorrectly assumes that the difference between the price of retail services and the price of UNE inputs used to provide those

¹³⁶ See Mammoth Declaration ¶ 11; *see also* Dialog Decl. ¶ 8; Digital West Decl. ¶ 10; GWI Decl. ¶ 5; Race Decl. ¶ 8.

¹³⁷ See IdeaTek Decl. ¶ 4 (“We use dark fiber UNEs to connect from a more urban central office, where we can obtain critical wholesale broadband and transport services, to more rural unserved central offices.”); *see also, e.g.*, Digital West Decl. ¶ 10 (“There are no competitive dark fiber or lit services between central offices so the only services available are the much more expensive ILEC lit services that would increase costs by a factor of 40 and eliminate the flexibility of easily increasing the speed of the dark fiber loops.”); GWI Decl. ¶ 13 (explaining that GWI uses UNE dark fiber to serve 1100 customers in 9 communities where “[t]here is no substitute dark fiber provider”).

services all constitute margin for competitive providers.¹³⁸ Competitive providers that use UNEs must and do invest significant amounts in securing their own remote terminals and other equipment, as well as provisioning backhaul where unbundled transport is not available.¹³⁹ As a result, the retail services offered by competitive providers include many value-added components ignored by the Petition and the economists' paper.

In many cases the value added by competitive providers is the attention and resources devoted to meeting the specific needs of customers in niche markets whose requirements are not met by large incumbents, who tend to focus on low-cost mass market services and high margin enterprise customers.¹⁴⁰ That leaves a segment of the customers, typically small and medium-size businesses and government entities, looking for alternatives to incumbent offerings. Competitive providers meet this need by spending relatively more resources on customer service and support, including designing the set of services that best suit the needs of customers that have multiple locations and that require features like increased security that are not available in mass market broadband products. For example, many of Allstream's 60,000 predominately small and medium business customers have multiple locations across its 11-state service area.¹⁴¹ These customers include banks and healthcare providers that have additional security requirements, which Allstream would not be able to meet without investing in its own equipment

¹³⁸ See Hal Singer and Kevin Caves, *Assessing the Impact of Forbearance from 251(c)(3) on Consumers, Capital Investment, and Jobs* at 15, attached as Appendix B to Petition.

¹³⁹ See, e.g., TPx Decl. ¶ 31 (monthly investment in 400 collocations in incumbent LEC central offices); Socket Decl. ¶¶ 16-17.

¹⁴⁰ See Allstream Decl. ¶ 16; First Communications Decl. ¶ 11; GWI Decl. ¶ 9 (explaining that GWI's "flexibility is unique in this market where the ILEC only offers three or four bandwidth options"); Access One Decl. ¶ 15 ("Custom-tailored solutions are one of our distinct advantages over ILEC competition."). See also Sappington Report at 11-12.

¹⁴¹ See Allstream Decl. ¶ 2.

to attach to unbundled copper pairs.¹⁴² Allstream and similar providers are not simply using UNEs to obtain higher margins and compete with ILECs on price, but are offering differentiated services to customers that ILECs have little interest in serving.¹⁴³ In Maine, GWI is able to use UNEs in addition to its own fiber network to offer customers customized Ethernet services, while the incumbent provider offers only 3 or 4 bandwidth options, which results in customers being forced to purchase more bandwidth than they need.¹⁴⁴

Fourth, the Petition and its supporting paper compound the erroneous assumption about UNE margins by also assuming that competitive providers expect to rely on UNEs indefinitely. But given the potential for copper retirement, competitive providers do not, and cannot, presume the perpetual availability of UNEs as a less expensive substitute.¹⁴⁵ UNEs provide a stepping stone for competitive providers to incrementally build out their own fiber networks before the copper networks are retired by ILECs and replaced with fiber. The copper retirement and network replacement by ILECs provide a natural transition away from UNEs that maintains a sense of urgency among competitive providers to deploy their own networks sooner.¹⁴⁶ Indeed, that pressure on competitive providers to construct their own fiber networks was cited by the

¹⁴² *Id.* ¶ 15; *see also* Dialog Telecom Decl. ¶ 9.

¹⁴³ *See, e.g.*, Bullseye Decl. ¶ 5 (“Bullseye has... invested in the creation of customer portal services, software and tools that enable customers to order and change services, provide order status and service performance including business analytics/reporting.”).

¹⁴⁴ GWI Decl. ¶ 11.

¹⁴⁵ Sappington Report at 16.

¹⁴⁶ Socket Decl. at ¶¶ 58-60; *see also* Sappington Report at 15-16; Brattle UNE Decl. ¶¶ 8-9, 11-18.

Commission as one rationale for its decision not to require unbundling of ILEC mass market fiber loops.¹⁴⁷

It is also critical to understand how competitive providers rely on avoided-cost resale, an issue that USTelecom addresses in only the most superficial manner. To begin with, the Petition is bereft of factual support for and analysis of USTelecom's claim that competition renders Section 251(c)(4) resale unnecessary. The small amount of data offered by USTelecom in support of its request for forbearance from Section 251(c)(4) resale is so highly aggregated that it reveals nothing about the level of competition in any product or geographic market.¹⁴⁸ And USTelecom's Petition says nothing about the harm that would befall customers that continue to utilize resold TDM-based business telephone services.¹⁴⁹

In fact, there is significant demand for TDM-based services available through avoided-cost resale. For example, Granite focuses on the provision of seamless communications services, including traditional TDM, to businesses with multiple locations across multiple ILEC territories that demand reliable connectivity, but not large amounts of bandwidth, at each individual location.¹⁵⁰ Such customers include retailers, restaurants, hospitality companies, real estate companies, healthcare providers, banks and financial service companies, public utilities, non-profit organizations, and governmental agencies.

¹⁴⁷ See *TRO* ¶ 272

¹⁴⁸ See Motion for Summary Denial at 21.

¹⁴⁹ See *id.*

¹⁵⁰ Small businesses like neighborhood shops with one or only a few locations that do not demand large amounts of bandwidth at each location are equally dependent on traditional TDM. See Granite Decl. ¶¶ 2, 8

Nothing illustrates the continuing importance of traditional TDM better than its use by important governmental and quasi-governmental institutions. A recent letter from David Redl, Assistant Secretary for Communications and Information for NTIA, to Chairman Pai emphasizes the reliance of government agencies on traditional TDM. Assistant Secretary Redl reiterated the budget, procurement, and other challenges that government customers face in connection with transitioning strategic government applications that use legacy services to alternative next-generation services.¹⁵¹ He cautioned that discontinuance of services provided over copper networks could place federal departments and agencies in the untenable position of losing access to critical national security and public safety communications.¹⁵²

Resale-based competitors' customers continue to rely on traditional TDM-based business telephone service because of the unique benefits it provides. First, traditional TDM provides customers with reliability because traditional TDM lines are self-powered, and therefore continue to operate even in the event of power outages, without the need for additional fail-safes such as generators or batteries.¹⁵³ The provision of reliable connectivity has special importance for those businesses that rely on TDM to ensure the operation of critical systems such as medical alerts, fire/sprinkler monitoring, gas pipeline monitoring, bank vault or burglar alarms, and elevators that require reliable back-up systems for unexpected failures, even where VoIP services provided over managed networks (i.e., not over the public internet) are available.¹⁵⁴ Property

¹⁵¹ See Letter from David J. Redl, Assistant Secretary for Communications and Information, NTIA, to Ajit Pai, Chairman, FCC, WC Docket No. 17-84 (July 19, 2018) (“July 19 NTIA Letter”).

¹⁵² *Id.* at 1.

¹⁵³ Granite Decl. ¶ 15.

¹⁵⁴ *Id.* ¶¶ 18-19.

management companies, for example, require reliable fire/sprinkler, burglar, and elevator alarms across the wide range of buildings they manage,¹⁵⁵ while banks require the self-powering capabilities of traditional TDM to ensure that bank vaults remain secure, and that critical banking operations such as clearinghouses, ATMs, and electronic transfer capabilities continue in the event of a power outage.¹⁵⁶

Second, traditional TDM is essential to businesses, government, and public safety institutions located in widespread and rural locations that require reliable, low bandwidth lines. Certain government agencies have thousands of locations across the country, many located in rural areas.¹⁵⁷ Other agencies must operate essential applications and services requiring reliability, availability, and compatibility that can only be achieved by the use of traditional TDM.¹⁵⁸ The Federal Aviation Administration, for example, requires traditional TDM to operate its flight monitoring system, the National Airspace System (“NAS”), and to ensure safe and efficient travel in the United States and over large portions of the world’s oceans.¹⁵⁹

2. Access to UNEs, Including Loops and Interoffice Transport, Promotes Investment and Innovation by Competitive Providers

The Petition presents a completely backwards description of UNEs impact on investment and innovation, asserting that UNE and discounted wholesale rates “distort investment decisions.”¹⁶⁰ In reality, access to UNEs on ILECs’ copper networks prompts competitive

¹⁵⁵ *Id.* ¶ 18.

¹⁵⁶ *Id.* ¶ 19.

¹⁵⁷ *Id.* ¶ 23.

¹⁵⁸ *Id.* ¶ 26.

¹⁵⁹ *Id.* ¶ 26.

¹⁶⁰ Petition at 26.

providers to invest in equipment and other infrastructure to provide service, and enables them to finance their own fiber network build over time.¹⁶¹ Moreover, with their initial investment in upgraded switches and other equipment, competitive providers use UNEs to offer services that are not just more competitively priced than the ILEC alternative, but often have added functionality or other attractive terms not available at all from the incumbent.

First, as was intended by Congress in passing the 1996 Act, UNEs have enabled competitive providers to gain a foothold in markets otherwise dominated by ILECs and incrementally build out their own networks. The ability to use DS0 and DS1 UNE loops and subloops provides a way to connect and serve customers in a timely manner. Rather than waiting for the slowest and most resource-intensive portion of network deployment—the last-mile fiber cables—competitive providers can invest in collocating their equipment in ILEC central offices or in remote terminals and begin serving customers. The revenue generated by these customers helps competitive providers finance the costly expansion of fiber networks to reach the customers’ premises. Moreover, securing customers early using UNEs gives providers an opportunity to earn customer loyalty, which reduces the risk of incurring the significant sunk costs needed to deploy fiber to the customers’ premises.¹⁶² For Gorge Networks, which operates

¹⁶¹ See, e.g., *Uniti Ex Parte* at 2; *Blackfoot Ex Parte* at 1-2; ACD Decl. ¶ 7 (“When ACD commenced providing telecommunications service in Michigan in 2000, 100% of its connectivity with customers was dependent on UNEs.” After acquiring a density of customers, ACD presently “serves approximately 25% of its customers with its own fiber optic network.”); *Sonic Decl.* ¶ 9.

¹⁶² See *Sappington Report* at 9 (“Methods of market entry, such as UNEs and resale, that allow a competitor to build a customer base in a given area before incurring the large fixed, sunk costs of serving the area lower barriers to investment in last-mile fiber networks.”); see also *TRO*, 18 FCC Rcd. at 17122-23 ¶ 237 (“A carrier will not deploy mass market loops unless it knows in advance that it will have customers that will generate sufficient revenues to allow it to recover its sunk loop investment.”).

in rural parts of Oregon and Washington, UNE loops are in many remote communities the only economically viable way to provide end users with broadband service.¹⁶³ Gorge Networks uses UNE loops, subloops, and transport from ILEC remote terminals to grow its customer base, which then supports the build-out of fiber facilities in Hood River, Oregon and Goldendale, Washington.¹⁶⁴ TelNet has invested millions in its own fiber network, and serves approximately 40% of its customers with its own facilities after transitioning those customers from UNEs.¹⁶⁵ Likewise, Digital West has used revenue from customers served in part through UNEs to fund the deployment of its own fiber network, which currently reaches 20% of its customers as Digital West continues to invest heavily in its network.¹⁶⁶

In some cases, competitive providers have used UNEs to be the first to deploy fiber networks in smaller communities otherwise ignored by both the ILEC and the incumbent cable provider. IdeaTek was able to use its access to unbundled dark fiber transport to provide backhaul for the fiber-to-the-home network it built in a small Kansas community outside of Wichita.¹⁶⁷ Given the size of the customer base, IdeaTek would not have been able to make a business case to build a FTTH network without the availability of unbundled transport.¹⁶⁸ Socket, which focuses on markets in rural Missouri, uses UNEs to jump start fiber deployment in

¹⁶³ See Gorge Networks Decl. ¶ 8.

¹⁶⁴ See *id.* ¶ 6 (“UNEs uniquely assist our ability to build fiber facilities because . . . unlike business data services, we do not need to make extended term commitments beyond the period needed to build fiber, which lowers the effective cost of fiber deployment.”).

¹⁶⁵ See TelNet Decl. ¶¶ 4-5.

¹⁶⁶ See Digital West Decl. ¶ 8.

¹⁶⁷ See IdeaTek Decl. ¶ 5.

¹⁶⁸ See *id.*

small towns like Fayette, Missouri.¹⁶⁹ The residential customers in Fayette “had no choice for landline broadband and voice service until Socket deployed fiber facilities in the town,” despite having three middle-mile fiber transport carriers.¹⁷⁰ By using unbundled DS1 EELs to first build a customer base among SMBs in Fayette, Socket was able to deploy a fiber network and expand its service to residential customers.¹⁷¹ Similarly, Race has been able deploy fiber to over 15,000 homes and businesses in unserved and underserved rural communities, and to provide services including emergency services, by using unbundled DS1, DS3, and dark fiber transport.¹⁷²

Second, competitive providers also use UNEs to offer innovative services and customer-oriented terms that create a differentiated product from what is offered by the ILEC. As Socket explains, DS0 copper loops are valuable because they “do not include ILEC electronics that determine what services can be offered over the loop,” thus enabling a competitive provider to “deploy its own electronics on either end of the DS0 loop” and “customize and control the services provided over the loop, including service quality and security.”¹⁷³ As previously discussed, using its own electronics, Sonic offers speeds faster than AT&T’s in nearly all of the census blocks Sonic serves.¹⁷⁴ Unbundled DS0 and DS1 loops also enable competitive providers to use pair bonding to multiply the speeds that they can offer customers.¹⁷⁵ Likewise, First Communications uses UNE loops and transport as inputs into their own bundles of voice, data,

¹⁶⁹ Socket Decl. ¶ 25.

¹⁷⁰ *Id.*

¹⁷¹ *Id.* ¶ 26.

¹⁷² Race Decl. ¶¶ 5-8.

¹⁷³ Socket Decl. ¶ 47; *see also* Sonic Decl. ¶ 14; Virginia Global Decl. ¶ 8.

¹⁷⁴ Brattle UNE Decl. ¶18 and Figure 2.

¹⁷⁵ *See, e.g.,* Sonic Decl. ¶¶ 4-5, 12; TPx Decl. ¶¶ 10, 12.

and managed services that fit the specific needs of business customers.¹⁷⁶ Competitive providers also use unbundled loops together with their own facilities to serve niche customers that are more likely to be located in underserved areas. For example, Access One serves customers which have locations in underserved urban areas and would otherwise have no choice in communications.¹⁷⁷

Third, access to UNEs also promotes competitive fiber deployment by enabling competitive providers to secure contracts with business and government customers that have multiple locations, including remote locations that are not on the providers' own network. Once they secure the customer contract, competitive providers can overbuild fiber to the customer's principal or headquarters locations, which are more likely to be located in denser metropolitan areas or office parks, while using UNEs or resold services to also cover remote offices where it is not economically practicable to deploy fiber.¹⁷⁸ Competitive providers can use the multilocation customer accounts as a roadmap to expanding their own networks. UNEs are essential for this deployment method. Because multilocation customers typically prefer to use a single service provider, a competitive provider would not be able to compete against ILECs' ubiquitous presence without affordable last-mile access to the more far flung locations. Access to unbundled EELs, for example, enables Socket to connect multiple remote clinic locations of a health care customer that has 90 locations throughout Missouri.¹⁷⁹ Once the customer base was established, Socket gained greater assurance that it could profitably deploy a fiber network,

¹⁷⁶ See First Communications Decl. ¶ 8.

¹⁷⁷ See Access One Decl. ¶ 14.

¹⁷⁸ See Sappington Report at 8, 14-15.

¹⁷⁹ See Socket Decl. ¶ 37.

transition its UNE-based customers onto fiber, and gain additional customers as it expanded its fiber network.¹⁸⁰

The increased investment reflects the transition of customers initially served by UNEs to their own facilities and, as Professor Sappington notes, the “ongoing race between ILECs and CLECs to deploy fiber.”¹⁸¹ This practice of overbuilding fiber to areas with existing customers should be familiar to USTelecom because that is precisely the deployment method used by the ILECs. Where ILECs have expanded their own fiber networks through construction rather than acquisition, they focused on their own respective incumbent footprints with secure customer bases.¹⁸² Conversely, the BDS data showed that ILECs and their affiliated CLECs are *not* building fiber to a significant majority (or even substantial minority) of business locations outside of their respective territories.¹⁸³ Thus, far from dampening investment incentives, UNE access brings at least some competitive parity to the race to upgrade to fiber networks between incumbents and competitive providers.

3. Forbearance Would Reduce ILEC Incentives to Upgrade Their Networks and Service Offerings

Just as the Petition presents an upside-down picture of the effect of the unbundling rules on CLECs’ investment incentives, it similarly inverts the effects those rules have on *ILECs*’ incentives. The Petition claims that unbundling causes incumbents to divert resources that would

¹⁸⁰ *Id.*

¹⁸¹ Sappington Report at 15.

¹⁸² See Reply Comments of INCOMPAS, WC Docket No. 05-25, RM-10593, at 10 (filed Feb. 19, 2016) (“INCOMPAS 2/19/16 BDS Reply Comments”); *id.* at 13 & n. 50 (citing reports of ILECs’ fiber buildout in their incumbent footprints).

¹⁸³ See Rysman White Paper at Table 4.

otherwise be used to invest in fiber networks, and otherwise reduces their incentive to invest.¹⁸⁴

In reality, the unbundling rules developed by the Commission considered the need to balance competitive access with investment incentives, and those rules have reinforced ILEC investment incentives by subjecting incumbents to actual competitive pressure in markets in which they otherwise would have no incentive to deploy advanced networks and services.

As described above, competitive providers use UNEs both as a bridge to building their own fiber networks and as an input into their differentiated service offerings, especially in underserved areas. Competition from these providers has pushed, and will continue to push, incumbents to upgrade their own networks and to match or beat the service offerings from their competitors.¹⁸⁵ This is the fundamental mechanism of markets that USTelecom seeks to halt through the forbearance requested in the Petition. If incumbents can eliminate access to UNEs, it would significantly reduce if not entirely remove the ability of competitive providers to build out their own fiber facilities. The Small Business Administration expressed this exact concern in a recent letter to the Commission, explaining that UNEs not only support CLEC fiber deployment,

¹⁸⁴ See Petition at 23, 25.

¹⁸⁵ See Sappington Report at 16 (“As CLECs expand their fiber networks to serve customers in these regions, ILECs often will feel pressured to follow suit. This fact has been identified in empirical research.”); *see also* Digital West Decl. ¶ 13 (“Our entry utilizing UNEs has pushed other broadband providers to upgrade their services. The local cable company, Charter/Spectrum has recently upgraded speeds in San Luis Obispo County and AT&T has begun building some limited fiber to high end homes in San Luis Obispo.”); Mammoth ¶ 2 (“[W]ithin two years of us offering service in Ranchester, Wyoming, CenturyLink and the cable company rolled out their own broadband offerings.”); Race Decl. ¶ 10 (“We have experienced that upon our entry into rural markets using existing middle mile systems and UNEs, existing providers have been forced to upgrade their networks to keep a significant market share.”); Sonic Decl. ¶ 13.

but also “provide competitive pressure for incumbents to likewise invest in new fiber deployment and network upgrades.”¹⁸⁶

There is no reason for the Commission to believe that, if an ILEC has not yet upgraded its network to fiber *in the face of competition*, it would suddenly do so once that competition has been muted or stamped out. As noted above, Sonic’s drive to be the first to build a widespread fiber-to-the-home network to serve existing UNE-based customers in San Francisco was followed by AT&T’s own fiber upgrades.¹⁸⁷ Nor is there any reason for the Commission to believe the claim that but for the “administrative and compliance costs” of the unbundling rules, ILECs would be investing to deploy fiber in the communities served by competitive providers using UNEs. Indeed, upgrading to fiber networks provides ILECs with the opportunity to retire their legacy copper facilities and shed many of these costs. If anything, wholesale elimination of unbundling and resale obligations now through forbearance would dampen ILEC incentives.¹⁸⁸

C. Nation-Wide Forbearance from Unbundling Obligations Would Be Disruptive and Would Leave Many Underserved Areas Without Any Provider of Many Advanced Services

The Petition incorrectly asserts that forbearance “would not disrupt the marketplace” because it ignores the importance of geographic markets and misunderstands the critical role that

¹⁸⁶ Letter from Major L. Clark, Acting Chief Counsel, Office of Advocacy, U.S. Small Business Administration, and Jamie Belcore Saloom, Assistant Chief Counsel, Office of Advocacy, U.S. Small Business Administration, to Marlene H. Dortch, Secretary, FCC, at 3, CG Docket Nos. 18-152 & 02-278, WC Docket Nos. 17-84 & 18-141, GN Docket No. 17-258, WT Docket No. 17-79 (filed Aug. 1, 2018).

¹⁸⁷ See Sonic Decl. ¶ 13.

¹⁸⁸ See Sappington Report at 17 (explaining that forbearance end ILECs’ unbundling obligation “even if they choose not to fully convert their copper networks to fiber,” and thus “reduce fiber-based broadband infrastructure investment by removing a potentially strong incentive for such investment by ILECs”).

UNEs play in many underserved communities. In fact, nation-wide forbearance would be highly disruptive to the progress of fiber network buildouts and delay the availability of upgraded networks and services to customers. It would also leave many customers, especially in rural communities, without any providers of broadband and other advanced services.

Nation-wide forbearance and the prospect of losing UNE access everywhere would throw providers' deployment plans into chaos. The resource limitations that currently create bottlenecks for deployment—qualified construction crews, local permitting processes, utility and ILEC pole owner make-ready work, and underground utility locates, among others—would be even further stretched if competitive providers around the country face imminent disconnection. Given the limited resources and capital, competitive providers will necessarily need to triage among existing markets in deciding where to construct their own facilities.¹⁸⁹ As a result, the markets with lowest revenue potential, which are already likely to be underserved rural and urban areas, will more likely see competitive providers exit.¹⁹⁰

In some of these underserved markets, competitive providers that use UNEs are customers' only choice for broadband and other advanced services. Some of these markets are remote rural locations that do not have cable providers or ILEC broadband service, where the competitive provider is the only broadband provider other than satellite. Virginia Global provides DSL broadband to mostly rural residential customers in Rockbridge County, Virginia, using unbundled subloops and DS0s and DS1 loops and transport, frequently where there is no

¹⁸⁹ See GWI Decl. ¶ 10 (“The loss of access to UNEs would affect GWI’s ability to continue to provide service. Specifically, we would pull out of roughly 30% of the approximately 60 markets we serve. All of the markets we would exit are rural markets.”); Mammoth Decl. ¶ 13.

¹⁹⁰ See First Communications ¶ 12; InfoStructure Decl. ¶ 8.

other provider of broadband service.¹⁹¹ By using its own equipment with the unbundled copper pairs, Virginia Global offers residential broadband speeds of up to 25Mbps / 10Mbps for download/upload.¹⁹² Because there is no commercial alternative to unbundled DS0 copper loops, if forbearance were granted, Virginia Global would end service to some customers who have no other broadband option.¹⁹³ Similarly, the loss of unbundled transport would result in discontinuing service.¹⁹⁴

Other rural communities face the same prospect of losing broadband service entirely. In Douglas County, Oregon, the local competitive provider, Douglas FastNet, uses UNE subloops to provide service to approximately 3,000 customers, many of whom either do not have access to broadband service from any other provider besides satellite providers, or have access to much slower ILEC broadband provided through T1-fed DSLAMs.¹⁹⁵ Digital West also relies on UNE loops to provide broadband service through remote terminals to rural parts of San Luis Obispo County where DSL service is not available from the ILEC.¹⁹⁶ Similarly, by using UNE dark fiber transport, IdeaTek offers the only broadband service available in rural communities in south central Kansas in the incumbent territories of AT&T and CenturyLink.¹⁹⁷ In rural areas, DS1

¹⁹¹ See Virginia Global Decl. ¶ 2.

¹⁹² See *id.* ¶ 3.

¹⁹³ *Id.* ¶ 12.

¹⁹⁴ See *id.* ¶ 11.

¹⁹⁵ See Douglas FastNet Decl. ¶ 5.

¹⁹⁶ See Digital West Decl. ¶ 2.

¹⁹⁷ See IdeaTek Decl. ¶ 2. The communities in Kansas where no ILEC DSL services are available include Bentley (AT&T), Andale (AT&T), Mt. Hope (AT&T), and Yoder (CenturyLink), as well as unincorporated parts of Reno, Sedgwick, and McPherson counties.

UNEs are also critical to provide service when the loop is too long to permit service over xDSL-conditioned DS0 loop copper.

The loss of service resulting from nation-wide forbearance will also affect business and other non-residential customers. Competitive providers currently use UNEs to provide affordable services to customers that require more robust reliable services than offered to mass market customers. For example, Socket Communications is the only provider of ISDN-PRI services in part of Missouri, and is able to offer these services by using unbundled DS1 loops and DS1 EELs.¹⁹⁸ ISDN-PRI services enable customers that require multiple, separately identifiable voice and data transmissions that are associated with specific locations or departments at a single physical address, such as an apartment building or dorm.¹⁹⁹ Having specific locations associated with a phone number is critical in a campus environment because law enforcement and other emergency responders need to be able to identify the caller.²⁰⁰ Local ISDN-PRI also enables fail-over service to route calls between an emergency responder's remote location and its headquarters site in the event the remote site served by Socket loses connectivity.²⁰¹ If Socket loses access to UNEs, customers would need to incur significant costs to replace its existing equipment in order to have the same functionality.²⁰²

¹⁹⁸ Socket Decl. ¶ 11.

¹⁹⁹ *Id.*

²⁰⁰ See *id.*

²⁰¹ *Id.*

²⁰² See *id.*

D. US Telecom’s Modified Transition Plan Does Not Ameliorate the Anti-Competitive, Harmful Impacts of Forbearance on Consumers

On June 21, 2018, US Telecom modified its proposal for a transition plan to accompany grant of forbearance. That proposal does not ameliorate the fundamental anti-competitive and anti-consumer problems that require denial of forbearance from Sections 251(c)(3) and (4) and Section 272(e)(1). Although USTelecom would now not institute any automatic price increases for UNEs until February 4, 2021, UNEs could only be used to serve the existing embedded base, with no new UNE orders after the effective date.²⁰³ Significantly, on a flash-cut basis, this truncates CLECs’ ability to utilize UNEs as a bridge to future fiber deployments. The cost of customers changing or adding locations, or of adding new customers, would increase dramatically. The CLECs entry path for building new last-mile fiber would become significantly steeper.

Moreover, CLECs would abruptly lose their sources for bare copper loops other than for their embedded base. This means that CLECs could not utilize existing investment in backhaul and EoC, VDSL or ADSL2+ equipment to expand the number of customers served from existing collocations. This also means that in addition to cutting off CLECs’ ability to build a customer base sufficient to sustain a network build, ILECs and, to the extent they are present, cable incumbents, would no longer face a competitive threat – and thus an impetus to upgrade services, quality, and support – from partial facilities-based CLECs.

On a more fundamental level, any “transition plan” that imposes a nation-wide cutoff date would invariably harm competition and consumers with no corresponding benefit. As noted

²⁰³ Letter from Jonathan Banks, USTelecom et al., to Marlene H. Dortch, Secretary, FCC, WC Docket No. 18-141, at 1-2 (filed June 21, 2018).

above, the same, finite supply of capital and engineering and construction labor would be stretched past the breaking point by every provider that currently uses UNEs and avoided-cost resale, as well as the incumbent that would have to try to accelerate their deployment plans.²⁰⁴ Moreover, cutting off UNE access at the same time would also likely overwhelm the provisioning times of special access alternatives where they are available, further forcing some competitive providers from their markets. It would take competitive providers years to overbuild their own facilities to transition customers from the embedded base, much longer than providers can justifiably sustain their operations in many markets. Thus, even with its modified transition plan, USTelecom's Petition effectively snuffs out existing competitors immediately. The end result will be higher rates for consumers, and fewer choices of carriers to service hard-to serve markets, whether rural or specialized.

IV. NATION-WIDE FORBEARANCE REPRESENTS A RADICAL AND UNWARRANTED DEPARTURE FROM THE COMMISSION'S COMPETITION FINDINGS IN THE *BDS ORDER*

The Commission made sweeping deregulatory changes in the *BDS Order* based on the prediction that, despite the highly concentrated markets, full facilities-based competition will arrive in the medium term (over the next three to five years) sufficient to discipline ILEC prices and to meet demand.²⁰⁵ While the undersigned disagree fundamentally with the Commission's premises and reasoning in reaching this conclusion, this Petition goes beyond even the (rosy) predictions of the *BDS Order*. The Petition would assume that unbundling is unnecessary even in markets that the *BDS Order* concluded were *non-competitive*. Furthermore, the *BDS Order* itself acknowledged that "UNEs, where available allow competitive providers to effectively

²⁰⁴ See *supra* Section III.D.

²⁰⁵ *BDS Order* ¶ 13 (2017).

compete in lower bandwidth services, and are particularly close substitutes for DS1s and DS3s.”²⁰⁶ The Commission focused not only on UNE DS1s and DS3s, but also UNE copper loops, including when used to provide Ethernet-over-Copper.²⁰⁷ Moreover, granting the forbearance requested in the Petition would undermine the Commission’s predictions in the *BDS Order* and further frustrate the Commission’s mission of promoting competition and the deployment of advanced networks. Accordingly, for BDS services, it would be premature to grant the forbearance requested in the Petition.

A. Forbearance from Unbundling Requirements Would be Premature Based on the BDS Order’s Predicted Timeframe for the Emergence of Competitive Providers

The *BDS Order* adopted a competitive market test that led to the elimination of price cap and tariffing protections in more than 91 percent of locations with BDS demand, even though over 77 percent of locations are connected only by ILEC-owned facilities.²⁰⁸ Among locations with bandwidth demand of below 100 Mbps, 84 percent of locations presently do not have any competitive provider offering service.²⁰⁹ The Commission concluded that the predicted emergence of facilities-based providers capable of serving customers meant that continued price cap regulations are not necessary to ensure just and reasonable rates.²¹⁰ Under the competitive market test, a location with BDS demand is deemed to be competitive with respect to DS1 and DS3 channel terminations if it is located in a county in which either one of two conditions is met:

²⁰⁶ *Id.* ¶ 32.

²⁰⁷ *Id.* ¶ 33 n. 104.

²⁰⁸ Rysman White Paper at Table 7.

²⁰⁹ *See supra* n.7.

²¹⁰ *BDS Order* ¶¶ 160-62.

either (1) 50 percent of the locations with BDS demand in that county are within a half mile of a location served by a competitive provider, or (2) 75 percent of the census blocks in that county have a cable provider present based on the Commission’s Form 477 data.²¹¹ Critically, the Commission’s test does not require a facilities-based BDS provider to be offering service to any particular customer location, or to even have facilities capable of supplying service connected to that location within a few months or even a year or more. Moreover, the half-mile test rested on CLEC statements that they might, under the right circumstances with sufficiently low entry barriers, build out up to a half-mile distance, not that barriers to build out were widely expected to be low within a half mile.²¹²

Rather, the test rests on a (likely overly optimistic) *prediction* about the ability of nearby providers to compete with the incumbent with the sole connection to a customer location at some point three to five years in the future, since the test “assesses the availability of actual and likely competitive options.”²¹³ The Commission recognized that in the counties it has deemed

²¹¹ *Id.* ¶ 86.

²¹² See Declaration of Jonathan B. Baker on Market Power in the Provision of Dedicated (Special Access) Services, WC Docket No. 05-25, RM-10593, ¶ 40 (filed Jan. 27, 2016) (explaining that due to the cost of building even to one half-mile away in the absence of substantial revenue potential, “nearby fiber providers would be expected to offer less of a competitive constraint than providers already serving a building with their own facilities, and, in general, are better seen as potential entrants than as ‘rapid entrants’”); see also Declaration of John Merriman on Behalf of Level 3 Communications, LLC, ¶ 6 filed as an Appendix to Comments of Birch, EarthLink, and Level 3, WC Docket Nos. 16-143, 15-247, & 05-25, RM-10593 (June 28, 2016) (“[I]t is infrequently the case that Level 3 can deploy a new fiber connection to serve a customer demanding only 100 Mbps of bandwidth or below.”); Third Declaration of Matthew J. Loch, appended as Attachment A to Reply Comments of TDS Metrocom, LLC, WC Docket No. 05-25, RM-10593, ¶ 13 (filed Feb. 19, 2016) (“[A] fiber lateral build to a customer located 100 to 1,000 feet and beyond from the nearest splice point is not competitive at speeds ranging from 10 to 100 Mbps because TDS CLEC could not recover its required revenue and compete with lower RBOC retail rates.”).

²¹³ *BDS Order* ¶ 97.

competitive, “some end users may not have viable alternatives to the incumbent LEC’s DS1 and DS3 end user channel terminations services and other special access services within” the “near-term.”²¹⁴ Nonetheless, the Commission concluded that “even in these areas, we believe tariffing may reduce incentives for competitive entry and ultimately inhibit growth in the market and competition over the longer term.”²¹⁵

Regardless of whether or not the Commission’s prediction is reasonable, it is indisputable that full facilities-based competition is the exception. The Petition glosses over the predictive nature of the *BDS Order*’s competition finding, and thus presents an inaccurate account of the state of competition. The Petition has presented no evidence that the Commission’s prediction has been proven accurate so far, much less that the pace of facilities-based entry has accelerated to justify granting forbearance now. Moreover, as discussed above, the Petition ignores the role that UNEs play as a bridge to the deployment of alternative full facilities-based fiber networks.²¹⁶ It is premature for the Commission to dismantle the competition-promoting provisions in the 1996 Act without any confirmation of the actual emergence of facilities-based competition.

Finally, the Petition’s request for blanket, nation-wide forbearance from unbundling and discounted resale obligations is inconsistent with the Commission’s own finding that many counties are not competitive even under the *BDS Order*’s competitive market test. For these

²¹⁴ *Id.* ¶ 162. The Commission also declined to reclassify counties that were subject to Phase 2 pricing flexibility as “non-competitive” even when they did not meet either prong of the competitive market test. Those areas lack even the prediction of competitive choice within three to five years. *See id.* ¶ 164.

²¹⁵ *Id.* ¶ 162.

²¹⁶ *See supra* Section III.B.2.

counties, the Commission concluded that even in the medium term of up to five years, there is unlikely to be sufficient facilities-based competition to ensure that prices would be just and reasonable. The Petition offers no explanation for why the competitive landscape in these counties is so different now, barely more than a year later, that the Commission should reverse the findings of the *BDS Order* and deem there to be sufficient competition to justify forbearance.

B. Forbearance Would Undermine the *BDS Order*'s Prediction of Competition

Granting the forbearance requested in the Petition would not only be premature given the Commission's own prediction about the timeframe for competition, it would also undermine the likelihood of competitive entry. If ILECs were unconstrained from increasing UNE prices, or eliminating UNEs altogether, the ILECs could force providers into much more expensive business data services. To mitigate the effect of price increases, end users would be driven into multiyear plans to obtain "discounts" on unrealistically high rack rates. This raises the cost of building alternative loop facilities because the CLEC must include the cost of the additional volume and term commitment – and any associated penalties for early termination – as part of its deployment costs. By raising rivals' costs, forbearance harms consumers by raising the prices they will face.

The *BDS Order*'s prediction of competitive entry is based on the premise that providers are willing and able to extend their existing networks to meet demand.²¹⁷ As discussed above, this is precisely what the unbundling and discounted resale requirements promote in the marketplace. Access to these inputs helps solve the chicken-and-egg problem of network

²¹⁷ *BDS Order* ¶ 119 (stating that "providers of BDS are commonly willing to extend their existing network . . . to meet demand," and "assum[ing] . . . that a cable company competes for any BDS demand, or will do so within a few years").

economics by enabling competitive providers to attract a base of loyal customers and generate revenue to finance costly network expansion before undertaking the expansion to end user locations.²¹⁸

Granting the forbearance requested by USTelecom would deal a double blow to the Commission's goal of promoting facilities-based competition. First, it would deprive competitive providers of the customer-driven path to deployment of loop facilities to supplement their backhaul and network electronics deployment. As discussed above, competitive providers that use UNEs already have an economic incentive to invest in their own advanced fiber networks, and face strong competitive pressure to do so before the ILECs retire their copper networks. Eliminating access to UNEs prior to network retirement hamstrings competitive providers' ability to build out fiber networks, and thus also removes the competitive pressure on the ILEC to do so.

Second, and in direct conflict to the *BDS Order*'s justification for its predictions, forbearance would increase the incremental costs to competitive providers of investing in their own networks to be able to serve additional customers, which in turn reduces their incentive and ability to build out their own networks. The *BDS Order* predicted that a competitive provider would be willing to make the network investments necessary to compete with the incumbent provider "so long as they at least recover the incremental cost of extending supply to any

²¹⁸ *Id.* ¶ 52 ("Competitive LECs rarely build on speculation and instead prefer to have a customer in place before undertaking the costs associated with buildouts."). The *BDS Order* acknowledges that even nearby providers would still build if "the cost of meeting demand within one-half mile, including the costs of network extension and customer connection, is usually less than the present value of expected net revenues that buildout to that location will entail." *Id.* ¶ 119. See also Sappington Report at 8, 14-15.

customer.”²¹⁹ For the vast majority of customer locations with demand, the data in the BDS proceeding show that the ILEC is the only facilities-based provider currently offering service.²²⁰ Forbearance will dramatically increase the cost to the inputs that competitive providers need to reach these customers. For example, one competitive provider has found that switching from unbundled EEL mileage to special access mile would increase per-mile costs from under \$2 to as much as \$37.²²¹ Another competitive provider found that the DS1 special access service requires a three-year minimum commitment, and even that rate would be 140% to 189% higher than the price of its current DS1 UNE.²²² Faced with much higher last-mile costs, competitive providers are less likely and able to make incremental investments in the other facilities and infrastructure—collocated electronics, middle mile fiber, sales and customer service staff—necessary to expand their geographic reach.

Moreover, as commenters have explained in the BDS proceeding, obtaining discounts off of the even higher ILEC “rack” rates for Ethernet services requires multiyear contracts.²²³ These contracts also effectively raise the incremental cost to a competitive provider of extending its

²¹⁹ *BDS Order* ¶ 123.

²²⁰ *See* Rysman White Paper at Table 7.

²²¹ *See* First Communications Decl. ¶ 12.

²²² Socket Decl. ¶¶ 51-53; *see also* Digital West Decl. ¶ 11 (“UNE DS-1 is available for \$70.00 per month and the equivalent special access service is \$330.00 per month.”).

²²³ *See* Comments of Windstream Services, LLC, WC Docket Nos. 16-143 and 05-25, RM-10593 (filed June 28, 2016) (comparing AT&T “rack” rate of \$678 per month for 2 Mbps on a 36-month term against AT&T rate of \$126 per month for DS1 service on a 36-month term); *see also* Reply Comments of AT&T Inc., WC Docket Nos. 16-143, 15-247, 05-25, RM-10593, at 27 n.87 (filed Aug. 9, 2016) (“[T]he actual rates paid by U.S. customers are generally negotiated at discounted levels dramatically below those in the service guides.”); *id.* at 60 (“[W]holesale customers generally negotiate prices well below those listed in the Guidebook.”).

facilities to a customer location because it must absorb the cost for the entire term of the contract (or the early termination penalty) in order to transition the customer from the ILEC's facilities onto its own last-mile network. In contrast, the flexibility of UNEs enable competitors to transition existing customers onto their own networks without paying an economic penalty. Forbearance thus will frustrate the *BDS Order*'s competitive prediction by increasing the incremental costs of investing in competitive infrastructure.

V. USTELECOM'S PETITION FAILS TO MEET THE STATUTORY SHOWING FOR FORBEARANCE UNDER SECTION 10 OF THE COMMUNICATIONS ACT

Section 10 of the Communications Act authorizes the Commission to forbear from applying a regulation or provision of the Act only if the Commission makes three determinations based on the record:

- (1) enforcement of such regulation or provision is not necessary to ensure that the charges, practices, classifications, or regulations by, for, or in connection with that telecommunications carrier or telecommunications service are just and reasonable and are not unjustly or unreasonably discriminatory;
- (2) enforcement of such regulation or provision is not necessary for the protection of consumers; *and*
- (3) forbearance from applying such provision or regulation is consistent with the public interest.²²⁴

Under the Commission's framework for evaluating competition in forbearance proceedings, wholesale and retail markets must be analyzed separately, and the petitioner must demonstrate that there is effective facilities-based competition in either the wholesale or retail market in each relevant product and geographic market.²²⁵ The Competitive Carriers Group has separately

²²⁴ 47 C.F.R. § 160(a) (emphasis added).

²²⁵ See Petition of Qwest Corporation for Forbearance Pursuant to 47 U.S.C. § 160(c) in the Phoenix, Arizona Metropolitan Statistical Area, Memorandum Opinion and Order, FCC 10-113, 25 FCC Rcd. 8622, ¶ 43 (2010) ("Qwest Phoenix Forbearance Order").

moved the Commission to summarily deny the Petition for failure to comply with the “complete-as-filed” requirement as set out in the Commission’s rules.²²⁶ The record does not contain enough information for the Commission to make the determinations necessary to grant forbearance, and, in fact, makes clear that forbearance cannot be granted in properly-defined relevant markets. This section highlights how, based on the information that is in record, the Petition fails to meet any of the three statutory factors for forbearance with respect to the Category 1 and Category 2 provisions. Accordingly, the Commission should deny the Petition.

A. The Commission Should Not Forbear from Section 251(c)(3)’s Unbundling and Associated Section 252 Requirements

Section 251(c)(3) and the Commission’s unbundling rules create a wholesale market for customer access, which in turn has spurred innovation and investment in the retail markets for voice and data services. The results of this retail competition are lower prices as well as better service quality and choice for consumers. Forbearance would effectively end this wholesale market in many communities that lack viable alternatives, raising prices and stifling investment to the detriment of the consumer and the public interest.

1. UNEs Remain Necessary to Ensure Just and Reasonable Rates and to Prevent Unjust and Unreasonable Discrimination in the Wholesale and Retail Markets

As explained in this Opposition, UNEs play an essential role in ensuring that customers, particularly those in underserved communities without facilities-based competition, have access to advanced communications services at reasonable prices and terms. Access to unbundled loops, dark fiber transport, and other associated network elements (including NIDs and OSS) at TELRIC rates establishes a wholesale market in which competitive providers can purchase

²²⁶ See Motion for Summary Denial.

inputs at cost for their own end user voice and data services.²²⁷ Eliminating this access through forbearance would effectively shut down the wholesale market in many areas in which there are no alternative sources for inputs like DS0 loops. In other areas, the alternatives to UNEs are special access and Ethernet services provided over facilities controlled by ILECs, which have the incentive and ability to raise their rivals' costs by charging much higher prices for others. High barriers to entry also prevent competitive sources of wholesale access from emerging in these same underserved areas. As a result, if forbearance were granted, retail customers will have to pay higher rates for vital voice and data services; or will lose access to specific services that meet their needs and, in some cases, to broadband services altogether.

Competitive providers lack economically viable wholesale alternatives to UNEs in many geographic and product markets. The Commission's own data show that, for business data services, ILECs control the sole connection to customers in the vast majority of locations.²²⁸ Competitive providers have also explained that there are no commercial substitutes for unbundled copper-pair loops, and rarely for interoffice dark fiber transport.²²⁹ Where there are ILEC substitutes for unbundled DS1 and DS3 loops in the form of special access or wholesale Ethernet services, purchasers would face price increases of several times what they currently pay.²³⁰ As the Commission and the D.C. Circuit recognized in the context of impairment

²²⁷ As noted above, if an ILEC disagrees with the calculation of UNE rates, there is already an existing option for challenging those rates. *See supra*, Section II.B.

²²⁸ *See supra* Section II.C.

²²⁹ *See supra* Sections II.C and III.C.

²³⁰ *See Access One Decl.* ¶ 11 (In Illinois, where Access One would be most affected, UNE DS1 tails sell for a maximum of \$54, without a service term. A monthly term Special Access DS1 service costs \$250 to \$320, depending upon the zone of the service address."); *First Communications Decl.* ¶¶ 17-18 ("If First Communications were no longer able to obtain DS1 UNE loops, DS1 special access circuits would be approximately \$200 more

analysis under Section 251, incumbents that control facilities necessary for their competitors to serve customers have an incentive to set high prices for those facilities in order to disadvantage those competitors.²³¹ USTelecom has failed to meet its burden of production to demonstrate that wholesale markets for loops and interoffice transport are competitive, and the available information does not support a conclusion that wholesale markets nation-wide are sufficiently competitive to establish the absence of market power.²³² Without a competitive wholesale market to which competitive providers can turn for lower priced inputs, those providers would either have to pass the higher prices to their own end user customers or exit the market entirely.²³³ Either way, consumers lose.

The record also does not support a conclusion that there is sufficient retail competition to support nation-wide forbearance. Although the Petition asserts that UNEs play a small and diminishing role on a nation-wide level, it ignores the critical role UNEs play in the specific markets in which they are available.²³⁴ As the Ohio Public Utilities Commission observed, the Petition's own figures imply that "resale and UNE loops must still be utilized to provision approximately seven percent of end-user switched and VoIP lines," which "is not an insignificant

expensive."); Fusion Decl. ¶ 8; InfoStructure Decl. ¶ 10; Socket Decl. ¶ 51 ("Special Access DS1 Loops can range from 140% to 189% higher than Socket's average cost of UNE DS1 loops depending on the term.").

²³¹ See *TRRO* ¶ 47; *United States Telecom Association v. FCC*, 359 F.3d 554, 576 (D.C. Cir. 2004) (*USTA II*).

²³² See *Qwest Phoenix Forbearance Order* ¶ 74 (concluding that Qwest has market power in the wholesale market for loops because competitive providers "reach relatively few buildings"); *id.* ¶ 78 (concluding that Qwest has market power for local dedicated transport because the "record does not reveal likely widespread potential competition for wholesale dedicated local transport between Qwest's central offices in these areas").

²³³ See Ohio PUC Comments at 5-6.

²³⁴ See *supra* Section III.B.1.

number of lines served.”²³⁵ As Dr. Sappington observes, competitive entry from even a small number of UNEs, and the lower barriers to entry that UNEs provide, can discipline pricing and incent further investments in service quality and delivery by the ILEC, and where it is present, the cable incumbent.²³⁶ Moreover, there is evidence of lack of competition in the retail market for residential broadband service in many markets around the country. Providers like Virginia Global and IdeaTek have explained that in the rural communities they serve, there often is no cable presence, and in some cases even the ILEC does not offer broadband service to residential customers.²³⁷ Thus, the Petition fails to establish the presence of even a duopoly in the markets in which it seeks forbearance, and in any event under the Commission’s forbearance standard, a cable/ILEC duopoly does not establish sufficient retail competition for mass market services to justify forbearance.²³⁸

Similarly, with respect to markets for voice and data services for small and medium-size business and government customers, there is also evidence of lack of competition in both rural communities and metro areas outside of central business districts.²³⁹ USTelecom has not shown that “recognized barriers to entry, which UNEs are designed to help competitors overcome, have been lowered to enable similar competitive facilities deployment” by competitive providers other

²³⁵ Ohio PUC Comments at 5.

²³⁶ Sappington Report at 10-13.

²³⁷ See IdeaTek Decl. ¶ 2; Virginia Global Decl. ¶ 2.

²³⁸ See *Qwest Phoenix Forbearance Order* ¶¶ 85-86.

²³⁹ See Access One Decl. ¶ 8 (“The Company provides traditional voice services to 28 Chicago locations for Catholic Charities, often in urban areas where CLECs are the only competitive choice for traditional communications services.”); Socket Decl. ¶ 37.

than potentially the incumbent cable companies.²⁴⁰ In many markets served by our members, business customers lack even the option of a cable provider.

The record also does not support the Petition’s assertion that UNE rates everywhere are “artificially low.”²⁴¹ If the Petition is arguing that existing rates are below what they should be under the Commission’s rules, i.e., below cost, the appropriate remedy is to seek different rates before the appropriate state utilities commission based on evidence of costs. If instead the Petition is arguing that current UNE rates are below what the ILECs would be able to charge competitive providers for a comparable service, that begs the question of whether those rates would be just and reasonable if UNE-based competition were not available.²⁴² Under either of these interpretations, there is no evidence that UNE rates are too low on a nation-wide basis. Given this record, the Commission cannot conclude that the retail markets for business services are sufficiently competitive on a nation-wide basis to ensure that charges will be just and reasonable if forbearance were granted. Accordingly, the Commission should find that the Petition has not demonstrated that enforcement of the unbundling rules is not necessary to ensure just and reasonable charges and practices.

2. Forbearance from Unbundling Requirements Would Undermine Consumer Protection and Is Inconsistent with the Public Interest

The record evidence supporting the conclusion that the unbundling requirements remain necessary to ensure just and reasonable charges and practices also supports a finding that those

²⁴⁰ *Qwest Phoenix Forbearance Order* ¶ 98.

²⁴¹ *See* Petition at 23.

²⁴² For example, the *BDS Order* noted that UNEs, “where available, allow competitive providers to effectively compete in lower bandwidth services.” *BDS Order* ¶ 32.

same requirements are necessary for consumer protection.²⁴³ In addition, the record also shows that access to UNEs remains necessary for competitive providers to offer innovative services to residential customers, including upgrading central office equipment to achieve higher speeds than those offered by the incumbent over legacy facilities.²⁴⁴ This evidence provides additional support for concluding that forbearance would undermine consumer protection.²⁴⁵ For business and government customers, competitive providers “rely on UNEs to target particular niche markets or customer segments” such as multilocation customers and smaller size business customers with specific needs that are unserved by mass market- and enterprise-focused incumbents.²⁴⁶

In determining whether forbearance is in the public interest, Section 10 further instructs, “the Commission shall consider whether forbearance from enforcing the provision or regulation will promote competitive market conditions, including the extent to which such forbearance will enhance competition among providers of telecommunications services.”²⁴⁷ The Commission has observed that “the loop and transport UNEs at issue in this proceeding are legacy facilities that already have been constructed,” and “[a]ny investment disincentives therefore would seem to have little likely impact” on the incumbents’ incentives to invest in *fiber* networks.²⁴⁸

²⁴³ See *id.* ¶ 102.

²⁴⁴ See *supra* Section III.B. See also Brattle UNE Decl. ¶¶10 and Table 4, 18 and Figure 2.

²⁴⁵ See *Qwest Phoenix Forbearance Order* ¶ 102.

²⁴⁶ *Id.* ¶ 103; see also Bullseye Decl. ¶ 2 (a company for which “national multi-location customers is a “niche focus.”).

²⁴⁷ 47 U.S.C. § 160(b).

²⁴⁸ See *Qwest Phoenix Forbearance Order* ¶ 108.

As explained above, access to UNEs reinforces investment incentives for both competitive providers and incumbents in order to win the race to build next generation fiber networks.²⁴⁹ Under current rules, ILECs have a strong incentive to pursue a “natural forbearance” option by upgrading their own legacy networks to fiber. This option in turn spurs competitive providers to upgrade their own networks and transition customers off of UNEs before the ILEC can build out its fiber network and retire its copper loops.²⁵⁰ Nation-wide forbearance would short-circuit this process by allowing ILECs to shed their unbundling obligations without making any improvements to their own networks. The result not only undercuts competitors’ ability to expand their own fiber networks, but also dampens incumbents’ incentives to upgrade their legacy facilities, for which they would be able to charge supracompetitive prices. Because nation-wide forbearance would both harm competition and reduce incentives for investment in fiber networks, it would not be in the public interest to grant the Petition.

B. The Commission Likewise Should Not Forbear from Continuing to Apply Section 251(c)(4)’s Avoided-Cost Resale Obligations

Section 251(c)(4) has enabled competitors like Granite to create highly-sought-after service offerings that rely on traditional TDM-based business telephone service because of the unique benefits it provides, including the reliability that results from self-powered lines. Indeed, multi-location businesses, government agencies, and public safety institutions all rely on innovations like Granite’s provision of “one stop shop” service. Forbearance from the avoided-

²⁴⁹ See *supra* Sections III.B.2-III.B.3.

²⁵⁰ Sappington Report at 14-16.

cost resale requirement would result in increased prices and other significant harms with no demonstrable public interest benefit.

1. Avoided-Cost Resale Is Necessary to Constrain Prices for Traditional TDM-Based Services

There is no question that resale rates will increase should the Commission forbear from the Section 251(c)(4) avoided-cost resale obligations. State regulators would no longer be able to impose a discounted rate on tariffed retail prices, and, as discussed above, resale prices would no longer constrain the prices ILECs charge in commercial wholesale agreements.²⁵¹ Relatedly, wholesale line acquisition costs would increase as the acquisition cost of its next best alternative increases. USTelecom is well aware of these negative effects on Granite and the ILECs' other competitive carrier customers; otherwise, it would not have petitioned for forbearance.²⁵²

Such line procurement cost increases for competitive carriers like Granite would lead to additional harms. ***BEGIN HIGHLY CONFIDENTIAL [REDACTED]

[REDACTED] END HIGHLY CONFIDENTIAL***²⁵³ Second, competitive carriers such as Granite would see their margins decline and would be unable to compete as effectively with ILECs when their line procurement costs are significantly higher – perhaps even as high as the ILECs' own retail rates. Third, reduction in relative competitiveness vis-à-vis the ILECs would be expected to lead to the usual harms from exclusionary acts towards competitors, including

²⁵¹ Declaration of William P. Zarakas ¶ 26, Attachment B to Opposition of Granite Telecommunications, LLC, WC Docket No. 18-141 (filed Aug. 6, 2019) ("Brattle Resale Decl."); Granite Decl. ¶ 41-42.

²⁵² Brattle ResaleDecl. ¶ 27.

²⁵³ Brattle ResaleDecl. ¶ 29; Granite Decl. ¶ 42.

increased retail rates for multi-location businesses, whether served by an ILEC or a competitive carrier, reduced product differentiation and innovation, and lower quality.²⁵⁴ Multi-location businesses, for example, would lose value and efficiencies provided by Granite as a “one-stop shop,”²⁵⁵ and both multi-location businesses and small business customers would suffer from limitations on Granite’s ability to provide functionalities only available through avoided-cost resale.²⁵⁶

Moreover, the provisions USTelecom cites as alternatives to the protections of Section 251(c)(4) do not sufficiently guard against ILEC abuse of market power.²⁵⁷ First, Section 251(b)(1) does not require that the resale rate take into account the costs that ILECs avoid by selling to a competitive LEC, rather than a retail customer.²⁵⁸ Second, Section 251(b)(1)’s resale requirement places the burden of demonstrating harm on competitive providers like Granite that, of course, lack a full understanding of the ILEC cost structure and private deals that it has struck and have structurally weaker bargaining power than the ILECs.²⁵⁹ Third, Section 251(b)(1)’s resale requirement lacks a methodology for calculating the resale rate and would require that *post hoc* enforcement proceedings be instituted at the state or federal level whenever Granite believes it is being treated unfairly.²⁶⁰ Furthermore, USTelecom fails to acknowledge that the Commission has relied on the continued availability of “cost-based rates available under section

²⁵⁴ Brattle ResaleDecl. 29.

²⁵⁵ Granite Decl. ¶ 45.

²⁵⁶ *Id.* ¶ 44.

²⁵⁷ Petition at 29.

²⁵⁸ *See* 47 U.S.C. § 251(b)(1).

²⁵⁹ Granite Decl. ¶ 41.

²⁶⁰ *Id.* ¶ 41.

251 and through resale ” – the very Category 1 requirements from which USTelecom seeks forbearance in the instant Petition – to justify forbearance from Section 271 checklist items.²⁶¹

2. Forbearing from the Avoided-Cost Resale Requirement Would Likewise Harm Consumers and the Public Interest

Forbearance from Section 251(c)(4) avoided-cost resale as it applies to traditional TDM-based telephone service also would harm consumers and would be inconsistent with the public interest. In contrast to its claims with regard to the elimination of UNEs, USTelecom has not even attempted to allege public interest benefits associated with forbearance from avoided-cost resale. This is unsurprising given that forbearance from the avoided-cost resale requirement would be detrimental to competitive market conditions and would harm consumers. Notably, multi-location business customers would be harmed by the loss of “one-stop shop” value and efficiencies, and both multi-location businesses and small business customers would suffer from limitations on the ability of Granite and other providers to offer functionalities only available through avoided-cost resale. Furthermore, while competition and consumers would be harmed by rate increases if the Commission were to forbear from the Section 251(c)(4) avoided-cost resale requirement, there are no identified costs (and the ILECs have alleged none) associated with retaining the requirement because the avoided-cost discount ensures ILECs’ ability to earn the profits they would make selling their services to retail customers, minus the costs they avoid by selling their services at wholesale. Finally, forbearance from the avoided-cost resale requirement would do nothing to increase incentives to invest in the construction of new networks or the provision of new services.

²⁶¹ *USTelecom 2015 Forbearance Order* ¶ 32.

C. The Commission Should Not Forbear from the Section 272(e)(1) Requirements

The Petition also sought forbearance from 272(e)(1) of the Act and Section 64.1903 of the Commission's rules. Section 272(e)(1) imposes a nondiscrimination requirement on Regional Bell Operating Companies' ("RBOC") fulfillment of requests for telephone exchange service and exchange access services from unaffiliated entities compared to RBOCs' fulfillment of requests from affiliated entities.²⁶² Less than three years ago, the Commission denied the same request in a USTelecom forbearance petition,²⁶³ and this Petition has not established that circumstances have changed sufficiently to justify a different decision.

First, the fundamental rationale for the Commission's 2015 decision—that the Section 272(e)(1) safeguards protect competition “from the BOCs’ ability to use any existing market power in local exchange services to obtain an anticompetitive advantage”²⁶⁴—remains just as valid today. The Petition argues that the Commission should revisit its 2015 decision by citing general Commission statements about the state of competition in the markets for interexchange service and business data services.²⁶⁵ Even if accurate, these observations would not address the basis for the Commission's earlier decision, which is not merely that USTelecom had failed to differentiate between enterprise and mass market long-distance service, but also that “the record in this proceeding does not contain granular data that could yield conclusions as to the state of competition in any geographic or product market— let alone in every segment of the

²⁶² 47 U.S.C. § 272(e)(1).

²⁶³ See USTelecom 2015 Forbearance Order ¶ 40.

²⁶⁴ *Id.*

²⁶⁵ See Petition at 35-36.

marketplace.”²⁶⁶ This Petition and this record do not provide the Commission with any more granular data on the state of competition in specific geographic markets, or in the retail product markets in which long-distance service is bundled by competitive providers with other voice and data services.

Second, the concerns raised by competitive providers in the 2015 proceeding also remain valid today. In its 2015 decision, the Commission observed that, based on comments from competitive providers, “removal of these safeguards would compromise their access to wholesale inputs, including special access services, that they rely on to compete with incumbents in the provision of ‘downstream long-haul services’ to business customers.”²⁶⁷ Because ILECs still predominately control bottleneck facilities, the nondiscrimination protections are still necessary to ensure that competitors are not placed at a disadvantage in competing for enterprise customers. That enterprise customers tend to purchase long-distance service in bundles with other communications services does not lessen the power of ILECs to discriminate against competitors in the fulfillment of exchange access.

Third, the Petition’s argument that the Commission should forbear from Section 272(e)(1) because Section 202 of the Communications Act is sufficient protection has also already been rejected by the Commission.²⁶⁸ In its 2015 order, the Commission concluded that “section 272 establishes protections that are not wholly replicated by any other Act provision or Commission requirement,” and thus “cannot find that application of the remaining section 272

²⁶⁶ *USTelecom 2015 Forbearance Order* ¶ 42 (internal quotation marks omitted).

²⁶⁷ *Id.*

²⁶⁸ *See* Petition at 37.

obligations is ‘not necessary to protect consumers’ per section 10(a)(2).”²⁶⁹ In sum, the Petition has not provided any reason for the Commission to revisit and overrule its decision in 2015, and the same evidence showing that there is not sufficient competition to warrant nation-wide forbearance of the unbundling and avoided-cost resale obligations also supports the conclusion that the Commission should not forbear from the Section 272(e)(1) requirements.

²⁶⁹ *USTelecom 2015 Forbearance Order* ¶¶ 43-44.

VI. CONCLUSION

For the foregoing reasons, the Commission should deny USTelecom's Petition for forbearance from the Category 1 obligations under Section 251(c)(3) and Section 251(c)(4), and the associated obligations under Section 251(d)(3) and Section 252; and from the Category 2 obligations under Section 272(e)(1).

/s/ Daniel P. Friesen
Daniel P. Friesen
President of the Board
FISPA
www.fispa.org
daniel@ideatek.com

/s/ Paula Foley
Paula Foley
Midwest Association of Competitive Communications
www.macctelecom.com
paula.foley@granitenet.com

/s/ Todd Way
Todd Way
Vice Chair
Northwest Telecommunications Association
www.nwta.biz
tway@dfn.net

Respectfully submitted,



John T. Nakahata
Henry Shi
Mengyu Huang*
HARRIS, WILTSHIRE &
GRANNIS LLP
1919 M Street NW, Eighth Floor
Washington, DC 20036
(202) 730-1320
Counsel for INCOMPAS
*Admitted in Maryland only.
Practicing under the supervision of
D.C. Bar members.

/s/ Karen Reidy
Karen Reidy
Vice President
INCOMPAS
www.incompas.org
kreidy@incompas.org

August 6, 2018