

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

In the Matter of)	
)	
Ensuring Customer Premises Equipment)	PS Docket No. 14-174
Backup Power for Continuity of)	
Communications)	
)	GN Docket No. 13-5
Technology Transitions)	
)	RM-11358
Policies and Rules Governing Retirement Of)	
Copper Loops by Incumbent Local Exchange)	
Carriers)	
)	WC Docket No. 05-25
Special Access for Price Cap Local Exchange)	
Carriers)	
)	RM-10593
AT&T Corporation Petition for Rulemaking)	
to Reform Regulation of Incumbent Local)	
Exchange Carrier Rates for Interstate Special)	
Access Services)	
)	
Windstream Petition for Declaratory Ruling)	WC Docket No. 15-1

COMMENTS OF COMPTTEL

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COMMENTS OF COMPTTEL

COMPTTEL respectfully submits these comments in response to the Commission’s Notice of Proposed Rulemaking (“NPRM”),¹ and in support of the Petition of Windstream Corporation for a Declaratory Ruling,² in the above referenced proceedings.

¹ Notice of Proposed Rulemaking and Declaratory Ruling, *Technology Transitions et al*, GN Docket No. 13-5, FCC 14-185 (2014) at ¶¶ 10-113 (“NPRM”) and ¶¶ 114-199 (“Declaratory Ruling”).

² Petition of Windstream Corporation for a Declaratory Ruling, WC Docket No. 15-1, GN Docket No. 13-5 (filed Dec. 29, 2014) (Windstream Petition); *See also*, FCC Public Notice, DA 15-4, rel. Jan. 6, 2015.

Summary and Introduction

The Commission in its *NPRM* proffers proposals and tentative conclusions, and seeks comment, on ways to strengthen its public safety, pro-consumer, and pro-competition policies and protections to address the technology transitions that are underway and the networks and services that will emerge from those transitions. COMPTTEL supports the Commission in its objective, and lauds the Commission's efforts, to ensure all consumers continue to benefit from competition, regardless of the network technology or facilities utilized. These principles are important in the context of both the residential and business markets. COMPTTEL's comment focus particularly on the importance, and means, of maintaining and strengthening the pro-consumer, pro-competitive policies that impact consumers and competition in the retail business market.

The Commission must ensure the continuation and strengthening of pro-consumer, pro-competitive policies regarding wholesale services and facilities, as these policies are still necessary for smaller and multi-location business, enterprise, nonprofit, health care, and government entities to benefit from a robustly competitive market. Evidence suggests that without wholesale access policies these entities would not experience the benefit of vigorous competition. More often than not, incumbent local exchange carrier ("ILEC") connections offer the only economically viable means for competitors to connect to business customer locations. Indeed, if the wholesale access market functioned properly on its own, price-regulated *legacy* services would not still be so popular. Customers, instead, would voluntarily cease purchasing these services and be clamoring to purchase services using the newer technology, which offers significantly greater cost efficiencies that *should be* reflected in the rate.

Commission wholesale policies have resulted in multi-billion dollar competitive

investment and the introduction and wide-spread adoption of many new technologies and services. Additionally, communications costs are a substantial portion of entities' expenses and impact their ability to invest, grow their business, and create jobs. Failure to ensure just and reasonable rates for these services will have a significant negative impact on the economy as a whole. As the Commission has recognized, fostering competition in servicing the retail business market is essential in laying the foundation for a broadband future and wholesale policies have played an essential role in enabling competition and investment in the business broadband market, which is a critical market to the overall economy.³

In furtherance of its pro-consumer, pro-competition goals in the business market, the Commission should adopt conclusions and rules, as addressed in these comments below, that pertain to the process for discontinuance, reduction or impairment of service under Section 214 of the Communications Act, as amended ("the Act"), and relate to the retirement of copper facilities. In particular, the Commission should adopt its tentative conclusion that "to receive authority to discontinue, reduce, or impair a legacy service that is used as a wholesale input by competitive providers, an incumbent LEC must commit to providing competitive carriers equivalent wholesale access on equivalent rates, terms, and conditions."⁴ The Commission should provide, in the manner discussed below, clarification and adopt specific criteria for implementing this standard. It should also provide further clarification, at a minimum, on the presumption that the Section 214 process applies to wholesale input services, clarifying that

³ See e.g., Federal Communications Commission, Connection America: The National Broadband Plan at 47 ("National Broadband Plan"), *available at*: <http://transition.fcc.gov/national-broadband-plan/national-broadband-plan.pdf> ("Ensuring robust competition not only for American households but also for American businesses requires particular attention to the role of wholesale markets, through which providers of broadband services secure critical inputs from one another.")

⁴ *NRPM* at ¶¶ 6, 92, & 110

approval is needed for the discontinuance of tariffed services, regardless of non-tariffed service offerings in existence; and confirming the application of the Section 214 process to term discount plans.

Additionally, when the incumbent LEC replaces any portion of the copper loop, competitive carriers lose direct access to the transmission medium (versus DSn capacity) and, as a result, the critical ability to provide Ethernet over Copper ("EoC"). EOC has brought to smaller businesses some of the innovative and high capacity broadband service that would otherwise have been limited to large enterprise customers, at more affordable rates. In order to ensure existing innovative and affordable broadband service is not lost to smaller business locations, and to foster greater innovation generally, the Commission should require the incumbent retiring the copper loop to simultaneously provide direct access to an alternative transmission medium (e.g., dark fiber). Additionally, the Commission needs to modify its rules pertaining to copper retirement to ensure timely and adequate notification and to encompass all situations where the ability to provide service will be impacted (such as replacement of the copper feeder). Furthermore, the Commission should clarify that incumbents may not charge for special construction in lieu of performing sufficient maintenance on existing facilities.

While it is imperative that the Commission immediately ensure that the largest ILECs cannot use technology transitions as a means to obtain *greater* control of the market and impose price hikes, it is also critical for the Commission to act on an accelerated basis to comprehensively evaluate marketplace competition and reform its wholesale access policies to better address the needs of business, non-profit, and government consumers, today. In particular, the Commission should act expeditiously to evaluate and reform its regulatory policies in the special access market, including the packet-switched special access services for

which the incumbents were granted forbearance.

I. The Commission Must Establish Clear Triggers for the Application of the Section 214 Discontinuance Process for Wholesale Input Services

Section 214 states that no carrier “shall discontinue, reduce, or impair service to a community, or part of a community, unless and until there shall first have been obtained from the Commission a certificate that neither the present nor future public convenience and necessity will be adversely affected thereby...”⁵ The Commission should clarify, in key respects, when the Section 214(a) application and approval process is required.

With respect to wholesale service inputs, the Commission’s practice has been to consider the impact of discontinuance only on the purchasing carrier’s customer, not the impact to the purchasing carrier itself, in determining if a carrier discontinuing service must file a Section 214 application.⁶ In its *NPRM*, however, the Commission proposes and seeks comment on a rebuttable presumption “that where an ILEC discontinues, reduces or impairs a service offering used by a competitive LEC to provide end users with service, this can also be expected to affect the competitive LECs’ retail customers.”⁷

As an initial matter, the Commission should interpret the statutory phrase “community, or part of a community” to include carrier-customers directly, and not make the requirement to initiate a discontinuance application conditional only on the impact to the competitive LECs’ retail customers, as the carriers themselves are a part of the community (and the using public).⁸

⁵ 47 U.S.C. 214(a).

⁶ See Memorandum Opinion and Order, *Western Union Tel. Co. Petition for Order to Require the Bell System to Continue to Provide Group/Supergroup Facilities*, FCC 79-726, 74 FCC 2d, 293 (1979).

⁷ *NPRM* at ¶ 103.

⁸ To the extent necessary, the Commission could reverse contrary precedent. See *NPRM* at

Moreover, as discussed below, competitive carriers are generally dependent on the wholesale input services they obtain from the incumbent LEC to provide their retail services, so discontinuance of a wholesale input service necessarily impacts the retail end-user's ability to get service – which is often uniquely tailored to the customers' needs – from the carrier-customer. Therefore, the Commission should adopt the proposed presumption and, *at a minimum*, in the case of ILEC wholesale input services for which the Commission has already found carrier customers generally reliant on to serve end-users – as is the case, for example, with last miles services such as DS1 and DS3 special access services – the Commission should find conclusively (i.e., it is not rebuttable) that the Section 214 process applies.

Additionally, the Commission should confirm that a Section 214 application is required when a carrier discontinues a tariffed service even if it currently offers a non-tariffed service that is similar to the tariffed service being discontinued. As the Commission has concluded, in determining when a discontinuance application is required, the Commission will examine the totality of the circumstances. Tariffed and non-tariffed services are distinguishable by the difference in regulatory treatment alone, as well as by the specific facts that led the Commission to make the determination to subject the services to different regulatory treatment. Furthermore, as discussed below, the Commission must find that the elimination of a term discount plan for special access services requires a Section 214 discontinuance application.

a. Carrier-Customers are a Part of the Community

In interpreting the statutory term “community or part of a community” in Section 214, the Commission should consider all members of that community, most specifically the carrier

¶ 102 discussing existing precedent that “a carrier need not seek Commission approval when discontinuing service to carrier customers if there is no discontinuance, reduction or impairment of the service to the retail end-users.”

customers. Communities do not comprise merely individuals. Rather, they include groups of individuals organized for a particular purpose, which the Commission recognizes to include corporations, as well as religious, social, and government organizations. Corporations that happen to be carrier-customers are also a part of the community and, as such, should be treated the same as any other user of a service. Specifically, to the extent a carrier discontinues, reduces or impairs service to a carrier-customer, the discontinuing carrier should be required to file an application for a certificate of public convenience and necessity under Section 214 of the Act.⁹

As a threshold observation, communities are *defined* by their level of social and economic interaction. For instance, the OMB established Metropolitan and Micropolitan Statistical Areas to define areas “containing a recognized population nucleus and adjacent communities that have a high degree of integration with that nucleus,” and thus create “statistical representations of the social and *economic* linkages between urban cores and outlying, integrated areas.”¹⁰ Carriers are particularly critical to a community because they provide the network services supporting the electronic linkages that define a modern society. Communities are defined by their level of integration, and telecommunications carriers provide the electronic glue that helps solidify such linkages.¹¹ Moreover, the telecommunications industry is a substantial

⁹ If the Commission adopts its tentative conclusion discussed in the next section of the comments, to the extent an ILEC can demonstrate that the discontinuance of a wholesale input service will have no impact on the competitiveness of the market, it could seek a waiver from the rules established by the tentative conclusion for that particular product.

¹⁰ “Standards for Defining Metropolitan and Micropolitan Statistical Areas” Office of Management and Budget, *available at*: <https://www.census.gov/population/metro/files/00-32997.txt> (emphasis added)

¹¹ Among other factors, it is estimated that 3.3 million workers today telecommute from home, an activity that has grown 79% between 2005 and 2012. <http://globalworkplaceanalytics.com/telecommuting-statistics> *See also* http://www.nytimes.com/2014/03/08/your-money/when-working-in-your-pajamas-is-more-productive.html?_r=0

employer within communities, providing over 870,000 jobs in December 2014¹² and, over the last 18 years, an estimated \$1.3 trillion in investment has been made in the communications industry.¹³ Disregarding carrier-customers as community members ignores a major business segment.

b. Discontinuance, Reduction, Impairment of Wholesale Input Services to Carrier Customers Presumptively – and in Some Cases Conclusively – Impacts Retail Customers

It is indisputable that, for the most part, retail business customers and the broader community are impacted when the ability of carrier-customers to obtain access to sufficient incumbent wholesale input services is compromised. Loss of certain incumbent LEC wholesale input services, such as DS1 and DS3 special access services and AT&T Wholesale Complete and Verizon's Wholesale Advantage services, is particularly detrimental to competitive carriers' ability to serve their end-user customers. This is especially true for carriers specializing in serving small to medium-sized businesses or small business locations of larger, multi-location customers.¹⁴

In light of these facts, the Commission should adopt the proposed presumption and, *at a minimum*, in the case of ILEC wholesale input services for which the Commission has already found carrier customers generally reliant on to serve end-users, the Commission should find conclusively (i.e., it is not rebuttable) that the Section 214 process applies. In particular, the

¹² Bureau of Labor Statistics, Current Population Survey, available at <http://www.bls.gov/iag/tgs/iag517.htm#workforce>

¹³ USTelecom, Research Brief September 8, 2014, *available at*: <http://www.ustelecom.org/sites/default/files/documents/090814%20Latest%20Data%20Show%20Broadband%20Investment%20Surged%20in%202013.pdf>

¹⁴ *See National Broadband Plan* at 47.

Commission has already determined that competitors are highly reliant on price regulated special access services, *i.e.* DS1 and DS3 special access services.¹⁵ The Commission’s conclusive presumption for these services should continue unless (and until) the Commission determines otherwise through a comprehensive analysis of the market such as in the special access rulemaking proceeding.

Today, competition for enterprise communications services is supplied by both ILECs and competitive carriers, with the latter delivering services over their own networks as well as through ILEC wholesale access facilities and services.¹⁶ More often than not, incumbent connections continue to offer the only economically viable means of access to a business customer location.¹⁷ As such, ILEC wholesale input services are not just a factor that contributes to competitive carriers’ ability to offer retail services; such input services are a necessary component for competitors to serve a significant portion of the end-user customers in the business market. What’s more, the impact is not limited to just customer locations where it is uneconomical for competitors to build. The fact that wholesale inputs allow carrier-customers to

¹⁵ See *supra* at 9, discussing Commission reliance on “special access services purchased from the incumbent LEC *at rates subject to price regulation*” for competition in the broadband enterprise market; See also Report and Order, *Special Access for Price Cap Local Exchange Carriers et al*, FCC 12-92, WC Docket No. 05-25, ¶ 2 (2012) (emphasis added) (“Competitive carriers rely heavily on special access to reach customers; a large competitive local exchange carrier (LEC) that offers enterprise services to businesses using special access services as a *critical input* has reported that it purchases...times as many special access as Ethernet circuits.”)

¹⁶ See *NPRM* at ¶ 6.

¹⁷ See Letter of Eric N. Einhorn, Windstream, to Marlene H. Dortch, FCC, WC Docket No. 05-25, *et al*, p.1, filed Nov. 22, 2013 (“Despite investing billions of dollars in recent years to expand and upgrade its network throughout its incumbent (ILEC) and competitive (CLEC) local exchange areas, Windstream’s substantial CLEC operations still rely on AT&T’s ILEC facilities for last-mile access to serve consumers in AT&T operating territories.”)

supplement their reach where they cannot build is particularly important for their ability to provide service to multi-location customers in the business market. Incumbent wholesale input services enable competitive carriers to have a sufficiently extensive network footprint. Access to all locations of a multi-location retail customer enables a carrier to provide one-stop shopping and certain services (such as the ones described below) that would not be feasible without access to all of the customers' locations.

Competitive LECs represent an innovative force for the advancement of communication services in general, and a nearly *exclusive* force for making those innovative services available to small and medium-sized commercial customers. Moreover, the entities competitors serve include government, health care facilities, and schools and libraries and the services competitive carriers offer these entities are critical to their operations. As an example of the way competitive LECs have enriched product offering through innovation and adaptation, consider the flexibility of XO's Ethernet Hub¹⁸ service, which allows commercial customers to separate and distribute "tagged" data by location, group, project teams or departments; and apply quality settings, then combine the traffic from as many locations as desired on a single hub. This is far more flexible than, for example, AT&T's Switched Ethernet Service (as described in AT&T's publicly available guidebook),¹⁹ which only allows eight Ethernet Virtual Circuits to be combined on one port. Further, the minimum port size offered with ASE (as described in AT&T's publicly available guidebook and as described as a catch product in its Wire Center Trials) is 100 Mbps.²⁰

¹⁸ See XO Ethernet Hub product description available at <http://www.xo.com/network-services/ethernet-services/hub/>

¹⁹ Available at <http://cpr.att.com/pdf/is/0005-0004.pdf>

²⁰ *Id.*; Letter from Christopher M. Heimann, General Attorney, AT&T Services, Inc., to Marlene H. Dortch, Secretary, Federal Communications Commission, GN Docket Nos. 13-5, 12-353 (filed Feb. 27, 2014) ("AT&T Proposal for Wire Center Trials") at Attachs. ("AT&T Plan")

XO, by contrast, has adapted Ethernet over Copper technologies to bring the advanced capabilities of Ethernet to small and medium-sized commercial customers with port requirements as low as 3 Mbps.

As another example of competitive LEC innovation in service offerings to its retail customers, Broadview Networks provides much more than the usual cloud services of storage and general computing capability offered by AT&T, Verizon, and CenturyLink. In its OfficeSuite²¹ offering, Broadview leverages the capabilities of the cloud framework to offer commercial customers cloud-based “Communications As A Service” (“CAAS”) products which include the features that are important to the customer. These services are not only made available by Broadview to large, enterprise customers that represent the focus of AT&T, Verizon and CenturyLink offerings, but to small and medium sized commercial customers with only modest needs. Additionally, many carrier-customers (such as those discussed in Section II.c below) use wholesale input services to offer individually tailored, value-added services to their customers.

Moreover, competitive carriers that rely on wholesale access make up the greater part of the competition in the business market.²² Therefore, it is not just a matter of particular service

at Exhibit E, available at <http://apps.fcc.gov/ecfs/document/view?id=752109054> (“ASE offers Ethernet connectivity for customers...Ports are offered in 3 sizes: 100 Mbps, 1 Gbps, & 10 Gbps.”)

²¹ See Broadview Networks OfficeSuite product description available at <http://www.broadviewnet.com/solutions/phone-system/>

²² As Windstream demonstrated in a recent *ex parte*, non-cable competitors – which deploy services both over their own network facilities as well as last-mile facilities leased by from the incumbent LEC – provide by far the largest source of competition in the nonresidential market with a 26% share of non-residential customer expenditures, compared to cable’s ten percent share. See Letter of Jennie Chandra, Windstream, to Marlene H. Dortch, FCC, *In the Matter of Technology Transitions, et al*, GN Docket No. 13-5, *et al*, Attachments, filed Aug. 7, 2014 (“Windstream Aug. 7, 2014 Ex Parte”), available at:

offerings being lost to certain end-user customers – the retail business market as a whole would lose the benefit of vigorous competition. Indeed, wholesale access is vital and is the lynchpin for ensuring retail competition will thrive, spurring economic growth, job creation and even greater innovation for the community at large.

c. Section 214 Discontinuance Approval for a Tariffed Service is Needed Even Where There is a Comparable Non-Tariffed Service in the Market

The Commission, in its *NPRM*, seeks comment as to whether a Section 214 application is required when a carrier discontinues a tariffed service if that carrier currently offers a non-tariffed service that is similar to the tariffed service being discontinued.²³ The answer is yes.

As the Commission has concluded, it must look at the totality of the circumstances in determining if a change constitutes a discontinuance, reduction, or impairment of service.²⁴ As such, the Commission must differentiate tariffed services from non-tariffed services in the market. In the case where a particular service – if still offered – would need to be tariffed, a non-tariffed service is a distinguishable service by the fact of the difference in regulatory treatment alone, and certainly by the facts that led the Commission to make the determination to subject the services to different regulatory treatment. Indeed, even under the approach espoused by the

<http://apps.fcc.gov/ecfs/document/view?id=7521751925> (the source for which was estimated monthly spending for wireline communications during 2nd Quarter of 2014, as compiled by the independent market research firm GeoResults); Moreover, AT&T *alone* reportedly had \$8.9 billion in “business services revenue” for *one quarter* of 2013. See Sue Marek, “AT&T U-verse subs top 9.4 million in Q2, 45 Mbps speeds coming soon,” *FierceTelecom*, July 23, 2013, available at: <http://lkconsulting.blogspot.com/2013/07/at-u-verse-subs-top-94-million-in-q2-45.html>. This is more than what USTelecom attributes to the six largest cable companies *for the entire year* (\$8.5 billion). Letter of Glenn Reynolds, USTelecom, to Marlene Dortch, FCC, WC Docket No. 05-25, p. 4, filed Jun. 4, 2014.

²³ *NPRM* at ¶ 105.

²⁴ *Declaratory Ruling* at ¶ 115.

ILECs for determining the trigger for a Section 214 application – basing it on the description of the service in the tariff or contract²⁵ – these services are necessarily distinguishable. As the Commission stated in the *Declaratory Ruling*, while a carrier’s description of its own service is not dispositive, it is important evidence of the service provided.²⁶

The distinction between tariffed and non-tariffed services is especially apparent in the case of special access services. In particular, incumbent carriers cannot rely on special access services for which they have been granted forbearance relief – even if they were to have similar attributes – to claim that a Section 214 application is not required when discontinuing a tariffed special access service. The Commission has found that the now de-tariffed products generally did not function as wholesale input products. Specifically, with regard to the special access services for which the incumbent LECs have been granted relief from dominant carrier tariff requirements, the Commission found that those services "are purchased predominately by enterprise customers, not by their competitors as wholesale inputs" which competitors use to create their own unique end-user services in the enterprise market.²⁷ On the contrary, DS1 and

²⁵ Petition for Reconsideration of the United States Telecom Association, *In the Matter of Technology Transitions et al*, GN Docket No. 13-5 *et al*, filed Dec. 23, 2014.

²⁶ *Declaratory Ruling* at ¶ 115.

²⁷ Memorandum Opinion and Order, *Petition of AT&T Inc. for Forbearance Under 47 U.S. C. § 160(c) from Title II and Computer Inquiry Rules with Respect to Its Broadband Services; Petition of BellSouth Corporation for Forbearance Under Section 47 U.S. C. § 160(c) from Title II and Computer Inquiry Rules with Respect to Its Broadband Services*, WC Docket No. 06-125, FCC 07-180, 22 FCC Red. 18705, ¶ 21, n. 90 (2007) ("*AT&T Broadband Forbearance Order*"); Memorandum Opinion and Order, *Petition of the Embarq Local Operating Companies for Forbearance Under 47 U.S. C. § 160(c) from Application of Computer Inquiry and Certain Title II Common-Carriage Requirements, et al.*, WC Docket No. 06-147, FCC 07-184, 22 FCC Red. 19478, ¶ 20, n. 82 (2007) ("*Embarq & Frontier Broadband Forbearance Order*"); Memorandum Opinion and Order, *Qwest Petition for Forbearance Under 47 U.S. C. § 160(c) from Title II and Computer inquiry Rules with Respect to Broadband Services*, WC Docket No. 06-125, FCC 08-168, 23 FCC Rcd. 12260, ¶ 24, n. 96 (2008) ("*Qwest Broadband Forbearance Order*") (collectively, the "*Broadband Forbearance Orders*").

DS3 special access services indisputably function as wholesale input services.

Moreover, the Commission adopted a different regulatory scheme for the two types of services (and the deregulation of one was based on the existence of the other). Since the ILEC alleged a distinction between these services (in order to obtain regulatory relief), and the Commission accepted it, neither can now ignore the distinction for purposes of triggering a 214 application. The appropriate proceeding for the Commission to reconsider its assessment of the special access services and market – which it needs to do – is in the special access rulemaking proceeding, where the Commission can adopt an appropriate regulatory framework. Unless and until the Commission does so, it must treat these services as distinct for purposes of the Section 214 trigger. As discussed below, to the extent the ILEC uses a functionally equivalent non-tariffed, non-TDM special access service to be granted a Section 214 approval (versus to avoid the Section 214 application trigger), the Commission must adopt conditions to ensure the necessary wholesale safeguards associated with DS1 and DS3 special access services are in place prior to granting the application.

d. The Elimination of Special Access Term Discount Plans Requires a Section 214 Application.

The Commission seeks comments on whether the elimination of term discount plans triggers a 214 discontinuance application.²⁸ In the past the Commission has viewed rate increases alone, including "bulk" discounts, not to require the filing of a Section 214 application. The Commission, however, should consider the elimination of a term discount plan to trigger the Section 214 process,²⁹ especially in the context of special access term discount

²⁸ *NPRM* at ¶ 104.

²⁹ *See Aeronautical Radio v. FCC*, 642 F.2d 1221, 1233 (D.C. Cir. 1980) (“On a question of statutory interpretation like that involving Section 214, this court must show ‘great deference to

plans.

First, the elimination of term discount plans, at least in the special access context, is not just a rate increase or straight "bulk" discount. Term discount plans are complex service offerings that vary in the length of time for which the purchaser is committed to the plan, vary based on the purchaser's demand for a particular product, and vary as to the percentage and types of services that can be purchased under the plan, *etc.* The plans unquestionably contain unreasonable terms that the Commission needs to address, but even if the Commission requires, for example, a reduction in percentage of demand to a reasonable level or otherwise requires changes, it is unlikely the outcome would be a simple "bulk" discount.

Second, the incumbents have repeatedly alleged (arguing against consideration of rack rates in special access rate reform) that, for the most part, purchasers buy special access under these discount plans, not the rack rates. Thus, elimination of the discount plan is tantamount to the discontinuance of a service, and the incumbents should be precluded from claiming otherwise.

Third, as the Commission indicated, it has the authority to find that when a rate change on a wholesale service could lead to discontinuance, reduction or impairment of service to end-user customers, Section 214 review is required. The Commission should make clear that price increases that have the practical effect of denying service to some of the carrier-customers' retail customers, or that would significantly limit competitors' ability to offer differentiated services, constitutes a discontinuance, reduction, or impairment of service. Given the substantial price differences between the various term plans, and between term plans and the rack rates, the Commission reasonably could, and should, find that the discontinuance of a tariffed term plan for

the interpretation given the statute by the officers or agency charged with its administration.”)

special access services would lead to a discontinuance of service to at least some of a carrier customer's end-users and, accordingly, should require a Section 214 application.

II. The Commission's Adoption of its Tentative Conclusion Regarding Equivalent Wholesale Access is Needed to Ensure the Public Convenience and Necessity

The Commission tentatively concludes “that to receive authority to discontinue, reduce, or impair a legacy service that is used as a wholesale input by competitive providers, an incumbent LEC must commit to providing competitive carriers equivalent wholesale access on equivalent rates, terms and conditions.”³⁰ The Commission *not only has authority*, pursuant to Section 214(c), to attach terms and condition to the grant of discontinuance to ensure the public convenience and necessity is served when the incumbent LEC discontinues, reduces or impairs service to a community,³¹ under Section 214(a), the Commission *must certify* that “neither the present or *future* public convenience and necessity will be adversely impacted” by the discontinuance, reduction or impairment in service.³² Accordingly, at a minimum, the Commission should adopt its tentative conclusion, as such a standard is needed for the Commission to provide the requisite certificate.

As discussed below, the Commission has repeatedly found that wholesale access *policies* are vital to the ability of business, non-profit, and government customers to avail themselves of competitive choices. ILEC discontinuance of wholesale input services governed by such wholesale access policies, without Commission action, would compromise the present and future public convenience and necessity. Consequently, the Commission should not grant the ILEC

³⁰ *NRPM* at ¶¶ 6, 92, & 110.

³¹ 47 U.S.C. 214(c).

³² 47 U.S.C. 214(a) (emphasis added).

discontinuance applications without, at a minimum, assuring that the ILEC offers services with comparable safeguards attached. The Commission should also clarify that this equivalency standard means that the replacement services must, at a minimum, offer the same functionality of the existing wholesale input, not be priced higher than existing services, and be subject to sufficient transparency, performance and enforcement mechanisms. As discussed further below, particularly with regard to certain services, it should adopt rules that establish specific criteria for finding that the replacement service meets this standard.

a. Conditions – as Proposed by the Tentative Conclusion - on ILEC Discontinuance of Wholesale Input Services are Needed

Wholesale access *policies* associated with certain wholesale inputs ensure business, nonprofit, and government end-users continue to benefit from price and service innovations driven by marketplace competition. The Commission has already, and repeatedly, acknowledged this fact. As it has stated, the “nation’s *regulatory policies* for wholesale access affect the competitiveness of markets for retail broadband services provided to small businesses, mobile customers and enterprise customers.”³³ The Commission found that where wholesale access rights and pricing mechanisms are lacking, the Commission’s longstanding competition policy objective and the ability of carriers to obtain the necessary inputs to compete are undermined.³⁴ The Commission has further recognized that competition policies have been essential to laying the foundation for a broadband future, and *wholesale policies* in particular have played a vital role in unlocking competitive investment in the business broadband market, which is critical to the overall economy.³⁵ Even Verizon has espoused the view (where it is a competitive carrier)

³³ *National Broadband Plan* at 47 (emphasis added).

³⁴ *Id.*

³⁵ “Ensuring robust competition not only for American households but also for American

“that *continued regulatory controls must remain* in place to safeguard access to the necessary wholesale inputs and thereby support competition to the benefit of customers.”³⁶

The Commission, for example, has repeatedly found DS1 and DS3 special access services to be a critical factor in ensuring a competitive landscape in the retail business market. In particular, the Commission relied on the availability of “special access services purchased from the incumbent LEC *at rates subject to price regulation*” to find the retail market for broadband enterprise services to be competitive.³⁷ Competitive policies associated with DS1 and DS3 special access services *alone* are not enough to enable competitive carriers to vigorously compete in the broader broadband enterprise market; for one thing, comprehensive reform of the entire special access market is needed. Nevertheless, allowing the elimination of incumbent services without concurrently attaching similar safeguards to replacement services would be ruinous to competition and harm the many customers benefiting from competitive service offerings. Consequently, the Commission should not delay in acting to ensure existing competition policies are not undermined by the IP transition. While the Commission reevaluates the special access market, and unless and until the Commission addresses the regulatory framework accordingly, it is imperative that the Commission ensure the incumbents continue to offer, *at a minimum*, a service with the same key functionalities, pro-competition terms and conditions, and at pricing no higher than that of existing DS1 and DS3 special access services.

AT&T’s proposed Wire Center Trial demonstrates, that without conditions being

businesses requires particular attention to the role of wholesale markets, through which providers of broadband services secure critical inputs from one another.” *National Broadband Plan* at 47.

³⁶ Verizon Business Response to Ofcom, *available at*: <http://apps.fcc.gov/ecfs/document/view?id=7521063643> (emphasis added).

³⁷ *AT&T Broadband Forbearance Order* at ¶ 25; *Embarq & Frontier Broadband Forbearance Order* at ¶ 24; *Qwest Forbearance Order* at ¶ 28.

attached to their approval of discontinuance, ILECs will not offer wholesale input services that will lead to end-user customers, in general, being able to meaningfully benefit from a competitive service option, to the extent competitive carrier would be able to provide service at all. For example, in its proposed Wire Center Trials, AT&T listed the replacement product for its Wholesale Complete Service as “TBD.”³⁸ Additionally, AT&T lists its existing switched Ethernet service (“ASE”) as a replacement product for DS1 and DS3 special access services.³⁹ As offered through its publicly available guidebook,⁴⁰ ASE is not a sufficient replacement for the DS1 and DS3 special access services.

As COMPTTEL demonstrates in comments on the AT&T proposed Wire Center Trial, as described in the publicly available guidebook, the pricing for DS3 capacity nearly doubles using AT&T’s ASE service and the price increase for DS1 capacity in some areas could be 1000 percent higher.⁴¹ While the Commission has generally declined to consider rate increases to an existing product in the context of triggering the need for an application under Section 214(a), it must consider the pricing of a replacement product for purposes of granting an application, pursuant to Section 214(c), in order to ensure the “present and future public convenience and necessity.” This is particularly true with regard to the pricing of wholesale input services, because pricing of these services directly impact the carrier-customers’ ability to offer its retail service. In the wholesale context, increased input pricing alone can force a competitor to reduce

³⁸ See AT&T Plan, Exhibit E.

³⁹ *Id.*

⁴⁰ Available at <http://cpr.att.com/pdf/is/0005-0004.pdf>

⁴¹ Comments of COMPTTEL, *In the Matter of Technology Transitions, et al*, GN Docket No. 13-5, *et al*, filed Mar. 31, 2014 (“COMPTTEL Comments on AT&T Proposed Trial”) at Exhibit, Table 1 and Table 2.

or discontinue a service offering, which has a direct adverse impact on retail consumer's ability to reap the benefits of competitive innovation and pricing in the market. Thus, a change in the price of key input services has a substantial impact on the future competitive landscape of the retail market.

Pricing safeguards are an especially critical component to consider when an incumbent discontinues, reduces, or impairs services for which the incumbent has been determined to be a dominant carrier or otherwise found to be governed by specific price regulation. In the context of DS1 and DS3 special access services, for example, the Commission eliminated the application of pricing rules to somewhat comparable services based on the existence in the market of these price regulated services. Unless and until an analysis of the special access market proves that the competitiveness of the retail market can sustain itself without the existence of equivalently priced wholesale special access services – and the evidence indicates otherwise – the Commission must implement pricing safeguards for replacement services, particularly given the market's reliance on these special access services.

The Commission also should take care to ensure sufficient wholesale input service quality and service delivery continue in the IP transition. Ethernet is a robust technology with vast capabilities. Yet, as we discuss more fully in COMPTTEL's Comments on AT&T's proposal for wire center trials, as offered through the AT&T's public guidebook, ASE imposes arbitrary limitations on the underlying Ethernet technology that limit its effectiveness to serve as a prospective replacement for DS1 and DS3 special access services.⁴²

⁴² *Id.* at 19-23.

b. The Commission Should Adopt Standards for Meeting the Equivalency Standard for Wholesale Input Services

As the Commission determined in the *NPRM*, it is important to adopt rules that provide clear criteria for applying the standard set forth in the tentative conclusion. This would facilitate the IP transition, and enforcement of the Commission's tentative conclusion, by narrowing the range of time-consuming individual disputes and creating certainty in the market. With regard to meeting the equivalency standard, *at a minimum*, the critical criteria proposed by Windstream, and others discussed below, should be applied and established through rules.

Equivalent Wholesale Rates

As an initial matter, it is important to recognize that the reason the ILEC is implementing the new technology in the first place is because it can be demonstrated to be far more economically efficient than older technologies (i.e. TDM). Pricing of the replacement product, therefore, logically should be considerably less expensive on a Mbps basis. Consequently, *at a minimum*, the Commission should adopt the criteria set forth by Windstream for ensuring equivalent rates⁴³ and clarify that these criteria comprise the ceiling for the rates on the replacement service.

In the case of DS1 and DS3 special access services, equivalent rates at the most basic level means that the price per Mbps of the replacement product does not exceed the price per Mbps of the DS1 and DS3 special access service that otherwise would be used to provision the capacity at issue, based on the rate in the service offering (e.g., term discount plan) being discontinued. However, because the incumbent cannot be expected to offer the identical

⁴³ *NPRM* at 111, *citing* Letter from Jennie B. Chandra, Windstream Commc'ns, Inc., to Marlene H. Dortch, Secretary, FCC, GN Docket Nos. 13-5 and 12-353, WC Docket No. 05-25, RM-10593, at 10 (filed Sept. 26, 2014).

capacity of a DS1 and DS3 loop, in order to ensure that the incumbent does not effectively avoid the equivalent rate standard, by simply offering only high capacity (and therefore higher priced wholesale inputs), the rules must also state the lowest capacity level of the special access replacement service must be priced no higher than the DS1 special access service. The ILEC must commit to continue to meet this equivalent pricing standard, and not increase basic pricing, for special access services until the Commission completes its analysis and concludes otherwise via Commission Order in the special access proceeding.

In addition, as Windstream also proposes, no “backdoor price increases” should be permitted, such as significant modifications to charges for NNI/Ports or any other rate elements, lock-up provisions, ETFs, special construction charges, or any other measure that, for all intents and purposes, constitutes to a higher rate. Special construction concerns, in particular, are addressed in the section following immediately below.

Limits on Special Construction Charges to Prevent Backdoor Price Increases

As to the fiber special construction charges, in particular, the Commission should establish clear limits. First, the Commission should specify that when fiber for any of the ILEC’s services, retail and/or wholesale, already connects to the location addressed by a wholesale order, the ILEC shall make capacity available to the requesting wholesale customer without assessing a special construction charge, just as it would for a retail customer in the same location. Second, the Commission should provide that, where the ILEC claims that its existing infrastructure is at exhaust and it must engage in construction, any new network delivery infrastructure (e.g., conduit, subduct, or aerial infrastructure) that is configured in a manner that that would allow for provision of capacity beyond that requested by the wholesale customer is presumed to be in part for the ILEC’s own use and therefore deemed normal construction. To

rebut this presumption, the ILEC would need to certify that it will not use the infrastructure for any of its or its affiliates' retail services now or in the future. Third, the Commission should clarify that special construction may not be charged to the wholesale customer for an ILEC's modifications of an existing facility to bring it into compliance with applicable codes or other safety or engineering requirements that are not exclusively for the wholesale customer's benefit.⁴⁴

Equivalent Includes Service Quality and Functionality

An important concern is service quality. Adoption of Windstream's proposed rule – that would ensure no impairment of service quality – is necessary to ensuring equivalent access. Important attributes of DS1s and DS3s are that they provide dedicated access connections that offer particular transmission performance characteristics. Consequently, a product that would provide equivalent access would need to support the transmission performance characteristics of these dedicated facilities. That is, the product must have the ability to transmit digital traffic at a consistent rate *at least* equal to the individual DS1 and DS3 transmission rates without degradation and within an acceptable (to be defined) tolerance range for transmission errors. In particular, the replacement service should provide transmission characteristics that maintain acceptable transmission for constant bitrate, or real-time services. This includes comparable transmission rates (in bits-per-second) and minimal levels of latency (delay), jitter (time variances in delay) and packet loss.

⁴⁴ This is analogous to the pole attachments rule that precludes a utility from assessing make-ready charges for remedying its own code violations. In the Matter of Kansas City Cable Partners d/b/a Time Warner Cable of Kansas City, Complainant, 14 FCC Rcd. 11599, 11607 (1999) (“Correction of the pre-existing code violation is reasonably the responsibility of [the utility] and only additional expenses incurred to accommodate [attacher's] attachment to keep the pole within NESC standards should be borne by [attacher].”).

In addition, competitive LECs are able to access these services in a hierarchal fashion. In particular, by aggregating DS1 customer access lines at serving wire centers, competitive LECs can order a DS1/DS3 multiplexing function (a critical component) from the incumbent LEC and combine up to 28 DS1 customer access lines on to a single DS3 facility that can carry the individual customer's traffic from its serving wire center back to the competitive LECs regional Point of Presence (PoP). From the PoP, the customer is given access to the various competitive service offerings of the competitive LEC. This hierarchal framework enables the competitive LEC to have some ability to tailor the service to the customer's needs. Therefore, the replacement service must also provide the same or similar customer aggregation function as the TDM hierarchical framework provides. In terms of Ethernet, this means the required support for VLAN ("Virtual Local Area Network") tagging in both, the CE-VLAN (Customer-edge) and S-VLAN (Service Provider) form. CE-VLAN and S-VLAN tagging allows Ethernet transmissions to be organized, according to customer and aggregation area, in much the same way DS1s and DS3s can be aggregated and organized by customer and serving wire center.⁴⁵

Nondiscrimination Requirements

Additionally, the Commission should ensure that the ILEC does not discriminate between wholesale and retail customers. For one, incumbent's wholesale charges for the IP replacement

⁴⁵ Ethernet access service definitions are standardized in the Metro Ethernet Forum Technical Specification: MEF 33 – Ethernet Access Services Definition, specification available at http://metroethernetforum.org/Assets/Technical_Specifications/PDF/MEF_33.pdf. This document describes various characteristics that define the configurable behavior of the envisioned replacement for TDM access service. Called an "Operator Virtual Connection", the service extends from the User Network Interface ("UNI") at the customer location, to the External Network to Network ("ENNI") meet point or point of interconnection with the wholesale customer. Together with Technical Specification MEF 26.1 – ENNI – Phase 2 (specification available at https://metroethernetforum.org/Assets/Technical_Specifications/PDF/MEF_26.1.pdf), an acceptable Ethernet replacement for TDM wholesale inputs can be created.

product for a discontinued wholesale input service cannot exceed the incumbent's retail rates for the equivalent offering. Additionally, the ILEC must generally make capacity of retail offerings also available to wholesale customers at rates that do not exceed retail levels. Bandwidth options shall not be reduced as compared to those available to ILEC's retail business customers. These provisions flow from the Section 202(a) prohibition against unreasonable discrimination, and should not be viewed as temporary.

The Commission also should confirm that incumbents should not be able to disadvantage wholesale customers as compared to retail customers when installing service. Delays in service delivery may result in orders being cancelled. To ensure competitive parity for service installation, it is important that the Commission, at a minimum, adopt Windstream's proposed rule providing that there should be no impairment of IP service delivery as compared to the incumbent's own operations. This requirement, which should not be viewed as interim, also is key to ensuring ILECs act in accordance with Section 202(a).

Enforcement

At a minimum, the Commission should adopt rules that ensure sufficient business rules, transparency, performance metrics and enforcement mechanisms.

c. Necessary "Wholesale Input" is Not Limited to Last-Mile Services

A number of competitive LECs use a wholesale input service provided by incumbent LECs that is comprised of the following network elements switching, DS0 loops, and shared transport, e.g., AT&T's "Local Wholesale Complete" and Verizon's "Wholesale Advantage" services. These wholesale input services are used by the carrier-customer to provide voice and data services to large businesses, including chains of retail stores, fast food restaurants,

convenience stores, and gas stations, that have numerous locations,⁴⁶ most or all of which require a relatively small number of voice lines and relatively limited data bandwidth.⁴⁷ Consequently, as with last mile wholesale input services, continuing access to these wholesale input services remains in the public interest and is necessary to protect consumers.

The ability of consumers at certain business locations to have a choice in provider is often dependent on a carrier-customer's ability to obtain this form of wholesale access. It is often uneconomical for competitive LECs to deploy fiber facilities to businesses located in suburban and rural areas, especially to provide the voice and data services demanded by these customers.⁴⁸ In addition, cable company networks often do not reach these customers' precise business locations and they do not generally offer service outside their franchised cable territories.⁴⁹ Nevertheless, business customers in these suburban and rural areas now have a choice in their voice and data service provider because competitive LECs have been able to use these ILEC wholesale input services to provide voice and data services to these businesses.⁵⁰

⁴⁶ See, e.g., Letter from Eric J. Branfman, Counsel for Access Point Inc., Birch Communications Inc., BullsEye Telecom, Inc., Matrix Telecom, Inc., New Horizon Communications Corp., Sage Telecom Communications, LLC, Telscape Communications, Inc, and Xchange Telecom, to Marlene H. Dortch, WC Docket No. 14-192, filed Nov. 14, 2014.

⁴⁷ Comments of Granite Telecommunications, LLC, GN Docket No. 12-353, Exhibit A, Declaration of Kevin Nichols in Support of Granite Telecommunications, LLC, at ¶ 4, filed Jan. 28, 2013 ("Nichols Declaration").

⁴⁸ See, e.g., Letter from Eric J. Branfman, Counsel for Granite Telecommunications, LLC, to Marlene H. Dortch, GN Docket Nos. 13-5 & 12-353, at 3, filed Nov. 6, 2014.

⁴⁹ Nichols Declaration at ¶ 14.

⁵⁰ See, e.g., Letter from Eric J. Branfman, Counsel for Access Point Inc., Birch Communications Inc., BullsEye Telecom, Inc., Matrix Telecom, Inc., New Horizon Communications Corp., Sage Telecom Communications, LLC, Telscape Communications, Inc, and Xchange Telecom, to Marlene H. Dortch, Secretary, WC Docket. No. 14-192, filed Nov. 14, 2014.

Competitors that rely on these inputs satisfy the unmet needs of large, multi-location business customers in several ways. First, they provide high quality and reliable voice service that includes advanced features (such as hunt lines) and that lacks the static, interference, or delay that can occur with alternatives such as mobile wireless or over-the-top VoIP services.⁵¹ Second, the competitors enable these businesses—which have hundreds or thousands of locations dispersed across the country and are not ordinarily limited to the regional footprints of a single ILEC or cable company—to obtain all of their telecom needs from a single service provider.⁵² Third, the competitors meet the businesses’ demand for highly responsive customer service by enabling them to speak directly with a live representative when service issues arise.⁵³ Fourth, the competitors offer the basic functionality that these customers need at the low prices they demand, rather than offering, for example, a product that provides unneeded bandwidth capacity at often double or triple the price.⁵⁴

Using this approach to serve larger, multi-site businesses, competitive LECs such as Access Point, Birch, Granite, and MetTel have provided services tailored to the individual customers’ needs, as well as brought competition to hundreds of thousands of business customer locations across the country. For example, Granite currently serves more than 240,000 locations with over 1.35 million voice lines.⁵⁵ Its customers include the country’s ten largest retailers and

⁵¹ See Nichols Declaration at ¶ 7.

⁵² *Id.* at ¶ 8.

⁵³ *Id.* at ¶ 9.

⁵⁴ *Id.* at ¶ 10.

⁵⁵ See *id.* ¶ 4; Granite Telecommunications, LLC, About Granite, <http://www.granitenet.com/About> (last visited Dec. 5, 2014).

86 of the *Fortune* 100 companies.⁵⁶ Consequently, it is important that the Commission specifically confirm that the tentative conclusion, upon adoption, applies to these types of wholesale input services.⁵⁷

III. The Commission Must Ensure the Needs for a Competitive Business Market are Met When the ILEC Retires the Home Run Copper Loop

In the *NPRM*, the Commission recognized that the existing copper retirement rules need modification to better protect retail customers and facilitate competition and, as such, seeks comment on improvements that will achieve this goal.⁵⁸ COMPTTEL focuses its comments on the impact of copper retirement on, and the modifications of the rules needed to protect, the business market. The primary harm to retail consumers and competition in the business market when an incumbent carrier replaces any portion of the copper loop (since carriers maintain access to DSn unbundled loops)⁵⁹ is the loss of the transmission medium (the home run bare copper loop),⁶⁰ to which the competitor adds its own electronics to create Ethernet-over-Copper (“EoC”).

The home run bare copper loop provides a basic transmission platform that can, with electronic modification, become broadband facilities. Competitive providers have, through

⁵⁶ Granite Telecommunications, LLC, About Granite, <http://www.granitenet.com/About> (last visited Dec. 5, 2014).

⁵⁷ The focus on these services is not meant to be a limitation as to what constitutes a wholesale input services beyond last-mile access services.

⁵⁸ *NPRM* at 49.

⁵⁹ *See supra* Section V.

⁶⁰ *See* 47 CFR § 51.319(a)(1) (“A copper loop is a stand-alone local loop comprised entirely of copper wire or cable. Copper loops include two-wire and four-wire network line...”)

innovation, developed technologies to use the copper loop infrastructure of the PSTN to support broadband deployment at ever-increasing transmission speeds. The record is filled with evidence that copper facilities are a major contributor toward broadband expansion. As Overture Networks Inc. explained, “Ethernet over Copper is a viable technology for delivering bandwidths from 10Mb/s to over 100Mb/s.”⁶¹ Likewise, ADTRAN explained: “Using vectoring, DSL download speeds of 100 Mbps can be provided on loops of up to 1000 feet over a single copper loop pair, or that same speed can be provided at up to 2500 feet with two-pair bonding.”⁶² CenturyLink also discusses how EoC, for which the competitor relies on the availability of the unbundled copper loop, has provided competition in the broadband market.⁶³ As one source explained, “EoC burst onto the scene at the right time for small-medium businesses that cannot afford to purchase budget-busting fiber connections but need something more than a T-1 – or even a VDSL line – to feed their increasing data appetite... in this economy where businesses are looking to expand without paying the price to do so, it seems that Ethernet-over-copper is [] a capability that’s out there to continue to provide quality services at lower cost for businesses,

⁶¹ Letter of Jeff Reedy, Co-founder and Chief Strategy Officer, Overture Networks, Inc., to Marlene Dortch, RM-11358 *et al*, at 2 filed Dec. 7, 2012.

⁶² Letter of Stephen L. Goodman, Counsel for ADTRAN, Inc., to Marlene Dortch, RM-11358 *et al*, p. 2, filed Oct. 12, 2012 (“ADTRAN Ex Parte”). ADTRAN also has stated: “Using VDSL2 technology and two-pair bonded loops, broadband download speeds of 80 Mbps can be provided on loop lengths up to 2500 feet. Alternatively, using ADSL2+ technology and two-pair bonded loops, the subscriber can get download speeds of 25 Mbps on loop lengths of up to 10,000 feet. And where there are additional loops (which may be the case for some residences, or for broadband service to businesses or to remote terminals), multi-pair bonding can be used to provide hundreds of Mbps download speeds.” *Id* at 1-2.

⁶³ CenturyLink Petition for Forbearance, *CenturyLink’s Petition for Forbearance Pursuant to 47 U.S.C. § 160(c) from Dominant Carrier Regulation and Computer Inquiry Tariffing Requirements on Enterprise Broadband Services*, WC Docket No. 14-9, at 29-30, filed Dec. 13, 2013 (“*CenturyLink Petition*”).

allowing them to reduce their telecom expense and hopefully grow their businesses accordingly.”⁶⁴

Access to this transmission medium has enabled competitors to offer more innovative services than is feasible when limited to the ILEC DSn unbundled loops. This has facilitated a degree of competition and more affordable offerings in the Ethernet market, particularly for smaller businesses.⁶⁵ In order to preserve these benefits when copper is retired, the Commission should ensure access to available alternative transmission mediums, e.g., reconsider its rules regarding access to dark fiber⁶⁶ (which, like the bare copper loops, is a transmission medium).⁶⁷ Additionally, the Commission should modify its copper retirement rules both in terms of process (more adequate and timely notification) and definition (to include the replacement of the feeder) to ensure competitive carriers have sufficient time and notification to accommodate the loss or change in transmission medium in serving their retail customers or working with their customers to find alternative options.

Access to Dark Fiber: Direct access to the transmission medium fosters innovation and broadband advancement. Without direct access to the transmission medium, advancements such as those described above are not possible. In fact, the more defined a transmission facility is, the

⁶⁴ “Finding New Gold in Copper”, FierceTelecom, pp. 5-6, September 2012, *available at*: servicecenter.fiercemarkets.com/files/leadgen/final_copper_networks.pdf

⁶⁵ As COMPTTEL has addressed in other proceedings, the grant of forbearance for the ILEC’s enterprise broadband services has precluded robust competition and just and reasonable pricing in this market.

⁶⁶ 47 CFR § 51.319(a)(6) (“An incumbent LEC is not required to provide requesting telecommunication carriers with access to a dark fiber loop on an unbundled basis.”)

⁶⁷ Dark fiber is optical fiber through which no light is transmitted and no signal is carried. *TRO* at ¶ 311, n. 900. It is the electronics that are added that define the capacity. *Id.* at ¶201, n. 628.

less innovation is possible that may otherwise advance economical broadband deployment. Direct access to the transmission medium enables the competitive provider to meet the ever-escalating demand of commercial customers for increased bandwidth. This is why it is important that, when the ILEC retires copper, where feasible, the ILEC be required to provide the same direct access to the transmission medium. In the case of optical fiber, that means access to raw fiber strands that replace the copper (i.e., unlit fiber) commonly referred to as “dark fiber” (in other words, absent the transmission equipment to generate the optical signals that ultimately carry data flows). With access to dark fiber, competitors maintain their ability to innovate and to meet the ever-increasing demands of commercial subscribers because it is the competitors’ investment in the electronics that defines the capacity on the strand.

In the *Triennial Review Remand Order*, the Commission eliminated competitors’ access to dark fiber. In doing so, it theorized that capping competitors’ access to ILEC fiber loops, on an unbundled basis, to a single lit DS3 per location provided the right balance of deployment incentive. In particular, the Commission found that revenue opportunities associated with dark fiber are even greater than those available in relation to two lit DS3 loops at a single location, so competitors are likely able to self-deploy. They based this conclusion on the claim that competitive carriers can economically deploy fiber at OCn capacity to large enterprise customers.⁶⁸

The analysis is flawed in several respects. Just to name a few: 1) It ignores smaller entities altogether. Smaller entities are demanding, and competitors through EOC are providing, ever-increasing bandwidths at more affordable pricing. 2) It ignores the dramatic public benefit from the investment and innovation in technologies that would be placed on that transmission

⁶⁸ *TRRO* at ¶¶ 183 - 184.

medium – the type of innovation and investment that has enabled copper loops to advance from supporting single-pair speeds of 64 Kbps to speeds of 100 Mbps (a 1500-fold increase) and more. Competitive use of the transmission facility will spur that investment and innovation, well beyond what the incumbent would be incentivized to do on its own. 3) It freezes the benefits of this form of innovative competition to the technology, consumer demands, carrier business plans and cost/benefit analysis of over a decade ago. 4) While competitors are aggressively investing in their own network deployment wherever economically feasible, this policy effectively encourages competitors – when considering the limited places where last-mile overbuilding is economic – to prioritize fiber deployments in areas where the ILECs have replaced their copper with fiber over those areas where copper loops are still in place. This is because competitive LECs need other means of Ethernet connectivity when EoC is no longer an option. 5) It fails to recognize the risk of return on investment is likely much higher where another has already deployed fiber. 6) Finally, it fails to sufficiently appreciate the continuing advantages of incumbency in last mile deployment. *Only* incumbent local exchange carriers enjoy the benefit of a ubiquitous network that represents cumulative, low-risk investments over decades, and that has enabled a development of a massive customer base of retail and wholesale purchasers that remains significant.⁶⁹ ILEC costs per customer are far lower due to the scale of its customer base. And much of the competitive impairments associated with deployment – in poles,

⁶⁹ Incumbent LECs still serve the majority of the wireline retail local telephone service connections. *See, e.g., Local Telephone Competition: Status as of June 30, 2013*, Industry Analysis Division, Wireline Competition Bureau, June 2014, Figure 3, page 4 (“2014 Local Competition Report”). Significantly, the incumbent’s market share is effectively consolidated in a *single* provider, while the competitors’ share is spread among *multiple competitors*. For example, according to the FCC’s Local Competition Report, in the District of Columbia the single incumbent LEC (Verizon) has 59% of the total end-user switched access lines and VoIP subscriptions, while the remaining 41% of the market is divided among *99 competitors*. *See 2014 Local Competition Report* at pp. 20 (Table 9) and 28 (Table 17).

conduits, rights-of-way, building entries – are not necessary for the incumbents to deploy fiber; the incumbents often have existing infrastructure and access that can be leveraged.

Change in Definition of “Copper Retirement”: The Commission should adopt its proposal that the feeder plant be one of the copper facilities included in the concept of “retirement.” As discussed above, competing carriers lose access to the home run copper loop when the incumbent replaces its copper in the feeder plant with fiber and, therefore, the ability to create EOC. While access to dark fiber may not be viable when copper is only retired in the feeder, the notification and other safeguards associated with copper retirement are needed, given the impact on the competitive carrier’s ability to provide the same level of service to their end-user customer.

Moreover, in areas where direct access to the dark fiber *medium* is not viable, the Commission should consider requiring access to a wavelength of transmission capacity. Today’s fiber optic networks predominantly use wave division multiplexing (WDM) to increase the number of logical pathways that a single fiber may support. This is true for both Active Optical Networks (AONs) used to support larger commercial customers, and for Passive Optical Networks (PONs) deployed to support consumer and small/medium business customers (*e.g.*, FiOS). Competitive access to a wavelength of an optical fiber’s capacity will allow sharing of a physical transmission facility while still maintaining a limited amount of flexibility with which a competitor may innovate.

An example of this opportunity for innovation is found in considering the FiOS (PON) network of Verizon. While FiOS now uses GPON as its transport technology,⁷⁰ new technology

⁷⁰ See Verizon press release where Verizon states the following about its FiOS network technology: “Verizon now uses Gigabit Passive Optical Network (GPON) technology, which increases capacity to four times the downstream and eight times the upstream capacity of the earlier BPON technology.”, October 21, 2009, available at

exists (TWDM-PON) to improve the capacity of that transmission facility by more than ten-fold (to 40 Gb/s), with the use of four wavelengths.⁷¹ Further, the implementation can occur without disrupting existing service. This is the type of innovation normally introduced by competitors. However, without requiring ILECs to provide competitors direct access to the dark fiber or access to wavelength services, this technological advancement often lays dormant, and the facility remains underutilized.⁷²

Notification Requirements:

Changes to the Commission's copper retirement rules are necessary to ensure that competitors utilizing copper loops have sufficient time and notification to transition their own retail customers to replacement facilities or give their customers time to switch to a different service provider. ILEC replacement of any portion of the copper loop necessarily requires competitive LECs providing EoC to migrate to other forms of last-mile access. If it means shifting to another transmission medium, the competitive LEC needs time to accommodate the change and invest in alternative electronics. If the competitor loses access to the transmission

<http://www.verizon.com/about/news/press-releases/fios-five-continuing-rapid-growth-leadership-technology-and-innovation/?pos=1>

⁷¹ See Alcatel-Lucent website, which states: "Time wavelength division multiplexing PON (TWDM-PON) provides four or more wavelengths per fiber, each of which is capable of delivering symmetrical or asymmetrical bit rates of 2.5 Gbps or 10 Gbps.", available at <http://www2.alcatel-lucent.com/techzine/twadm-pon-taking-fiber-new-wavelengths/#sthash.gOmd7Mmm.dpuf>

⁷² The story for AON technologies is even more compelling, with the introduction of new wave division modulation methods that yield capacities in excess of 9600 Gb/s over a single strand of fiber. See, for example, the Cisco description of its ONS 15454 100Gbps Coherent DWDM Trunk Card: "Release 9.6 of the Cisco ONS 15454 MSTP extends the total data transport capacity by a factor of three, allowing DWDM transmission of up to 9.6 Tbps (96 wavelengths at 100 Gbps each) in the C band.", available at http://www.cisco.com/c/en/us/products/collateral/optical-networking/ons-15454-series-multiservice-provisioning-platforms/data_sheet_c78-713298.html

medium altogether it needs time either 1) to find another form of last-mile access that will accommodate the service offering to the end-user customer; 2) to change the service offering to the end-user customer and provide sufficient time for the customer to accommodate the change in service; or 3) to provide the customer sufficient notice to seek alternative service arrangements.

IV. The Commission Should Make Clear That Incumbents May Not Charge for Special Construction In Lieu of Performing Sufficient Maintenance on Existing Facilities

In response to the Commission's question about "whether and how [it] should revise [its] rules to address inadequate maintenance,"⁷³ COMPTTEL suggests that the Commission should establish that (1) an incumbent may not charge for special construction where existing copper is not retired and where existing facilities, if repaired or maintained, would be adequate, and (2) an incumbent may not charge for special construction for network delivery infrastructure (e.g., trenching and conduit) when the ILEC plans to use the new infrastructure for its own operations. In essence, special construction charges should not be a substitute for incumbents' adequate maintenance of their own facilities and should not underwrite an incumbent's upgrades to its network as part of its normal operations. These should be considered ordinary construction, included as part of the base rate for service.

Competitive LECs are increasingly observing the imposition of unwarranted and/or excessive special construction charges being used as an opportunity to impose de facto last-mile price increases. For example, competitive LECs have been required to enter into special construction arrangements on the basis that the copper facilities are not available, even though it

⁷³ *NPRM* at ¶ 53.

appears that the retail customer requesting service is currently using the copper facilities (through service from the incumbent) to which the competitive LEC seeks wholesale access to replace the incumbent.⁷⁴ In other cases, competitive LECs—on the alleged grounds that their orders trigger a new build-out—have been charged special construction for network delivery infrastructure that are engineered to support capacity for multiple carriers.⁷⁵

The imposition of excessive and improper special construction charges impedes competition by providing the incumbent with an artificial cost advantage that can make a competitor's service to a particular customer uneconomic. Requiring a competitor to pay the incumbent to construct duplicative last-mile facilities is inconsistent with the Commission's rules and precedent.⁷⁶ In addition, the Commission has found that incumbents cannot force interconnectors to pay for services and equipment that they do not actually need, because this would impede efficient competitive entry.⁷⁷

Therefore, in particular, COMPTTEL recommends that the Commission adopt rules establishing the following:

- An incumbent may not charge for special construction to an existing customer location when (a) a competitive LEC's order is for a capacity level that is capable of being supported by copper facilities; (b) such facilities exist (including facilities in need of repair or maintenance) and are not being used by other

⁷⁴ Letter of Eric Einhorn, Windstream, to Jonathan Sallet and Julie Veach, FCC, GN Docket Nos. 13-5 and 12-353, at 14-15, filed Apr. 28, 2104; *See also*, Letter of Karen Reidy, COMPTTEL, to Marlene H. Dortch, FCC, GN Docket Nos. 13-5 and 12-353, filed Oct. 24, 2104.

⁷⁵ *Id.*

⁷⁶ *See, e.g.*, Memorandum Opinion and Order, *Expanded Interconnection with Local Telephone Company Facilities*, FCC 94-190, 9 FCC Rcd. 5154, 5172, ¶ 57 (1994) ("Special Access Remand Order"). *See also* 47 U.S.C. § 201(b).

⁷⁷ *See, e.g.*, Second Report and Order, *Local Exchange Carriers' Rates, Terms and Conditions for Expanded Interconnection Through Physical Collocation for Special Access and Switched Transport*, FCC 97-208, 12 FCC Rcd. 18,730, 18,745-46, 18,751, ¶¶ 23-24, 37 (1997).

customers, but they are deemed unavailable in this particular instance (including where the incumbent declines to test all available spares), and (c) the incumbent has not gone through the Commission’s copper retirement processes.

- An incumbent may not charge for special construction for network delivery infrastructure (e.g., trenching and conduit) when (a) the incumbent deems existing infrastructure to be unavailable (e.g., due to exhaust), and (b) the incumbent plans to use the new infrastructure for its own purposes. The incumbent may charge for special construction if it signs a declaration noting that it will not use the infrastructure for any of its or its affiliates’ retail offerings. At the very least, the Commission should permit the incumbent to charge special construction only for incremental costs necessitated by the competitive LEC’s use. For example, the incumbent would be able to charge for slightly larger conduit size but not for trenching.

If the Commission does not clarify in these ways incumbent obligations with respect to special construction charges, such charges may become a significant means for incumbents to effect de facto price increases for last-mile inputs. As further discussed above, permitting unconstrained increases in special construction charges—which disproportionately burden competition, competitors, and their customers—also would undermine any equivalency requirement on rates for IP replacement products.

V. The Commission Should Confirm That ILECs’ Obligation to Provide DS1 and DS3 Capacity Loops on an Unbundled Basis is Not Altered by the Technology Transitions

The Commission acknowledges in the *NPRM* that the technology transitions “must not harm or undermine competition.” This is why the Commission should make sure that ILECs provide access to DS1 and DS3 capacity loops, on an unbundled basis, where impairment exists irrespective of the ongoing technology transitions. As Windstream explains in its petition for declaratory ruling, in many locations where they currently rely on UNEs to serve business customers, competitive LECs’ input costs will otherwise increase substantially.⁷⁸ This is

⁷⁸ Windstream Petition at 17.

because competitive LECs will most likely be forced to rely on ILECs' special access services, and the rates for those services are frequently substantially higher than those for UNEs offering comparable capacity.⁷⁹ Business customers at these locations will face increased prices and/or fewer choices. This would be particularly harmful to small and medium-sized businesses, which need voice service, but also often require low-latency connectivity between all of their locations in order to support private network applications. These customers' capacity requirements are modest, but obtaining affordable connectivity is critical for running their businesses. The Commission should therefore grant Windstream's petition.

The rules requiring ILECs to provide DS1 and DS3 capacity loops on an unbundled basis are technology neutral. They define unbundled DS1 and DS3 capacity loops by the specific bandwidth delivered to the customer, not the nature the physical connection (copper or fiber) or the electronics (TDM or IP) used in the loop.⁸⁰ And the impairment triggers define the areas in which unbundling obligations apply based on the size of the wire center and the cap established by the Commission⁸¹ – not the facility or technology used to provision the loops. As Windstream discusses in its petition, the Commission has found that competitive LECs generally

⁷⁹ See, e.g., XO Communications Petition to Suspend and Investigate, Transmittal No. 1187, at 2-3 (filed May 7, 2012) (explaining that Verizon's DS1 and DS3 special access rates are already well above rates for comparable UNEs, and Verizon's 2012 proposal to increase certain Phase II price flex rates for DS1 and DS3 special access would have exacerbated this). Because ILECs' DS_n special access rates are often substantially higher than their rates for comparable UNEs, if ILECs provide replacement products for DS_n special access services at equivalent rates, the rates for those replacement products will also often substantially exceed UNE rates.

⁸⁰ See 47 C.F.R. § 51.319(a)(4)(i) (“A DS1 loop is a digital local loop having a total digital signal speed of 1.544 megabytes per second. DS1 loops include, **but are not limited to**, two-wire and four-wire copper loops capable of providing high-bit rate digital subscriber line services, including T1 services.”) (emphasis added); See also 47 CFR § 51.319(a)(5)(i) [“A DS3 loop is a digital local loop having a total digital signal speed of 44.736 megabytes per second.”].

⁸¹ See 47 C.F.R. § 51.319(a)(4); see also 47 C.F.R. § 51.319(a)(5)

are impaired without unbundled access to DS1 and DS3 capacity loops,⁸² and this impairment finding is not altered by an ILEC's replacement of copper facilities with fiber facilities or TDM equipment with IP equipment.⁸³

While Windstream's request for confirmation is limited to DS1 and DS3 capacity loops, impairment also was found and continues to exist for DS0 loops. The Commission should, therefore, also ensure that ILECs fulfill their existing obligations to provide unbundled access to DS0 capacity loops during and after the technology transitions.

Conclusion

For the foregoing reasons, the Commission should adopt its tentative conclusion and provide clarification and adopt specific criteria on implementing this standard, as well as clarification on the triggering of the Section 214 process as it relates to wholesale input services. The Commission also should ensure access to available alternative transmission mediums and modify its copper retirement rules, both in terms of process and definition, to ensure competitors maintain sufficient access and have sufficient time and notification to accommodate the change in access. The Commission should additionally address special construction charges, to keep these charges from becoming a backdoor price increase or a substitute for adequate ILEC maintenance of copper facilities. Finally, the Commission should grant Windstream's petition for declaratory ruling.

⁸² See, e.g., *TRO* ¶¶ 320, 325.

⁸³ Windstream Petition at 16-17.

Respectfully submitted,

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