

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

In the Matters of)	
)	
Policies and Rules)	
Governing Retirement of Copper Loops)	
By Incumbent Local Exchange Carriers)	
)	RM-11358
Petition of XO Communications, LLC,)	
Covad Communications Group, Inc., NuVox)	
Communications and Eschelon Telecom, Inc.)	
For a Rulemaking to Amend Certain Part 51)	
Rules Applicable to Incumbent LEC)	
Retirements of Copper Loops and Copper)	
Subloops)	
)	
AT&T Petition to Launch a Proceeding)	
Concerning the TDM-to-IP Transition)	
)	GN Docket No. 12-353
Petition of the National Telecommunications)	
Cooperative Association for a Rulemaking)	
to Promote and Sustain the Ongoing TDM-to-IP)	
Evolution)	
)	

COMMENTS OF MEGAPATH CORPORATION

Pursuant to the Public Notice released by the Federal Communications Commission (“FCC” or “Commission”) on February 4, 2013,¹ MegaPath Corporation (“MegaPath”) files the following comments in support of TelePacific *et al.*’s January 25, 2013 letter² requesting that the

¹ *Wireline Competition Bureau Seeks Comment on Request to Refresh Record and Amend the Commission’s Copper Retirement Rules*, Public Notice, WC Docket No. 12-353 & RM 11-358, DA 13-147 (WCB rel. Feb. 4, 2013).

² Letter of U.S. TelePacific Corp. *et al.* Requesting Commission to Refresh Record and Take Expedited Action to Update Copper Retirement Rules, WC Docket Nos. 10-188, 12-353; GN Docket Nos. 09-51, 13-5; RM-11358 (filed Jan. 25, 2013) (“TelePacific Letter”).

Commission “refresh the record” and revise its copper retirement rules.³

MegaPath supports the TelePacific Letter. The Commission’s copper retirement rules need to be strengthened to promote new technologies that provide affordable broadband over copper. The nation’s copper loop network infrastructure can be used as a means to accomplish just that and the Commission should not allow that tremendous national resource, which was paid for by monopoly rents, to be retired prematurely.

As discussed below, affordable broadband can be achieved via Ethernet over Copper (“EoC”) and CLECs are utilizing copper to provision high-speed EoC broadband services, which business customers are demanding. The existing copper retirement rules, however, deter investment in copper and set the stage for increased broadband prices. The Commission should not allow that to happen and should strengthen the copper retirement rules as the TelePacific Letter requests. Because ILECs have the ability to embark on or threaten widespread retirements at any time, the need for revised retirement rules is crucial. If ILEC copper facilities are allowed to be retired, however, to ensure broadband remains affordable, the Commission should require that the ILEC provide, at a minimum, the functional and price equivalent wholesale services on fiber facilities if such obligations are not otherwise imposed prior to the retirement of any copper facilities.

A. EoC is the Means of Achieving Affordable Broadband to Businesses

EoC is the technological means of achieving affordable broadband to businesses. There is no question that robust broadband services can be provisioned over copper and do not have to be provisioned over fiber. As the TelePacific Letter explains, deploying fiber in the local loop to

³ While MegaPath supports the Comments of the Midwest Association of Competitive Communications, Inc. (“MACC”) that are being filed in this proceeding on March 5, 2013, MegaPath submits these additional comments.

every home and business is costly and difficult to justify, especially in the midst of a global economic slowdown.⁴

For instance, in the 2010 report that Covad Communications Company filed in various Commission proceedings (“QSI Report”),⁵ QSI examined, among other things, whether self-provisioning of loop and transport fiber-optic facilities for the provision of broadband is an economical viable option for CLECs.⁶ QSI concluded that CLECs are unable to viably construct and operate their own facilities unless there are a large number of customers (over 24) located at extremely short distances (0.5 miles or less) from an already existing metropolitan fiber ring.⁷ Even in these extreme cases, there are practical considerations that limit a CLEC’s ability to construct their own last-mile facilities, including the significant time it would take a CLEC to plan, design, construct, and turn-up self-provided last-mile network facilities in response to new customer demand.⁸ Because of their large market share, ILECs are able to deploy their broadband fiber networks on a market-by-market basis, in advance of customer demand.⁹

⁴ TelePacific Letter at 14-15. *See also Review of the Section 251 Unbundling Obligations of Incumbent Local Exchange Carriers; Implementation of the Local Competition Provisions of the Telecommunications Act of 1996; Deployment of Wireline Services Offering Advanced Telecommunications Capability*, CC Docket Nos. 01-338, 96-98, 98-147, Report and Order and Order on Remand and Further Notice of Proposed Rulemaking, 18 FCC Rcd 16978, ¶¶ 85-91 (2003) (“TRO”), corrected by Errata, 18 FCC Rcd 19020 (2003) (subsequent history omitted); *See Petition of Qwest Corporation for Forbearance Pursuant to 47 U.S.C. § 160(c) in the Phoenix, Arizona Metropolitan Statistical Area*, WC Docket No. 09-135, 25 FCC Rcd 8622, ¶ 90 (2010) (citing same and stating “we find *de novo* entry is equally unlikely”).

⁵ Letter from Anthony Hansel, counsel for Covad, to Marlene H. Dortch, Secretary, FCC, GN Docket Nos. 09-47, 09-51 & 09-137 (filed Feb. 3, 2010); *see also* Comments of Covad Communications Company, WC Docket No. 09-223, at Exhibit A (filed Jan. 22, 2010). A copy of the QSI Report is attached hereto as Exhibit A.

⁶ QSI Report at 2.

⁷ *Id.* at 6.

⁸ *Id.* at 21-25.

⁹ *Id.* at 22.

In contrast, CLECs are almost never able to adopt a “if we build it, they will come” strategy with respect to last-mile facilities, and instead must attempt to get facilities in place as customer demand actually materializes.¹⁰ Based on its cost analysis, the QSI Report concluded it is “cost prohibitive and economically non-viable” for a CLEC to self-provision last mile facilities and justify competitive entry in order to offer broadband services to a small or medium-sized business customer.¹¹ Unfettered copper retirement reduces competitive alternatives and increases prices for customers because it limits future innovation and investment to a few big players (AT&T, Verizon, Wireless players and Cable) who have the capital and time to replace the current copper infrastructure with fiber or wireless alternatives. Continued access to copper loops permits a CLEC to obtain a large enough base of customers subscribing to broadband service such that fiber deployment may become economically viable at a future date.

While fiber to business locations has been deployed in portions of many urban areas, the fact remains that the vast majority of commercial buildings lack fiber-based broadband. The record demonstrates that 87% of businesses do not have access to fiber¹² and approximately 68% of buildings with 20 or more employees are not connected to fiber networks.¹³ In the AT&T ILEC region, half of the multi-tenant business locations will remain reliant on copper infrastructure after AT&T completes its fiber investment.¹⁴ Moreover, with the exception of Verizon’s FiOS project, ILECs have generally elected to forego deploying fiber directly to residences and

¹⁰ *Id.*

¹¹ *Id.* at 36.

¹² Letter from Stephen L. Goodman, Counsel for Hatteras Networks, Inc., to Marlene H. Dortch, Secretary, FCC, RM-11358, at Presentation slide 4 (filed Jan. 29, 2008).

¹³ Letter from Jeff Reedy, Co-founder and Chief Strategy Officer, Overture Networks, Inc., to Marlene H. Dortch, Secretary, FCC, GN Docket Nos. 09-47, 09-51, 09-137, and RM-11358, at 2 (filed Dec. 7, 2012) (“Overture 12/7/12 Letter”) (citing Vertical Systems figure).

¹⁴ TelePacific Letter at 3.

small and medium sized businesses and will continue to rely on copper loop infrastructure to deliver broadband services for the foreseeable future.¹⁵ Thus, copper will remain a prevalent and important part of the nation's network for some time.

Provisioning broadband via EoC is the an effective and efficient alternative to provisioning broadband over fiber because it leverages existing copper and allows providers and customers to expand capacity by investing in and deploying cost effective electronics rather than capital intensive construction projects. Indeed, with EoC, carriers can deploy state-of-the-art broadband services without the time and expense of digging up streets to deploy fiber.

B. EoC is being Deployed by CLECs to Provision High-Speed Broadband Services

For these reasons, where copper is available, CLECs rely on it to deliver high-speed EoC broadband services.¹⁶ TelePacific's survey of nine CLECs in California confirms this and reveals that these CLECs have installed EoC capability in 343 California wire centers, giving approximately 250,000 small and medium businesses (9-249 employees) served by those wire centers the ability to purchase broadband service ranging from 3 Mbps to 50 Mbps today.¹⁷ Texaltel undertook a similar survey that reveals that six CLECs provide EoC broadband that more than 400,000 business customers in 130 wire centers in Texas have the potential to access.¹⁸ In addition, Broadview and MegaPath alone provide over eighty thousand small and medium size businesses with innovative and affordable broadband services, often through the use of copper-based solutions.¹⁹

¹⁵ TelePacific Letter at 7.

¹⁶ Overture 12/7/12 Letter at 3.

¹⁷ TelePacific Letter at 4 and Lubamersky Decl. at pp. 3-5.

¹⁸ TelePacific Letter at 4.

¹⁹ COMPTTEL 2/25/13 Letter at 1.

This extensive deployment of EoC helps explain why the sales of EoC electronics far exceed Ethernet over fiber electronics. In terms of deployment of copper versus fiber based on number of ports deployed, “each year more copper ports are deployed than fiber ports at a ratio of almost 2:1.”²⁰ Moreover, when the market is looked at in terms of the growth of Carrier Ethernet Access Device (“EAD”) between fiber and copper, “the copper EAD market is the fastest growing technology in the EAD space” being forecasted to grow by a “healthy 17% per year through 2016.”²¹

C. Business Customers of All Sizes are Demanding EoC

Given the tremendous potential of copper and growth of EoC, it is no wonder that EoC resonates not only with small and medium-sized businesses, but also with medium and large-sized businesses that have various small sites across multiple geographic areas that seek high-speed, affordable broadband.²² As the TelePacific Letter explains, because businesses increasingly demand Ethernet-based communications services to link their Ethernet local area networks (“LANs”), CLECs are addressing these demands with broadband offerings based on EoC, Ethernet over DS1, and Ethernet over BSDL technologies.²³ EoC is an incredibly viable technology for delivering bandwidths from 10 Mbps to 100 Mbps and bandwidth continues to

²⁰ Overture 12/7/12 Letter at 4.

²¹ *Id.* at 4.

²² Competitive Carriers Hone Their Ethernet Over Copper Skills, Fierce Telecom (May 3, 2011), available at http://www.fiercetelecom.com/special-reports/competitive-carriers-hone-their-ethernet-over-copper-skills?utm_source=editorscorner#ixzz1sy4FBq7g; COMPTel 2/25/13 Letter at 2 (explaining that “[c]ompetitive carriers serve a vast array of industries with their copper based solution, such as financial institutions, non-profits, retail customers, educational institutions, insurance companies, health care providers, publishing and consulting firms.”).

²³ TelePacific Letter at 12. See also Comments of Covad Communications Company, WC Docket No. 09-223, at 4 (filed Jan. 22, 2010).

increase.²⁴ Further, EoC may be more cost effective for business customers than traditional TDM based services.²⁵ In fact, according to some carriers, when compared to TDM-based services, a business receives over two times the bandwidth for the same price.²⁶ As a result, Ethernet has become the standard for enterprise networks and the demand for EoC is rising.

D. The Existing Copper Retirement Rules Deter Investment in Copper and Set the Stage for Increased Broadband Prices

As discussed in the MACC comments, copper retirement harms innovation of products and services over such copper infrastructure, reduces competitive alternatives, and increases prices to consumers.²⁷ Broadview's and MegaPath's recent presentations to the Commission demonstrate that a substantial number of small and medium size end-user businesses will be impacted by the retirement of copper loops used to provide EoC.²⁸ Indeed, the "decommissioning of copper facilities could strand massive dollar investments in competitive products and services, as well as curtail future innovation of products and services over existing copper infrastructure."²⁹ In addition, innovation of products and services over existing copper facilities could disappear.³⁰ Moreover, "if copper facilities were to be broadly retired – with no functionally and similarly priced alternative wholesale product available – the cost of providing broad-

²⁴ Overture 12/7/12 Letter, at 3 (Figure 2).

²⁵ Letter from Jeffrey K White, President, Hatteras Networks, to Marlene H. Dortch, Secretary, FCC, GN Docket No. 09-51, at Attachment pp. 7-8 (filed June 8, 2009) ("Hatteras 6/8/09 Letter").

²⁶ Hatteras 6/8/09 Letter at 7.

²⁷ See also COMPTTEL 2/25/13 Letter at 1-2.

²⁸ *Id.* at 1-2, MegaPath presentation, slide 5 &7, and Broadview presentation, slide 5.

²⁹ COMPTTEL 2/25/13 Letter at 1.

³⁰ *Id.*

band services to these small and medium size business customers could increase dramatically ([by 10 to 40 times).”³¹

The QSI Report discussed above also determined that prices would increase significantly. Based on ten (10) different Metropolitan Statistical Areas (“MSAs”) analyzed, QSI found that limitations on CLECs’ ability to compete more broadly stem from escalating costs as configurations over fiber facilities have to be purchased at higher or non-UNE based prices. The study reveals that CLEC costs of leasing all fiber or hybrid loops (\$620.60 to \$702.29 per month) as a means of providing 5 Mbps broadband services are higher, by an order of magnitude, than the costs of leasing copper loops (\$68.61 to \$111.69 per month) that deliver the same speeds.³² Furthermore, QSI concludes that CLECs face a price squeeze when they need to serve business customers in locations where copper UNE loops are not available.³³ Essentially, the costs of the ILEC fiber inputs across the ten MSAs are so high relative to the prevailing retail price level that CLECs could not recover their lease costs.³⁴ While these fiber prices may have changed since 2010, today’s wholesale fiber pricing is still too high to allow smaller competitors to add value added services to the public over wholesale fiber loops.

Based on its cost analysis, the QSI Report concludes that where UNEs are not available, a competitor cannot economically offer broadband retail products using an ILEC’s facilities.³⁵ Consumers would likewise face a substantial increase in broadband costs, which in some cases may lead consumers to “forgo the broadband services they have been able to obtain from com-

³¹ *Id.* at 1-2; *see also id.* at MegaPath presentation, slide 5 & 7 and Broadview presentation, slide 5.

³² QSI Report, at 17.

³³ *Id.* at 19.

³⁴ *Id.*

³⁵ *Id.* at 3-7.

petitors at affordable rates.”³⁶ The QSI Report further concludes that the promotion of broadband competition in the United States will be greatly advanced if the Commission takes affirmative steps to guarantee continued access to the ILECs’ legacy copper networks.³⁷

As the TelePacific Letter requests, the Commission should do just that to ensure that “(1) customers currently receiving broadband over copper loops do not lose their affordable broadband service and (2) the rules promote the regulatory certainty necessary for further investments in development of new technologies for affordable broadband over copper.”³⁸

Respectfully submitted,

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³⁶ COMPTTEL 2/25/13 Letter at 2.

³⁷ QSI Report at 7.

³⁸ TelePacific Letter at 4.