

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

Connect America Fund	)	
	)	WC Docket No. 10-90
	)	
Developing a Unified Intercarrier	)	CC Docket No. 01-92
Compensation Regime	)	
	)	

**REPLY COMMENTS OF TELIAx, INC.**

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Teliax, Inc. ("Telix"),<sup>1</sup> through its counsel, respectfully submits its reply comments in support of the Petition of CenturyLink, Inc. ("CenturyLink") for a Declaratory Ruling filed May 11, 2018 ("Petition").

**I. Introduction and Summary**

To the chagrin of AT&T and Verizon, the VoIP Symmetry Rule ("VSR") adopted by the Commission in *In re Connect America Fund*, 26 FCC Rcd 17663 (2011) ("*2011 Transformation Order*"), *aff'd sub nom. In re FCC 11-161*, 753 F.3d 1015 (10<sup>th</sup> Cir. 2014)<sup>2</sup> remains unchanged by the D.C. Circuit's opinion.<sup>3</sup> This proceeding is not the opportunity to re-write the VSR, and the Commission must not be influenced by AT&T and Verizon's restatements of the VSR to create the rule that they *wish* the Commission had imposed in 2011. This Petition process, instead, requests that the

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<sup>1</sup> Teliax is a competitive local exchange carrier ("CLEC") based in Denver, Colorado. The Company provides voice and data services to both retail and wholesale customers, including toll free (8YY) origination service. Through an affiliate, Teliax also offers access to the Toll Free Exchange, a propriety platform that allows carriers and service providers to offer toll free calling services completely through IP transport, bypassing the unnecessary costs and technical limitations of the Public Switched Telephone Network ("PSTN").

<sup>2</sup> The D.C. Circuit did not, and could not review the *2011 Transformation Order*, because such a review would have been untimely. *See* 28 U.S.C. 2344 ("Any party aggrieved by the final order may, within 60 days after its entry, file a petition to review the order in the court of appeals wherein venue lies."); *see also, Council Tree Inv'ts, Inc. v. FCC*, 739 F.3d 544, 551 (10<sup>th</sup> Cir. 2014) ("our jurisdiction over an FCC order is contingent upon the timely filing of a petition for review."); *NRDC v. Nuclear Regulatory Comm'n*, 666 F.2d 595, 602 (D.C. Cir. 1981).

<sup>3</sup> *AT&T Corp. v. Fed. Comm'ns Comm'n*, 841 F.3d 1047, 1054 (D.C. Cir. 2016).

Commission provide clarity to the industry in light of the D.C. Circuit's vacatur<sup>4</sup> of the *2015 Declaratory Ruling*,<sup>5</sup> because the Court found the Commission's prior attempt to clarify the VSR was defective. However, the record before the Commission in this proceeding is sufficient to support the Commission's original reasoning in the vacated Declaratory Ruling and to grant the CenturyLink Petition.

Accordingly, this matter boils down to a plain reading of the VSR, codified at 47 C.F.R. §51.913(b), including the following three components: (1) the VSR applies to the "full Access Reciprocal Compensation charges;" (2) the VSR applies through filed tariffs or "via contractual or other arrangements;" and (3) the VSR necessarily recognizes functional equivalence.

AT&T seeks to add restrictions to the VSR at every step of the way. AT&T argues that end office is not truly a functional equivalent;<sup>6</sup> and that local exchange carriers partnering with over-the-top ("OTT") VoIP companies are ineligible to charge end office access.<sup>7</sup> But AT&T builds this argumentation without considering the plain fact that the VSR and the *2011 Transformation Order* never implemented such restrictions, as discussed *infra*.

AT&T is simply trying to throw out every possible attack, to see which sticks. AT&T even argues that given that "the end user's broadband Internet service provider is the only entity in the call flow that performs the function of directing packets," the ISP is the only entity eligible for functional equivalence.<sup>8</sup> But as discussed *infra*, the VSR implemented by the Commission was expansive, not restrictive, designed to promote IP-based technologies and to provide competition to service bundlers, including AT&T, Verizon and Cable TV Companies. The fact that a VoIP provider provides services to

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<sup>4</sup> With a vacatur, "it is as if the order never existed ... and the parties [are returned] to their original positions, before the now-vacated order was issued." *Bryan v. BellSouth Comm's, Inc.*, 492 F.3d 231, 241 (4<sup>th</sup> Cir. 2007), *cert. denied* 552 U.S. 1097 (2008).

<sup>5</sup> *Connect America Fund*; and *Developing a Unified Intercarrier Compensation Regime*, Declaratory Ruling, 30 FCC Rcd. 1587 (2015) ("*2015 Declaratory Ruling*").

<sup>6</sup> AT&T Comments at 6, *et seq.*

<sup>7</sup> AT&T Comments at 8, *et seq.*

<sup>8</sup> AT&T Comments at 14.

its customer on an over-the-top basis is immaterial in terms of the provision of end office functionality. True, the technologies at issue here use Internet access, but they do not do so for purposes of routing calls. In the absence of end office services provided by local exchange carriers like Teliax, a user at the end of the chain can still access any website they want using appropriate Internet browsing software and hardware (including <http://www.fcc.gov>), but the user nevertheless cannot place a telephone call using Teliax's partner. Also, especially in the 8YY context, these are not the simple technologies discussed in *YMax*.<sup>9</sup> Rather, Teliax and other local exchange carriers have substantially invested in necessary technologies to ensure reliable call completion.

Verizon makes claims LECs have engaged in access arbitrage and even fraud with respect to 8YY traffic. However, when one examines the facts, including the fact Verizon refuses to provide any useable information to identify and block alleged fraudulent calls, the true fraud seems to be coming from attempts to obtain 8YY traffic free of charge.

In the same vein, Verizon and AT&T state that "trunk and loops" are a necessary component of end office switching.<sup>10</sup> In an IP-based environment that the VSR is designed to promote, this requirement approaches laughable. *See infra*. The Commission never even went into such detail in the VSR or *2011 Transformation Order*, and rightly so.

The comments that AT&T and Verizon filed stem from the same playbook. The companies are lobbying for rules that are not in the VSR based on policy reasons that are not encapsulated by the VSR or *2011 Transformation Order*. Such lobbying has no place in this proceeding, which is intended to clarify an existing rule, but only belong in a petition for rulemaking. CenturyLink has, indeed, made its case, such that the Commission should grant CenturyLink's Petition.

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<sup>9</sup> *See AT&T Corp. v. YMAX Commc'ns Corp.*, 26 FCC Rcd. 5742, ¶ 37 (2011).

<sup>10</sup> AT&T Comments at 8; *see* Verizon Comments at 7.

## II. Arguments

### *A. The 2011 Transformation Order Brought OTT VoIP Traffic into the Section 251(b)(5) Framework and Permitted VoIP Providers and Their LEC Partners to Charge Access on Interexchange VoIP-PSTN Traffic.*

In the *2011 Transformation Order*,<sup>11</sup> the FCC brought **all** VoIP-PSTN traffic into “the section 251(b)(5) framework.” It set “[d]efault intercarrier compensation rates for toll VoIP-PSTN traffic are equal to interstate access rates” and ruled “[c]arriers may tariff these default charges for toll VoIP-PSTN traffic in the absence of an agreement for different intercarrier compensation.”<sup>12</sup> The Commission also allowed “local exchange carriers (“LECs”) to address [the] issue [of distinguishing VoIP-PSTN traffic] through their tariffs, much as they do with jurisdictional issues today.”<sup>13</sup> The Commission concluded this approach “best balances the competing policy goals during the transition to the final intercarrier compensation regime.”<sup>14</sup>

In the *2011 Transformation Order*, the FCC defined “VoIP-PSTN traffic” as “traffic exchanged over PSTN facilities that originates and/or terminates in IP format.”<sup>15</sup> The test is “whether the exchange of traffic between a LEC and another carrier occurs in Time-Division Multiplexing (TDM) format (and not in IP format), without specifying the technology used to perform the functions subject to the associated intercarrier compensation charges.”<sup>16</sup> Also, the Order clarified that the “ESP exemption is not relevant or applicable prospectively in determining the intercarrier compensation obligations for VoIP-PSTN traffic.”<sup>17</sup> That statement means the FCC intended a VoIP calling service to be eligible for intercarrier compensation whether the service is a telecommunications service or an information service.

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<sup>11</sup> *2011 Transformation Order*, 26 FCC Rcd 17663, at ¶ 934.

<sup>12</sup> *Id.* at ¶ 933.

<sup>13</sup> *Id.* at ¶ 934.

<sup>14</sup> *Id.* at ¶ 935.

<sup>15</sup> *Id.* at ¶ 940.

<sup>16</sup> *Id.*

<sup>17</sup> *Id.* at ¶ 945.

Noting that historically LECs “have been permitted to charge access charges to the extent that they are providing the functions at issue,” the FCC stated its belief that “competitive LECs should be entitled to charge the same intercarrier compensation as incumbent LECs do under comparable circumstances.”<sup>18</sup> And, thus, the Commission adopted “rules that permit a LEC to charge the relevant intercarrier compensation for functions performed by it and/or by its retail VoIP partner, regardless of whether the functions performed, or the technology used correspond precisely to those used under a traditional TDM architecture.”<sup>19</sup> The ability to bill access was limited in only two small ways. First, there could be no double billing and, second, there is a proscription against a LEC charging “for functions performed neither by itself or its retail service provider partner.”<sup>20</sup>

The 10<sup>th</sup> Circuit upheld *2011 Transformation Order* and denied all petitions for review in 2014.<sup>21</sup> Therefore, **all** of the rules adopted by the FCC in that order, including the VSR, are valid and cannot be changed by the Commission without first opening an Administrative Procedure Act-compliant rulemaking proceeding. The *2015 Declaratory Ruling* was vacated only because the Court of Appeals found the FCC failed to explain sufficiently what “functional equivalence” means and what distinguishes end office switching from tandem switching.<sup>22</sup> As set forth in CenturyLink’s Petition, the D.C. Circuit’s concerns are easily addressed.

Section 51.913(b) of the FCC’s rules<sup>23</sup> sets forth the VSR<sup>24</sup> and reads as follows:

Notwithstanding any other provision of the Commission’s rules, a local exchange carrier shall be entitled to assess and collect the full Access Reciprocal Compensation charges prescribed by this subpart that are set forth in a local exchange carrier’s interstate or intrastate tariff for the access services defined in § 51.903 regardless of whether the local

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<sup>18</sup> *Id.* at ¶ 970.

<sup>19</sup> *Id.*

<sup>20</sup> *Id.*

<sup>21</sup> *In re FCC 11–161*, 753 F.3d 1015.

<sup>22</sup> *AT&T Corp. v. Fed. Comm’n Comm’n*, 841 F.3d 1047, 1054 (D.C. Cir. 2016)

<sup>23</sup> 47 C.F.R. 1.913(b).

<sup>24</sup> Various courts have held CLECs have correctly adopted the VSR in its tariffs. *Broadvox-Clec, LLC v. AT & T Corp.*, 98 F.Supp.3d 839 (D. Md. 2015); and *Teliax, Inc. v. AT&T Corp.*, 220 F.Supp.3d 1094 (D. Colo. 2016), *vacated on other grounds*, Order, Civil Action No 15-cv-01472-RBJ, *slip op.* (September 1, 2017).

exchange carrier itself delivers such traffic to the called party's premises or delivers the call to the called party's premises via contractual or other arrangements with an affiliated or unaffiliated provider of interconnected VoIP service, as defined in 47 U.S.C. 153(25), or a non-interconnected VoIP service, as defined in 47 U.S.C. 153(36), that does not itself seek to collect Access Reciprocal Compensation charges prescribed by this subpart for that traffic. This rule does not permit a local exchange carrier to charge for functions not performed by the local exchange carrier itself or the affiliated or unaffiliated provider of interconnected VoIP service or non-interconnected VoIP service. For purposes of this provision, functions provided by a LEC as part of transmitting telecommunications between designated points using, in whole or in part, technology other than TDM transmission in a manner that is comparable to a service offered by a local exchange carrier constitutes the functional equivalent of the incumbent local exchange carrier access service.

The VSR is written broadly to permit LECs to charge full "Access Reciprocal Compensation charges"<sup>25</sup> when they or their VoIP partner handle and pass on traffic bound for the called party's premises. The Commission did not qualify or restrict a LEC's ability to charge end office access, or use the words "but limited to tandem switched access charges." The only reasonable construction of the rule is that it allows LECs to bill for both end office and tandem access services when they provide the functional equivalents of these services as viewed from an IP-based network perspective.

"VoIP Traffic," as used in the *2011 Transformation Order*, involves calls that use IP format for part of call completion to or from the PSTN.<sup>26</sup> The VSR therefore applies to all forms of VoIP traffic, including "over the top" VoIP calls. In its *2011 Transformation Order* the Commission thoughtfully deliberated about what form of VoIP traffic to include and concluded that that the VSR applies **to all**

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<sup>25</sup> "Full Access Reciprocal Compensation" means "telecommunications traffic exchanged between telecommunications service providers that is interstate or intrastate exchange access, information access, or exchange services for such access, other than special access." 47 C.F.R. § 51.903(h).

<sup>26</sup> See *2011 Transformation Order* at ¶ 940.



**forms** of VoIP traffic, including “over the top” VoIP calls.<sup>27</sup> This is the law today.<sup>28</sup> The Commission adopted the VSR to include **both** interconnected and non-interconnected VoIP traffic, with **no exclusion** for calls using an “over the top” broadband connection to transport calls.<sup>29</sup>

*B. By Using Broad Language in the VSR, the Commission Signaled that OTT VoIP Traffic Is Subject to Full “Access Reciprocal Compensation Charges, Including End Office Switched Access Charges.”*

The Commission did not use the term “tandem access charges” in the *2011 Transformation Order* but rather, full “Access Reciprocal Compensation charges.” In construing statutes and regulations, the use of such a broad term does not permit narrow interpretation.

In construing statutes as to their breadth, courts look at the words used by Congress. When statutes (or agency regulations) use words that convey a broader meaning, the statutes or rules must be interpreted to encompass more than if narrower words are used. For example, in construing the federal Age Discrimination in Employment Act,<sup>30</sup> which permits an “unsuccessful job applicant to sue an employer for using a practice that has a disparate impact on older workers,” Judge Martin from the Eleventh Circuit wrote:

Congress said age discrimination must not “deprive any individual of employment opportunities.” **If Congress intended to protect a narrower group, it would have said so.** For example, the same sentence of § 4(a)(2) later uses the term “such individuals” to refer back to a set of people who were introduced earlier. And a different part of the sentence uses the word “employees,” when referring to the people an employer can’t “limit, segregate, or classify.” But when the

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<sup>27</sup> *Id.* at ¶ 954 n.1942 (“Because our prospective VoIP-PSTN intercarrier compensation rules typically involves traffic exchanged between carriers, and because intercarrier compensation disputes have tended to involve **all forms of VoIP traffic**, we are not persuaded that the Commission should draw additional distinctions among traffic associated with different types of VoIP services, as some commenters recommend.”) (emphasis added).

<sup>28</sup> Strengthening this, the Commission considers calls routed through the public Internet, *i.e.* “over the top,” are a form of interconnected VoIP services. *See, e.g., Extension of the Commission’s Rules Regarding Outage Reporting to Interconnected Voice Over Internet Protocol Service Providers and Broadband Internet Service Providers*, Final Rule, 77 Fed. Reg. 25088 (April 27, 2012), at ¶ 73.

<sup>29</sup> *See* 47 C.F.R. § 51.913(b).

<sup>30</sup> 29 U.S.C. § 621, *et seq.*

statute described the group who would be protected by this prohibition imposed on employers, Congress chose the term “any individual.”<sup>31</sup>

Obviously, the term “individuals” includes more people than the term “employees.” As such, Judge Martin would allow a non-employee, otherwise covered by the ADEA, to sue. Judge Martin’s logic and words swayed a California district court construing the same law.<sup>32</sup>

The very same reasoning applies to the VSR. The VSR does not split VoIP-PSTN traffic into OTT VoIP and non-OTT VoIP. The Commission recognized OTT VoIP as an important component of voice communications as part of its access reform decision-making process,<sup>33</sup> and is well aware of the differences between the two types of services. Had the FCC intended to exclude OTT VoIP from the VSR or from assessing functionally equivalent end office access charges, **the Commission would have said so in a clear and fully understandable way.** In this context, AT&T’s argument that no partnership between an OTT VoIP provider and CLEC could ever bill end office access because they use third-party broadband connections quickly evaporates.<sup>34</sup> For the VSR to make sense and be consistent with the rules of statutory construction, as well as simple grammar, OTT VoIP must be subject to end office access. Otherwise, the *2011 Transformation Order* and Section 51.913 would have been written differently. The FCC would not have used broad language if it had intended a narrow result.

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<sup>31</sup> *Villarreal v. R.J. Reynolds Tobacco Co.*, 839 F.3d 958, 982 (11<sup>th</sup> Cir. 2016) (Martin J., dissenting), *cert. denied*, 137 S.Ct. 2292 (2017) (emphasis added).

<sup>32</sup> *Rabin v. PricewaterhouseCoopers LLP*, 236 F.Supp.3d 1126 (N.D. Cal. 2017).

<sup>33</sup> *Connect America Fund*, Notice of Proposed Rulemaking and Further Notice of Proposed Rulemaking, 26 FCC Rcd 4554, at ¶ 483 (2011); *2011 Transformation Order*, at ¶¶ 9, 50.

<sup>34</sup> AT&T Comments at 23, *et seq.*

Had the FCC intended to limit OTT VoIP traffic to tandem switching access charges<sup>35</sup> only, it would have said so by stating OTT VoIP services are eligible to bill only tandem access charges.<sup>36</sup> The *2011 Transformation Order* did not do that.

*C. In Interpreting the VSR as It Applies to OTT VoIP Traffic, Functionality Must Be Viewed from an IP-Based Perspective*

The VSR does, of course, specify a LEC cannot bill for “functions not performed by the local exchange carrier itself or the affiliated or unaffiliated provider of interconnected VoIP service.”<sup>37</sup> But those functions cannot be viewed from the perspective of a TDM-based carrier. Functionality must be seen through IP technology. Indeed, Section 51.913(b) continues:

For purposes of this provision, functions provided by a LEC as part of transmitting telecommunications between designated points using, in whole or in part, technology other than TDM transmission in a manner that is comparable to a service offered by a local exchange carrier constitutes the functional equivalent of the incumbent local exchange carrier access service.

The only perspective that is relevant is that of the OTT VoIP provider and its competitive LEC (“CLEC”) partner using IP-based technology and their own hardware and software. The two partners’ hardware and software work together to enable the consumer to make or to receive telephone calls, providing the IP equivalent of local switching and transport to deliver outgoing calls to TDM-based carriers and the PSTN or to deliver incoming calls from TDM-based carriers and the PSTN. The fact that much of this traffic is carried over the Internet and that traditional telephone lines and trunks are

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<sup>35</sup> Teliax explained differences between end office and tandem switching in considerable detail in its initial Comments at 8-10.

<sup>36</sup> Viewed from a policy perspective, the availability of OTT VoIP creates a much more competitive market than if OTT VoIP services were not available. Were OTT VoIP unavailable, consumers would be limited to traditional analog voice services, bundled VoIP services and wireless services. That result would mean fewer choices for consumers and likely higher prices for voice services—the antithesis of everything the Commission has done since it first allowed competition in Customer Premises Equipment (“CPE”) and Private Line Services decades ago.

The availability of OTT VoIP services also enhances the viability of stand-alone broadband services that enable consumers to select OTT VoIP and other services, including video-streaming services, rather than just purchase bundled packages of services from entities including ILECs, Cable TV companies and direct broadcast satellite companies.

<sup>37</sup> 47 C.F.R. § 51.913(b).

not used is immaterial. The network or facilities involved are not relevant. The true test is: But for the services and functionality provided by the OTT VoIP and CLEC, would VoIP-using consumers be able to communicate with the TDM world? The answer is indisputably “**NO.**”

Both AT&T and Verizon attempt to make much of the fact that OTT VoIP rides a third-party’s broadband connection. But such is the nature of OTT VoIP. Likewise, it is the very nature of AT&T’s new DirectTV Now<sup>SM</sup> video streaming service.<sup>38</sup> AT&T does not offer this service only in markets that are served by its wireline broadband service, its wireless broadband service or even where its DirectTV<sup>TM</sup> satellite broadcast service is available. Just like OTT VoIP service, DirectTV Now<sup>SM</sup> video streaming service is a market-disrupter designed to compete against bundled service providers.

AT&T does not bill its DirectTV Now<sup>SM</sup> video streaming service customers more or less when they use a broadband connection provided by third-party service provider than it does when a DirectTV Now<sup>SM</sup> video streaming service subscriber uses an AT&T wireline broadband connection. DirectTV Now<sup>SM</sup> video streaming service is an important market development that brings choice and competition to the market. So too is OTT VoIP.

The FCC’s recognition of OTT VoIP as a competitive alternative is one reason the FCC’s *2011 Transformation Order* included OTT VoIP in the VSR that applied access charges to **all** VoIP calls. As the Commission said, it did not intend to “apply the entire preexisting intercarrier compensation regime to VoIP-PSTN traffic prospectively” because of the FCC’s belief in the “shortcomings of that regime.”<sup>39</sup> But it did not stop there. Rather, the FCC, “mindful of the need for a measured transition for carriers that receive substantial revenues from intercarrier compensation,” applied full “Access Reciprocal Compensation charges” and did not exclude OTT VoIP traffic.<sup>40</sup>

AT&T and Verizon’s argument that the OTT VoIP provider-CLEC partnership does not provide the function of connecting the end user customer (be she the calling or called party) with the “end

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<sup>38</sup> <https://www.directvnow.com>.

<sup>39</sup> *2011 Transformation Order*, at ¶ 935.

<sup>40</sup> *Id.*

office switch or switch equivalent” is similar to arguing AT&T does not provide the function of connecting the end user customer to the streamed video programming of his choice as part of AT&T’s DirectTV Now<sup>SM</sup> video streaming service. But for AT&T’s investment in hardware and software that provides the video streaming service capability, the customer’s broadband connection will not deliver video programming. Likewise, but for the OTT VoIP provider-CLEC’s investment in hardware and software that provides the digital voice communications capacity, the customer’s broadband connection will not permit her to have a telephone conversation.

*D. Teliix Has Made Substantial Interconnection Investments.*

AT&T makes the erroneous – and offensive, ILEC-centric claim – that it is a “true” provider of functional equivalent end office switching, and that “Over-the-top LEC-VoIP partnerships” make “very small investments.”<sup>41</sup> Teliix has made substantial investments in equipment and software to interconnect with the last-mile, including Layer 2 or Layer 3 Internet data transport facilities; session border controller equipment located in data centers in Denver and Colorado Springs; and SIP trunking capacity. There can be no dispute that Teliix and its partners have made the “substantial investment[s] required to construct the tangible connections between themselves and their customers throughout their service territory.”<sup>42</sup> Without these investments, Teliix would not be able to complete calls that AT&T has previously admitted that it wants delivered.<sup>43</sup>

*E. Verizon’s Discussion of Arbitrage Is False and Misleading*

Verizon tosses around the word “arbitrage” as if it were confetti at a ticker tape parade on Broadway in an effort to characterize legitimate traffic supported by the Commission’s rules as something improper or unlawful.<sup>44</sup> However, rather than ticker tape, Verizon is really tossing mud at

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<sup>41</sup> AT&T Comments at 17-19.

<sup>42</sup> *AT&T Corp. v. Fed. Comm’n Comm’n*, 841 F.3d at 1056.

<sup>43</sup> Teliix Comments (filed Jun. 18, 2018), Exhibit B, Meola Dep, at 46:12-25, 48:22-25.

<sup>44</sup> See, e.g., Verizon Comments at the first introduction page where it speaks of “double billing and arbitrage” and “arbitrage schemes.”

its competitors in yet another attempt to avoid paying intercarrier compensation authorized by Commission rule and carrier tariffs.

Specifically, as to Teliax, Verizon states “[i]ndeed, competitive LECs are purchasing 8YY calls from their ostensible wholesale customers in order to exploit arbitrage opportunities. For example, Teliax’s ‘wholesale customer[s do not] make any payment to Teliax . . . for 8YY originating’ traffic; instead, ‘[t]hey get paid by Teliax to send us their traffic.’”<sup>45</sup> Verizon simply distorts the truth.

Teliax offers wholesale 8YY origination service to OTT VoIP providers and other LECs. While the more accurate characterization of those entities is “partner” or “co-venturer,” Teliax treats those companies as “customers” and often refers to them as customers but only in a general business sense and not as a regulatory term of art such as may be found in carrier tariffs.

Why do these carriers and service providers turn to Teliax to handle their originating 8YY calls? Teliax has invested in robust IP- and TDM-based network facilities in two LATAs (Denver and Colorado Springs) that can handle a large capacity of IP-originated 8YY calls, perform 8YY database queries using Teliax’s own SMS database<sup>46</sup> and route those calls to the interexchange carrier’s (“IXC”) Carrier Identification Code (“CIC”) either through direct interconnection with Teliax or through tandem switches where the IXC has not elected a direct interconnection with Teliax.

Many of the carriers and service providers using Teliax’s services do not have the network capacity or capabilities to process toll free calls. Some do not wish to make the necessary investments to handle originating 8YY calls. Some use Teliax on an overflow basis. Many turn to Teliax to avoid the expenses and aggravation of dealing with the Verizons and AT&Ts of this world. In most but certainly not all cases, Teliax will agree to pay the carrier or VoIP provider a commission on the 8YY calls sent by that entity as an inducement to use Teliax, rather than another 8YY wholesale provider.

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<sup>45</sup> Verizon Comments at 9, citing Excerpt of Deposition of Teliax President David Aldworth at 61:18-62:5, *Teliax, Inc. v. AT&T Corp.*, No. 1:15-cv-01472-RBJ, Dkt. No. 68-1 (D. Colo. filed Oct. 21, 2016),

<sup>46</sup> Teliax is the smallest owner-operator of a SOMOS 8YY database or SMS.

For many service providers, Teliax provides an efficient way to handle their 8YY call origination without the burdensome resource investment necessary to manage traffic exchange and intercarrier compensation. Dealing with either Verizon or AT&T on most intercarrier compensation matters but especially on 8YY calls is generally very costly and extremely frustrating. For example, Teliax executives spend an inordinate number of hours dealing with disputed billing and collection efforts related to 8YY calls delivered to AT&T or Verizon for completion. Teliax incurs significant legal and consultant fees to assist in these efforts. And, at a certain point, Teliax has been forced to file lawsuits to collect its bills.<sup>47</sup> Many OTT VoIP providers and CLECs simply do not wish to devote the resources necessary to get paid for calls the big IXC's want delivered. Instead, they turn to wholesale providers of 8YY origination service. In order to avoid monthly "David and Goliath" fights, Teliax's partners are willing to forgo billing their own access charges and receive only a commission. Teliax earns its revenue not only by providing service to deliver calls desired by AT&T and Verizon and their customers but also by showing up monthly in the Valley of Elah to battle the Telecom Giants.

Billing disputes are not the only obstacle Teliax helps its partners negotiate. Teliax also works with its partners and IXC's to address fraudulent 8YY calls, including those made by robodialers. Teliax has policies in place to investigate IXC claims of fraudulent 8YY traffic whenever the IXC can provide information that allows Teliax to investigate the claim. Upon receipt of usable information about alleged fraudulent 8YY traffic, Teliax normally contacts the VoIP provider or CLEC that is sending the

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<sup>47</sup> See e.g., *Teliax, Inc. v. AT&T Corp.*, No. 1:15-cv-01472-RBJ, Dkt. No. 68-1 (D. Colo.) (referred to the Commission on the basis of primary jurisdiction); *Teliax, Inc. v. Verizon Services Corp.*, Civil Action No. 18-cv-00104-RM-MEH (D. Colo.); *Teliax, Inc. v. MCI Communications Services, Inc.*, Civil Action No. 1:18-cv-01266-RM-MEH D. Colo.). It is important for the Commission to understand that access revenues are an important part of Teliax's strategy to invest in its network just as access revenues were used by AT&T and Verizon. Moreover, those companies had substantially higher access revenue streams. For example, in 2007—the last available year of data that the Commission published its *Statistics of Common Carriers*, AT&T had \$7,531,529,000 or slightly more than \$38 per access line in Switched Access Revenue alone, while Verizon had \$2,251,433,000 or almost \$61 per access line in Switched Access Revenue alone. (Calculated by Teliax from the 2006-2007 *Statistics of Common Carriers* (rel. Sept. 2010)). Having built their networks, both wired (fiber optic) and wireless (4G) and made acquisitions (e.g., wireless properties, CLECs, DirectTV, AOL, Yahoo, Time Warner), AT&T and Verizon no longer see a need for access revenues especially as they are billed by potential competitors.

alleged “bad” traffic. If investigation demonstrates the claim is correct, Teliax refunds any access charges that are related to the fraudulent calls if previously paid by the IXC and/or adjusts current billing. In addition, Teliax insists its wholesale partners block the source of the fraudulent traffic and, in extreme cases, Teliax blocks all 8YY traffic from the offending VoIP provider or CLEC and even stops doing business with the offender.

However, Verizon does not normally provide Teliax with any information necessary to investigate and, if appropriate, cause the disconnection of the source of such traffic. For example, Teliax and Verizon/MCI signed a traffic agreement, which included 8YY calls, in 2015 at negotiated rates. Until October 2017, Teliax delivered all 8YY calls bound for Verizon’s CIC and Verizon paid the contract rates for these calls, subject to an occasional billing adjustment, which Teliax handled as described above.

But suddenly in October 2017, Verizon claimed **all** wholesale 8YY calls delivered by Teliax to Verizon’s CICs were fraudulent in nature (without providing Teliax with any identifying information to enable Teliax to investigate specific calls or call sources). Also, Verizon simply stopped paying any fees for any 8YY traffic under the contract. After Verizon canceled the contract, Teliax began to bill Verizon under Teliax’s interstate tariff for 8YY calls Verizon accepts from Teliax. Not surprisingly, Verizon repeated its claim that **all** wholesale 8YY traffic is fraudulent and continues to not pay Teliax’s tariff charges.

Verizon is quick to yell “fraud”, but Verizon should look in the mirror for the source of that fraud. If there is fraud involved in the 8YY traffic exchanged between Teliax and Verizon it is fraud being committed by Verizon. The very idea that the very same type of wholesale 8YY traffic that was overwhelmingly “good” for more than two years suddenly becomes all “bad” simply strains all credibility. The plain facts are: Verizon is attempting to avoid payment for 8YY calls that it complete so its toll free subscribers who then pay Verizon for those calls.



*F. Focusing on Loops and Trunks Is Immaterial*

Both Verizon and AT&T focus on the interconnection of loops and trunks as the essential function of end office switching with AT&T pointing to RAO 21.<sup>48</sup> RAO 21<sup>49</sup> was released in 1992 to address the then standard TDM networks. But it is **not** essential for IP-based networks. IP networks are based on packet switching not circuit switching. With TDM networks, the intelligence that enables calls to be made from an end user customer and the PSTN is found in the complete network – a combination of physical wires and cables, other hardware and software. They all must work together for voice service to be provided and the components together can provide only voice service.

In contrast, an IP-based network separates the end user services from the physical connections, which merely transmits data packets – packets that can be providing a variety of services at the same time based on the hardware and software connected to the broadband line. With the right configuration, a homeowner can speak with her office using OTT VoIP at the same time her son is watching streaming video or playing online games.

The functionality that allows OTT VoIP users to make and receive telephone calls comes from the VoIP provider and its CLEC partner just as the functionality for OTT video comes from the video streaming provider. The broadband connection, unlike the TDM circuit-switched network or the Cable TV Company's coaxial network, is simply a content-neutral transmission facility for purposes of the VSR. It does not control the routing of calls.

Historically, the Commission has implemented the mandate to ensure long distance calls bear a reasonable share of local network costs<sup>50</sup> without regard to the technology used and despite major changes in technology. Initially, telephone companies used base-band technology<sup>51</sup> where one single

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<sup>48</sup> AT&T Comments at 6; Verizon Comments at 3, 7.

<sup>49</sup> *Classification of Remote Central Office Equipment for Accounting Purposes*, Responsible Accounting Officer Letter 21, DA 92-1091 (Com.Car.Bur. Aug. 7, 1992) ("RAO 21").

<sup>50</sup> *Smith v. Illinois Bell Tel. Co.*, 282 U.S. 133 (1930).

<sup>51</sup> H. Newton, *Newton's Telecom Dictionary* 99 (19<sup>th</sup> ed. 2003) ("NTD").

pair of wires was used to carry one telephone call. Later, telephone companies introduced frequency-division multiplexing<sup>52</sup> to carry more than one telephone call on a pair of balanced wires. Next came L Carrier equipment<sup>53</sup> (analog) that enabled telephone companies to carry even more calls on coaxial cable. This was followed by T-Carrier equipment<sup>54</sup> (digital) that used time-division multiplexing and finally the retirement of many metallic circuits and their replacement with fiber optic cables. For financial and engineering reasons, often a mix of these technologies were used for decades. While the actual accounting and allocation principles varied, Commission<sup>55</sup> rules and policies ensured appropriate local network costs were recoverable by telephone companies from interstate rates irrespective of the technologies used.

Similarly, end office switching technology changed significantly over the decades, but FCC rules and policies ensured appropriate costs were recoverable by telephone companies in interstate rates. Indeed, the last manual central office (i.e., a cord board and a common battery) was operated until the early 1990s by the Kerman Telephone Co., in Kerman, California.<sup>56</sup> Panel-type switches,<sup>57</sup> step-by-step switches,<sup>58</sup> No. 5 cross-bar switches,<sup>59</sup> ESS switches,<sup>60</sup> and No. 5ESS digital switches<sup>61</sup> all served customers and their interstate costs recovered by telephone companies.

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<sup>52</sup> *Id.* at 341.

<sup>53</sup> *Id.* at 453.

<sup>54</sup> *Id.* at 773.

<sup>55</sup> Prior to the establishment of the FCC in 1934, the Interstate Commerce Commission ("ICC") regulated interstate telecommunications.

<sup>56</sup> Charles Hillinger, *Pulling the Plug : Phone Company to Replace Last Manual Switchboard*, L.A. TIMES (Apr. 8, 1991), [http://articles.latimes.com/1991-04-08/news/mn-130\\_1\\_manual-switchboard](http://articles.latimes.com/1991-04-08/news/mn-130_1_manual-switchboard).

<sup>57</sup> NTD, *supra* n.51, at 592.

<sup>58</sup> *Id.* at 755.

<sup>59</sup> A "no. 5 cross-bar [central office switch], ... produce[s] a computer card that records either the number of the telephone that placed the call or the trunk line that carried the call from another central office." *Application of U.S. of America for Order Authorizing Installation of Pen Register or Touch-Tone Decoder and Terminating Trap*, 610 F.2d 1148, 1153 (3<sup>rd</sup> Cir. 1979).

<sup>60</sup> NTD at 300.

<sup>61</sup> *Id.* at 23.

There should be no difference with the use of packet switching devices and OTT VoIP services. Consistent with the Commission's policy over the last century, OTT VoIP and their CLEC partners must be allowed to recover their interstate costs for providing end office switching functionality as part of the FCC's major intercarrier compensation reform transition plans. AT&T's and Verizon's focus on technically obsolete lines and trunks should be ignored.

*G. YMax Did Not Restrict Application of the VSR in LEC-VoIP Partnerships*

AT&T places outsized importance on the *YMax* decision, perhaps forgetting that the D.C. Circuit wrote, "...neither *YMax* decision is a holding in favor of AT&T's view...."<sup>62</sup> The Commission must resist AT&T's attempt to re-litigate this issue.

It is true that the D.C. Circuit used *YMax* to demonstrate defects in the *2015 Declaratory Ruling*, including inconsistencies regarding the "commonly understood meaning" of end-office switching around the time of the *2011 Transformation Order*. But the relevance of *YMax* ends there. The D.C. Circuit called *YMax* a "narrow" case that shows that "an over-the-top VoIP provider could not levy end-office switching charges based on a tariff that described end-office switching **purely in TDM terms**."<sup>63</sup> The D.C. Circuit acknowledged that the Commission refused to "address issues regarding the intercarrier compensation obligations, if any, associated with [VoIP] traffic" in *YMax*; and that the Commission emphasized that "this Order addresses only the particular language in *YMax*'s Tariff and the specific configuration of *YMax*'s network architecture, as described in the record."<sup>64</sup>

As O1 Communications, Inc. and Peerless Network, Inc. point out in their excellent comments on this topic,

*YMax* did not operate its own network or perform the switched access functions necessary to complete calls to its customers and used a plug-in device known as a "magicJack." In addition, the record in that matter demonstrated that AT&T provided all of the equipment,

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<sup>62</sup> *AT&T*, 841 F.3d at 1056.

<sup>63</sup> *Id.* at 1055 (emphasis added). See also *supra* n.24 (noting that courts have concluded several CLEC's FCC tariffs have properly incorporated the VSR).

<sup>64</sup> *YMax* at 5743 n. 7; *AT&T*, 841 F.3d at 1055.

facilities, configurations and interconnections to YMax and AT&T, not YMax, handed off the calls to other providers for completion. As described elsewhere in these comments, this is not a typical over-the-top VoIP call scenario.<sup>65</sup>

Clearly, the facts of *YMax* differ from the LEC-VoIP partnerships that AT&T challenges. YMax, in AT&T's words, "did nothing but hand off calls to the public Internet."<sup>66</sup> Teliix and other local exchange carriers have made substantial investments in functionally equivalent end office switching, *see supra*, and provide a host of end-office services, as described in both the Petition and Teliix's initial comments.

AT&T further points out that Chairman Pai and Commissioner O'Rielly disagreed in their dissents to the *2015 Declaratory Ruling* about the role of *YMax*.<sup>67</sup> For example, AT&T makes much of now-Chairman Pai's words that *YMax* "rejected the contention that an over-the-top VoIP provider performs end office switching by interconnecting virtual loops over the Internet."<sup>68</sup> But these prior opinions do not restrict Chairman Pai or Commissioner O'Rielly from voting to grant CenturyLink's Petition. FCC Commissioners have always considered new situations, facts or arguments thoughtfully and do not simply assume nothing has changed since they last looked at an issue. As the Petition and Teliix's comments make clear, carriers such as Teliix perform actual – not "virtual" – functions when offering end office switching. This is not virtual loops over the Internet. In the case of 8YY calls and originating access, these are signals that come from the Internet and require an end-office provider outside the Internet context to point them in the right direction and perform vital functions to enable call completion. As already discussed, *YMax* was a narrow decision that highlighted an improper application of end-office switching. The VSR opened distinct opportunities for functionally equivalent end office services that do not look or feel like those in *YMax*. Teliix is confident that

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<sup>65</sup> O1 Communications, Inc. & Peerless Network, Inc. Comments at 10.

<sup>66</sup> AT&T Comments at 9.

<sup>67</sup> AT&T Comments at 11.

<sup>68</sup> Dissenting Statement of Commissioner Ajit Pai, *Connect America Fund*, 30 FCC Rcd 1587, 1616 (2015) ("Pai Dissent").

today's Commission will view the services Teliix and other local exchange carriers provide as not only legitimate but necessary services that enable calls to connect in a manner envisioned by the VSR.

### **III. Conclusion**

For the reasons set forth in Teliix's June 18, 2018 Comments and as set forth herein, the Commission should promptly readopt the *2015 Declaratory Ruling* and make it clear IXCs must challenge access rates either before the FCC or in court while not engaging in self-help.

Respectfully submitted,

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