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Ex Parte

Ms. Marlene H. Dortch
Secretary
Federal Communications Commission
445 12th Street, SW
Washington, DC 20554

Re: Updating the Intercarrier Compensation Regime to Eliminate Access Arbitrage,
WC Docket No. 18-155

Dear Ms. Dortch:

In its Notice of Proposed Rulemaking, the Commission “propose[d] to require access-stimulating LECs to choose either to: (i) bear the financial responsibility for the delivery of terminating traffic to their end office, or functional equivalent, or; (ii) accept direct connections from either the IXC or an intermediate access provider of the IXC’s choice.”¹ The Commission also sought comment on CenturyLink’s recommendation that this proposal should apply to *all* providers, not just access stimulators.² In addition, CenturyLink recommended that the Commission supplement that universal rule with a rule requiring access-stimulating LECs to always offer to connect under prong (i), bearing the financial responsibility delivery of terminating traffic from the tandem, including any tandem switching charges.³

In this filing, CenturyLink provides data in support of its recommendations. The data in the two Tables below quantify the inefficiencies in the Commission’s current framework for

¹ *Updating the Intercarrier Compensation Regime to Eliminate Access Arbitrage*, WC Docket No. 18-155, Notice of Proposed Rulemaking, FCC 18-68 ¶ 9.

² *Id.* ¶ 23. As discussed below, CenturyLink believes that access-stimulating LECs should not be able to choose option (ii).

³ *See* Comments of CenturyLink at 8-9 (filed July 20, 2018).

terminating access traffic, including both access stimulation traffic and other traffic that, although not fitting the definition of access stimulation, nevertheless presents opportunities for access arbitrage within the scope of this proceeding. As detailed below, this analysis shows that under CenturyLink's recommended approach, CenturyLink would have seen its costs reduced by approximately \$14.4 million over the six-month period analyzed, as compared to the \$6.2 million by which CenturyLink would have seen its costs reduced under the industry-supported proposal targeted at access stimulation, and the \$3.1 million saved under the Commission's proposal (a number which, as explained below, is based on the unrealistic assumption that traffic flows would have been the same if the Commission's proposal had been the law).⁴ These estimates reflect only CenturyLink's own information—industry-wide, the inefficiencies, and potential savings from adopting a more rational framework, would be much larger.

In Table 1, CenturyLink reports the costs it incurred to terminate traffic under the existing regulatory framework over a six-month sample period, as well as estimates of what it would have cost to deliver the same traffic to the same destinations under the Commission's two-pronged proposal. Table 1 reports data separately for both for access stimulation traffic and non-stimulated traffic, consistent with CenturyLink's recommendation that the Commission's proposal be applied to all traffic.⁵ As shown in Table 1, CenturyLink conservatively estimates the difference (*i.e.*, the cost savings CenturyLink would have realized by having the ability to utilize direct connection) during the sixth-month study period to be \$3.1 million for access stimulation traffic to destinations where CenturyLink cannot demand a direct connection today, as well as an additional \$8.2 million for *other*, non-stimulated traffic that would be captured under the more inclusive rule CenturyLink recommends.

It bears noting that the estimates in Table 1 assume that the same quantity of traffic in each category would have been delivered to the same destinations over new interconnection arrangements. Such an assumption is warranted for most forms of traffic but not necessarily for access stimulation traffic, which is stimulated specifically for the purpose of generating intercarrier compensation payments. If the Commission were to adopt its proposal for access stimulation traffic, access stimulators would likely attempt to shift their stimulation activities from place to place so that IXCs would never have the time or the opportunity to deploy facilities to utilize direct connections, circumventing the new rule and perpetuating the inefficient arbitrage the Commission aims to eliminate. On the other hand, for non-stimulated traffic, which is routed to particular destinations for legitimate purposes other than generating access charges, the calls would occur and be terminated to the same destinations regardless of the arbitrage opportunities that the current regulatory framework presents.

The Commission should take account of this important difference between the arbitrage opportunity provided by access stimulation schemes and that presented by other forms of traffic and tailor its reforms accordingly. To that end, the Commission should adopt CenturyLink's

⁴ CenturyLink included an analysis based on this unrealistic assumption because CenturyLink understood Commission staff to have requested it, along with an explanation of why the assumption was unwarranted.

⁵ The non-stimulated traffic in Table 1 is identified in the columns titled Other CEA/Wireless/IPES.

recommendation: it should (1) adopt the Commission's proposed rule but make it applicable to all traffic; and (2) supplement that rule with a targeted rule that requires access-stimulating LECs to offer to connect with IXCs under prong (i). Doing so would eliminate opportunities and incentives to engage in inefficient arbitrage in the current intercarrier compensation framework for both access stimulation traffic and other traffic.

Adopting CenturyLink's recommendation would do more than simply eliminate the opportunity for access stimulators to avoid the effect of a new rule and thereby ensure that the estimated savings from Table 1 would be realized. Instead, it would generate even greater savings by eliminating the incentive to engage in access stimulation at all. Table 2 reports the costs for delivery of all access stimulation traffic CenturyLink incurred over the six-month study period; adopting CenturyLink's proposal for access stimulation traffic would eliminate all of those costs, approximately \$6.2 million over the six-month period. Combined with the \$8.2 million that CenturyLink conservatively estimated would be saved by applying the Commission's two-pronged proposal for non-stimulated arbitrage traffic, the total amount of costs CenturyLink would have saved under its recommended approach is approximately \$14.4 million for just the six months in the study period.

Critically, the Commission cannot rely on competition under its current regulatory framework to produce these efficiencies; it must reform its rules. Although IXCs arguably have a right to obtain connections to most end offices, the overwhelming majority of the traffic CenturyLink has identified as posing a risk of arbitrage is different in this key respect: CenturyLink has no clear right to demand a direct connection to deliver it. That is, most traffic presenting arbitrage opportunities falls into one of three categories—traffic to (i) end offices behind providers, such as competitive equal access providers (CEAs) where CenturyLink cannot demand a direct connection,⁶ (ii) IPES providers, and (iii) wireless carriers. For those types of traffic, providers wishing to deliver traffic to the terminating provider may ask for a direct connection but they have no clearly established right to demand one. And, the terminating provider has no incentive to permit one unless the requesting provider offers better terms to the terminating provider than existing alternate arrangements. In other words, a provider seeking a commercial arrangement competes and wins by offering the terminating provider more benefits (whether considered revenue sharing under the Commission's rules or not), and then leveraging that ability to deliver traffic by charging as much as possible to those other providers that cannot deliver traffic themselves. The only competition such a provider needs to fear is the possibility that it will be displaced by another provider that offers a better deal to the terminating provider, not that another provider will undercut its price to deliver traffic.

Adopting the reforms CenturyLink proposes will mean that any intermediate provider can compete to offer service to these destinations. Those carriers will have an incentive to compete

⁶ CenturyLink, as an IXC, cannot demand a direct connection to any end office behind CEAs operated by Iowa Network Services, South Dakota Networks, and Minnesota Independent Equal Access Corporation. In addition, there are individual end offices that subtend other providers where CenturyLink has no ability to obtain a tariffed direct connection, even though CenturyLink can obtain a direct connection to other end offices behind those providers.

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against each other for traffic, driving prices toward cost and improving service and efficiency. Further, any IXC will similarly be able to choose not just to purchase intermediate services from those providers, but will be able to opt to connect itself, whether by leasing facilities or, in cases where it makes economic sense to do so, deploying its own facilities. Rather than the stunted, inefficient market that exists today, the Commission will finally unleash competition, benefiting competitors and, more importantly benefitting the consumers that ultimately bear the costs of the current inefficient regime.

Please contact me if you have any questions regarding this submission.

Respectfully submitted,

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Table 1: Analysis of Commission Two-Pronged Connection Proposal for CEA Access Stimulation and Other CEA, Wireless, and IPES Traffic

Month	Actual Variable Cost (\$000)		Estimated Direct Interconnect Cost (\$000)		Estimated Savings (Variable less Interconnect) (\$000)	
	Access Stimulator (CEA)	Other CEA/ Wireless/IPES	Access Stimulator (CEA)	Other CEA/ Wireless/IPES	Access Stimulator (CEA)	Other CEA/ Wireless/IPES
Sep-18	\$ 1,133	\$ 2,612	\$ 270	\$ 1,221	\$ 862	\$ 1,342
Oct-18	\$ 906	\$ 2,789	\$ 275	\$ 1,299	\$ 630	\$ 1,429
Nov-18	\$ 736	\$ 2,594	\$ 275	\$ 1,238	\$ 461	\$ 1,307
Dec-18	\$ 564	\$ 2,316	\$ 237	\$ 1,100	\$ 327	\$ 1,179
Jan-19	\$ 680	\$ 2,833	\$ 263	\$ 1,249	\$ 416	\$ 1,520
Feb-19	\$ 624	\$ 2,676	\$ 230	\$ 1,201	\$ 395	\$ 1,402
Totals	\$ 4,642	\$ 15,820	\$ 1,551	\$ 7,309	\$ 3,092	\$ 8,179

Table 2: CenturyLink Costs for All Access Stimulation Traffic/ Savings under Industry Proposal

Month	Actual Variable Cost (\$000)	Estimated Savings (Equals Actual Variable Cost) (\$000)
	Access Stimulator (All)	Access Stimulator (All)
Sep-18	\$ 1,572	\$ 1,572
Oct-18	\$ 1,169	\$ 1,169
Nov-18	\$ 1,000	\$ 1,000
Dec-18	\$ 754	\$ 754
Jan-19	\$ 858	\$ 858
Feb-19	\$ 829	\$ 829
Totals	\$ 6,181	\$ 6,181

Description of Methodology

In the Tables, Actual Variable Cost means the actual historical costs CenturyLink incurred to deliver traffic for the end offices included in the analysis (*i.e.*, those end offices where savings would have been achieved under, for Table 1, the Commission's two-pronged approach, and, for Table 2, all access stimulation traffic). Estimated Direct Interconnect Cost in Table 1 means the cost CenturyLink would have incurred to deliver traffic if it had been able to utilize direct interconnections, as described in the methodology set forth below; because the industry proposal is to shift costs to access stimulators, there is no Estimated Direct Interconnect Cost reported in Table 2. Estimated Savings means the difference between the actual historical cost and the estimated direct interconnect cost in Table 1, and the entire actual historical cost in Table 2.

CenturyLink grouped traffic destinations in the Tables to align with various proposals the Commission might consider. Specifically, in Table 1, Access Stimulator (CEA) captures the costs and modeled potential savings under the Commission's own proposal, which would allow IXCs to seek direct connections from access-stimulating LECs where the IXC does not currently have a right to demand that direct connection. Other CEA/Wireless/IPES captures all other destinations where, as of today, the Commission has not yet explicitly declared that an IXC has a right to obtain a direct connection (or to have the terminating provider pay for intermediate transport, if the terminating provider does not wish to permit the IXC to connect directly). This category thus provides information on the additional savings that would be captured if the Commission were to adopt CenturyLink's recommendation to apply the Commission proposal to all traffic. In Table 2, CenturyLink shows the costs, and therefore the potential savings, associated with all access stimulation traffic.

For the purposes of this exercise, CenturyLink considered the following entities to be access stimulators: Great Lakes Communications, Northern Valley Communications, PacOptic Networks, Reasnor Telephone Company, OmniTel Communications, BTC, Inc., Goldfield Access Network, Tekstar Communications, Interstate Cablevision Company, Louisa Communications, Killduf Telephone Company, Wide Voice, LLC, Native American Telecom Enterprise, Premier Communications, Core Communications, CoreTel Communications, Breda Telephone Corp., Interstate Communications, Comity Communications, Baltimore-Washington Telephone, and Greenway Communications.

CenturyLink generated the data in the Tables using the following protocol.

1. First, CenturyLink determined the actual cost it incurred to terminate traffic to each destination switch, regardless of how CenturyLink actually delivers traffic there (*i.e.*, whether by a commercial arrangement or by paying tariffed rates).
2. Next, CenturyLink calculated an estimated cost for a leased connection to each non-wireless destination switch (including both the cost of the leased connection and any tariffed local switching charge, to ensure an appropriate comparison between the direct

connection cost and the actual costs determined in step 1), and, for wireless destinations, an estimate of the upper bound of costs for terminating traffic. For destinations sitting behind a CEA, or for an IPES destination, because no switch has been publicly identified as a switch to which an IXC actually can connect to deliver traffic, CenturyLink network planning personnel used LERG data to identify a switch which could reasonably be assumed to serve as the destination switch.

- a. Non-Wireless traffic. For non-wireless traffic, CenturyLink assumed that it would have to lease DS-1s to connect to the destination switch. CenturyLink estimated costs for leasing DS-1s using an internal CenturyLink model called a provisioning tool. The provisioning tool generates the estimated cost of leasing a DS-1 from the most cost-effective appropriate point from which CenturyLink could presently reach the destination switch (*e.g.*, a place on CenturyLink's own network or a location to which CenturyLink already has access with high-capacity trunks), at prices available either in the competitive market or by tariff to that particular destination switch. For the purposes of this exercise, CenturyLink used a tiered approach to determine, for each month, the number of DS-1s (and any additional facilities) that would be required for each destination end office. For a destination end office with a traffic volume exceeding 3,000,000 MOUs that month, CenturyLink assumed each DS-1 would carry up to 250,000 MOUs. If traffic was between 500,000 and 3,000,000 MOUs, CenturyLink assumed each DS-1 would carry up to 200,000 MOUs. If traffic was below 500,000, CenturyLink assumed each DS-1 would carry 150,000 MOUs. Because traffic volumes varied during the sample period, this methodology would indicate that CenturyLink would sometimes need a different number of DS-1s to a particular destination in one month than the next. For the purposes of this exercise, CenturyLink assumed that it would add facilities immediately if the model showed they were necessary (*i.e.*, in the same month that the traffic reached the higher level), but would remove facilities only after two consecutive months where traffic did not reach the level that would require them (*i.e.*, there would be two months where there were "too many" DS-1s for the amount of traffic reported). This assumption has the effect of understating the potential savings from the proposed rule changes as compared to the savings that would be achieved if CenturyLink would immediately remove facilities that were not necessary. Notably, the estimated costs for IPES traffic are conservative because it is unlikely that an IPES provider would insist on interconnecting using TDM DS-1s; it is more likely that such a provider would prefer to interconnect in IP, which would be more efficient for both CenturyLink and the IPES provider.
- b. Wireless traffic. For wireless traffic, CenturyLink assumed that the cost for termination for all traffic would be \$0.0004 per MOU. This estimate is conservative as it represents an upper bound on the costs any provider would face. That is because the evidence in the record indicates that the market price for terminating traffic to wireless providers via intermediate providers did not exceed

that amount.⁷ In fact, CenturyLink expects that for many wireless destinations, its costs would be much less under a rule providing for direct connections—and the savings would accordingly be greater—as CenturyLink would in many cases have enough traffic to warrant establishing the direct connection itself.

3. Next, for each location, CenturyLink compared the actual costs CenturyLink incurred determined in step 1 to the estimated costs it would incur determined in step 2.
4. Table 1 summarizes the results of this analysis for those destinations where reform would produce savings, grouping the destinations by type: (i) end offices of access-stimulating LECs, such as those behind CEAs, to which CenturyLink cannot demand a direct connection, and (ii) other providers whose traffic represents an arbitrage opportunity that would be addressed by a broader application of the Commission's proposal, as recommended by CenturyLink (*i.e.*, LECs that are not access stimulators but are behind CEAs, wireless providers, and IPES providers). For destinations where there would not be a savings, CenturyLink assumed it would maintain its current indirect interconnection arrangement.
5. For Table 2, CenturyLink determined the actual historical cost it incurred to terminate traffic to each destination switch associated with an access stimulator.

⁷ See Letter from John Barnicle, Peerless, to Marlene H. Dortch, FCC, WC Docket No 10-90, *et al.*, at 3 (filed Mar. 15, 2018) (observing that the market price for terminating traffic to T-Mobile was \$0.0004/MOU or less).