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

In the Matter of	
Petition for Declaratory Ruling To Clarify that Technology Transitions Do Not Alter the Obligation of Incumbent Local Exchange Carriers To Provide DS1 and DS3 Unbundled Loops Pursuant to 47 U.S.C. § 251(c)(3)	WC Docket No. 15-1
Technology Transitions	GN Docket No. 13-5

VERIZON'S OPPOSITION
TO WINDSTREAM'S PETITION FOR DECLARATORY RULING

Although Windstream's petition purports to present a novel issue for the Commission to resolve,[1] the Commission decided the question it poses years ago. In order to encourage investment in next-generation facilities and services, the Commission held in 2004 that its unbundling rules do not require ILECs to build TDM capabilities into their packet-switched networks or to add those capabilities into their networks that do not already have them in order to satisfy a CLEC's request for unbundled network elements.[2] Consistent with that limitation on the unbundling rules, Verizon provides DS1 and DS3 to wholesale customers in wire centers that *both* satisfy the Commission's impairment triggers *and* already have the TDM equipment necessary to provide DS1 or DS3 service over fiber loops. Where TDM facilities do not exist —

[1] *See* Windstream Corp., *Petition for Declaratory Ruling to Clarify That Technology Transitions Do Not Alter The Obligation of Incumbent Local Exchange Carriers to Provide DS1 and DS3 Unbundled Loops Pursuant to 47 U.S.C. § 251(c)(3)*, WC Docket No. 15-1 & GN Docket No. 13-5, at 1, 10 (Dec. 29, 2014) ("Windstream Petition").

[2] *See 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*, Order on Reconsideration, 19 FCC Rcd 20293, ¶¶ 20-21 (2004) ("*Reconsideration Order*").

such as in greenfield areas where a provider does not offer those services or in wire centers where a provider has transitioned to all-IP service and no longer has facilities in place to offer TDM-based services like DS1s and DS3s — the Commission's 2004 ruling means that the unbundling rules do not require the provider to build TDM equipment or capabilities into its network solely to fulfill a CLEC's request for unbundling.

Windstream ignores the Commission's 2004 *Reconsideration Order* and, moreover, provides no basis for the Commission to amend its existing regulations either to require the unbundling of the packet-switched capabilities of ILECs' networks or to require ILECs to add TDM capabilities to their packet-switched networks that do not already have them. As the Commission has long recognized, imposing unbundling requirements on packet-switched networks would undermine broadband deployment in conflict with both congressional and Commission policy, and harm consumers. In contrast, exempting those "next-generation network capabilities" has — as the Commission predicted it would — "stimulate[d] facilities deployment" by both ILECs and CLECs (in competition with numerous other marketplace participants), with customers "benefit[ting] from this race to build next generation networks."[3]

1. In a series of decisions from 2003 through 2005, the Commission adopted unbundling rules that distinguished between fiber-to-the-premises (FTTP) and other loops, and between packet-switched and TDM networks. Under those rules, the Commission eliminated all unbundling obligations for fiber loops "serving an end user's customer premises," except for the obligation to unbundle a narrowband "transmission path capable of voice grade service" in

[3] *Review of the Section 251 Unbundling Obligations of Incumbent Local Exchange Carriers*, Report and Order and Order on Remand and Further Notice of Proposed Rulemaking, 18 FCC Rcd 16978, ¶ 272 (2003).

brownfield areas after the copper loop previously serving that premises has been retired.[4] The Commission's current rules also state clearly that there are no unbundling obligations for the packet-switched capabilities of loops.[5]

Of particular relevance to the Windstream Petition, the Commission held in the *Reconsideration Order* that that ILECs "are not obligated to build TDM capability into new packet-based networks or into existing packet-based networks that never had TDM capability" so that they can then unbundle TDM network elements, such as DS1 or DS3 loops.[6] That limitation follows directly from the statute, which "requires unbundled access only to an incumbent LEC's *existing* network — not to a yet unbuilt superior one."[7] The Commission explained that it reached this decision because its "rule[] addressing routine network modifications" in the context of unbundling — that is, the rule that requires ILECs to make certain, limited modifications to

[4] 47 C.F.R. § 51.319(a)(3). Although two courts of appeals have held that § 51.319(a)(3) applies to all customers and, therefore, ILECs have no obligation to unbundle DS1 or DS3 FTTP loops, as noted above Verizon currently voluntarily provides DS1s and DS3s in wire centers that *both* satisfy the Commission's impairment triggers *and* already have the necessary TDM equipment to provide DS1 or DS3 service over fiber loops. *See Illinois Bell Tel. Co. v. Box*, 526 F.3d 1069, 1073 (7th Cir. 2008) (finding that 47 C.F.R. § 51.319(a)(3) "as written is unqualified" and "says that ILECs need not furnish optical-fiber local loops as unbundled network elements," with "[n]othing turn[ing] on the customer's identity"); *BellSouth Telecomms., Inc. v. Kentucky Pub. Serv. Comm'n*, 669 F.3d 704, 710-12 (6th Cir. 2012) (finding that "the DS1/DS3 [loop unbundling] regulations . . . yield to" the exclusion of FTTP loops from unbundling in § 51.319(a)(3) and that that ILECs "need not offer unbundled access to DS1 and DS3 loops" over FTTP loops). Windstream does not address these decisions in its petition.

[5] *See* 47 C.F.R. § 51.319(a)(1), (a)(2)(i).

[6] *Reconsideration Order*, ¶ 20.

[7] *Iowa Utils. Bd. v. FCC*, 120 F.3d 753, 813 (8th Cir. 1997), *aff'd in part, rev'd in part sub nom. AT&T Corp. v. Iowa Utils. Bd.*, 525 U.S. 366 (1999); *see id.* at 812 (finding that the "plain terms of the Act" do "not require incumbent LECs to provide [their] competitors with superior quality interconnection").

their networks to add equipment necessary for the ILEC to fulfill a CLEC's orders for unbundled network elements — "do[es] not apply to FTT[P] loops."[8]

The Commission clarified further that an ILEC's use of TDM equipment to provide TDM services over fiber in order to maintain compatibility with a customer's existing TDM equipment "does not change the scope of the Commission's unbundling relief."[9] In doing so, the Commission specifically granted a clarification that Verizon requested. As Verizon explained:

> [E]ven when carriers deploy new packet-based networks, including fiber-to-the-premises networks, it will continue to be necessary in many instances to hand off a signal to end-user customers in TDM format. For example, small business customers may have made a substantial investment in customer premises equipment that is not directly compatible with the new packetized networks. In these circumstances, it may be necessary to hand off a signal to the customer in TDM format rather than put the customer to the expense of investing in all new customer premises equipment.[10]

Verizon, therefore, asked the Commission to "make clear that incumbent LECs need not unbundle their next-generation networks regardless of whether they employ TDM interfaces to make their new network facilities backward-compatible with customers' existing equipment."[11] The Commission agreed and its clarification applies to the "'TDM handoff'" that is "described . . . in Verizon's ex parte."[12]

2. The *Reconsideration Order* — which Windstream simply ignores — refutes Windstream's claim that ILECs must continue to unbundle DS1 and DS3 loops over their next-generation networks that lack TDM capabilities and that are not being used to offer these

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[8] *Reconsideration Order* ¶ 20 n.69.

[9] *Id.* ¶ 21.

[10] Ex Parte Letter from Dee May, Verizon, to Marlene H. Dortch, FCC, *Review of Section 251 Unbundling Obligations of ILECs*; *Unbundled Access of Network Elements*, CC Docket No. 01-338 & WC Docket No. 04-313, at 2 (Oct. 7, 2004) (cited in *Reconsideration Order* ¶ 21 n.70).

[11] *Id.*

[12] *Reconsideration Order* ¶ 21.

services to their own customers.[13] Instead, where an ILEC's packet-switched network has no TDM capabilities — or has those capabilities solely to enable the kinds of TDM handoffs discussed above — there is no obligation to unbundle that packet-switched network.

As Windstream acknowledges, the Commission's current DS1 and DS3 loop unbundling rules define these loops as having a specified "digital signal speed" of 1.544 Mbps and 44.736 Mbps, respectively.[14] That is not, as Windstream suggests at one point, a mere amount of "capacity available to the customer" that is indifferent to the format in which the information (voice or data) is transmitted.[15] Rather, DS1 and DS3 are well-defined TDM standards, set by industry standard-setting bodies.[16] As the Commission has recognized, DS1 and DS3 are "T-carrier systems" that "use pulse code modulation and *time division multiplexing*."[17]

Therefore, to the extent Verizon today provides DS1 or DS3 over fiber loops, it does so only in those central offices that are equipped with the necessary TDM equipment to send a DS1 or DS3 signal over a fiber loop. Special equipment must also be deployed at the customer's premises to receive those DS1 and DS3 signals, to hand them off to the customer premises equipment. Because the Commission's unbundling rules do not require ILECs to add TDM

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[13] *See* Windstream Petition at 13-15.

[14] *Id.* at 3 n.3 (quoting 47 C.F.R. § 51.319(a)(4)-(5)).

[15] *Id.* at 13.

[16] *See, e.g.*, ATIS, Digital Hierarchy – Formats and Specifications, ATIS-0600107.2002(R2011), §§ 5.1, 5.2.2, 6, 9 (containing specifications for the use of the "time reference in the bit stream," of "channel time slots" for transmitting information, and the specific standardized "frame structures" for DS1 and DS3 digital signals).

[17] *Local Telephone Competition and Broadband Reporting,* Report and Order, 19 FCC Rcd 22340, ¶ 15 n.34 (2004) (emphasis added); *see also* Public Safety and Homeland Security Bureau, FCC, *Impact of the June 2012 Derecho on Communications Networks and Services: Report and Recommendation,* https://apps.fcc.gov/edocs_public/attachmatch/DOC-318331A1.pdf, at 8 n.20 (Jan. 10, 2013) (explaining that a DS3 line "is a digital signal level 3 T-carrier").

equipment to their packet-switched networks in order to unbundle TDM network elements, where a provider's central office does not contain that equipment and provides IP-only services, the provider would not be required to accept orders for unbundled DS1 or DS3 loops.

3. For all of these reasons, the Commission could not now declare that ILECs have an obligation to add TDM capabilities to their packet-switched networks in order to continue to unbundle DS1 or DS3 loops. The Commission could not reinterpret its routine network modification rule to require ILECs to deploy TDM equipment to their packet-switched networks, because there is no evidence that ILECs routinely add TDM capabilities to those networks for their retail customers.[18] Nor could the Commission amend its rules to impose new unbundling obligations on packet-switched networks without first making an impairment finding based on substantial evidence in a new record. No such finding could be supported and, moreover, imposing such unbundling obligations would be inconsistent with congressional policy as set forth in § 230 and § 706 and more than a decade of Commission decisions refusing to require the unbundling of packet-switched networks.

Finally, despite Windstream's assertions that continued DS1 and DS3 loop unbundling is necessary for small and medium business customers,[19] those customers have been — and continue to be — voluntarily migrating to superior carrier Ethernet services. Carrier Ethernet has double-digit growth rates, with more new Ethernet ports installed in the first half of 2014 than in any prior six-month period.[20] That is because, as one CLEC explains, "Ethernet is a

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[18] *See United States Telecom Ass'n v. FCC*, 359 F.3d 554, 578 (D.C. Cir. 2004) (upholding the Commission's routine network modification rule because it adhered to the "clear and reasonable limiting principle" that the only modifications required are those "the ILEC routinely performs, on demand, for its own customers").

[19] *See* Windstream Petition at 7-10, 15-19.

[20] *See* Vertical Systems Group, *Carrier Ethernet Services: 3+ Million Ports Worldwide by 2018* (Dec. 18, 2014), *available at* http://www.verticalsystems.com/vsgpr/carrier-ethernet-services-3-

superior choice," is "more resilient," and is "easier, faster, and less expensive to scale" than legacy TDM services.[21] Furthermore, there is extensive, facilities-based competition to provide carrier Ethernet services. For example, tw telecom is the number three provider of carrier Ethernet services, and Time Warner Cable, Comcast, Cox, Level 3, and XO all have at least a four percent share of the U.S. retail marketplace.[22] Another six providers — including Windstream, Charter, Cogent, Integra, Lightpath, MegaPath, and Zayo — are in the next tier of providers, with roughly 30 more companies also offering carrier Ethernet service to U.S. customers.[23] Customers "shopping for Ethernet services have a broad[] choice of companies with substantial Ethernet assets" from which to choose.[24] In light of this robust competition for the modern services that small and medium-business customers demand, there is no possible basis to extend unbundling obligations for legacy DS1 and DS3 loops to next-generation packet-switched networks.

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million-ports-worldwide-by-2018/; Vertical Systems Group, *Mid-Year 2014 U.S. Carrier Ethernet LEADERBOARD* (Aug. 20, 2014) ("Mid-2014 Leaderboard"), *available at* http://www.verticalsystems.com/vsglb/mid-year-2014-u-s-carrier-ethernet-leaderboard/.

[21] MegaPath, *Compare Ethernet and T1*, *available at* http://www.megapath.com/data/ethernet/comparison/; *see also* DS3 Today, *From DS3 to Switched Ethernet* (explaining why "switched Ethernet technology gives [customers] more connectivity options than T1, DS3, or SONET"), *available at* http://www.ds3today.com/articles/switched-ethernet.php.

[22] *See* Mid-2014 Leaderboard.

[23] *See id.*

[24] *Id.*

CONCLUSION

For the foregoing reasons, the Commission should deny Windstream's petition for declaratory ruling.

Respectfully submitted,

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