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BY HAND DELIVERY AND ELECTRONIC FILING

Marlene H. Dortch
Secretary
Federal Communications Commission
445 12th Street, S.W.
Washington, D.C. 20554

Re: *Petitions of AT&T Inc., BellSouth Corporation, the Embarq Local Operating Companies, and Qwest Pursuant to 47 U.S.C. 160(c) for Forbearance from Title II and Computer Inquiry Rules with Respect to Broadband Services, WC Docket Nos. 06-125 & 06-147*

Petitions of Verizon Telephone Companies Pursuant to 47 U.S.C. 160(c) for Forbearance from Title II and Computer Inquiry Rules with Respect their Broadband Services, WC Docket Nos. 04-440

Petition of ACS of Anchorage, Inc. Pursuant to Section 10 of the Communications Act of 1934, as Amended (47 U.S.C. § 160(c)), for Forbearance from Certain Dominant Carrier Regulation of Its Interstate Access Services, and for Forbearance from Title II Regulation of Its Broadband Services, in the Anchorage, Alaska, Incumbent Local Exchange Carrier Study Area, WC Docket No. 06-109

In re Special Access Rates for Price Cap Local Exchange Carriers, WC Docket No. 05-25

Dear Secretary Dortch:

BT Americas, Inc. ("BT") respectfully submits this written *ex parte* for inclusion in the records of the above-captioned proceedings. The purpose of this *ex parte* is (1) to address the inefficiencies of providing Ethernet over TDM; and (2) to set forth the legal basis for rejecting proposals to forbear from regulation on the basis of whether the special access services at issue use "TDM" or "packet" technology.

I. Providing Ethernet over TDM is Inefficient

It is not efficient to run Ethernet over TDM loops from either a cost or a quality perspective.

It is not efficient on a cost basis for at least three reasons. First, the purchaser is required to purchase unused bandwidth. For example, if a customer wants a 10Mbps Ethernet service, the BOCs will only provide a DS-3 (45 Mbps) special access loop.¹ With a DS3 the customer will be paying substantially more than what the customer would expect to pay for a 10Mbps circuit (which is all it needs). Second, the customer then has to add equipment on top of the equipment already on the DS3 (and which is not needed) to deliver the Ethernet service. Third, it is more costly and inefficient in terms of the equipment used at both ends. The customer, at its end, will need a much bigger router and card to terminate a DS3 than to terminate a 10 Mbps solution. The carrier, at its end, rather than having a single card handle 100 10Mbps lines via an aggregated Gigabit Ethernet connection, will only be able to handle 8 DS3s.

Nor is Ethernet over TDM efficient from a quality perspective. Introducing additional equipment introduces additional points of failure. And if there is a failure it is more difficult to determine whether the problem is in the BOC circuits/equipment or in the wholesale provider's Ethernet equipment. Technological solutions to compensate for these issues are costly and further raise the cost differential between Ethernet over TDM and other forms of Ethernet access service, making Ethernet over TDM not competitive.

II. The Legal Basis for Rejecting Proposals to Forbear from Regulation on the Basis of Whether the Special Access Services at Issue use "TDM" or "Packet" Technology

The legal basis for rejecting proposals to regulate or deregulate on the basis of whether the special access services at issue use "TDM" or "packet" technology is that there is no rational basis to support granting forbearance based on the distinction. A decision to deny or grant forbearance must involve an assessment of whether the ILEC has market power over local loop and transport facilities.² This assessment should not vary based on the technology attached to such facilities. A facility without competitive alternatives available does not enable an ILEC to exercise any less market power by virtue of its use of packet or optical electronics. Similarly, an ILEC's market power over a facility used to provide 45 Mbps of capacity does not vary based on whether TDM or packet technology is used to produce that bandwidth.

The notion that there is validity to regulating based on a TDM versus packet distinction is a myth. Verizon claims the distinction "between traditional, TDM-based transmission services and newer, packetized and optical broadband transmission services is consistent with the

¹ Or an NxT1 solution which is uneconomic as well, for the same reasons that the DS-3 solution is uneconomic.

² See, e.g., *Petition of ACS of Anchorage, Inc. Pursuant to Section 10 of the Communications Act of 1934, as Amended (47 U.S.C. § 160(c)), for Forbearance from Certain Dominant Carrier Regulation of Its Interstate Access Services, and for Forbearance from Title II Regulation of Its Broadband Services, in the Anchorage, Alaska, Incumbent Local Exchange Carrier Study Area*, Memorandum Opinion and Order, WC Docket No. 06-109, ¶ 26 (the section 10 "inquiry is informed by the Commission's traditional market power analysis") (rel. Aug. 20, 2007) ("*ACS Broadband Forbearance Order*").

Commission's own prior *decisions*.”³ The “decisions” cited by Verizon actually are but one – the so-called *Triennial Review Order*. And from that decision, Verizon cites to a single paragraph in which the Commission determined that it would require ILECs to unbundle only the TDM features, functions and capabilities of “hybrid loops” consisting of both fiber and copper and not any of the packetized features, functions and capabilities of the fiber components of such loops. This decision is not controlling. Nor is it relevant. It is not based on section 10 and it involves no assessment of market power. Rather, the Commission therein applies the so-called “impairment standard” that governs competitors’ rights to gain access to facilities as UNEs at cost-based rates. It is not a market power test and it has not been adopted by the Commission as the standard for assessing forbearance.

Verizon’s reliance on *Triennial Review Order* discussion regarding competitors’ ability to deploy packet switching and the Commission’s decision not to require subloop unbundling of fiber feeder also is misplaced.⁴ Neither switching nor subloop fiber feeder plant is at issue here. Moreover, none of the Commission’s section 251 decisions regarding fiber loop plant are relevant here, as fiber is neither TDM nor packet but instead is used to support both technologies. Indeed, all DS3s are provided over fiber and to the extent DS1s are not, packetized DSL technology often makes this possible. At bottom, even the Commission’s *Triennial Review Order* and related section 251 unbundling orders do not enshrine the TDM versus packet distinction claimed by Verizon and others in the above-captioned proceedings.

Nevertheless Verizon’s reliance on the *Triennial Review Order* extends to optical facilities as well.⁵ Yet, the distinction the Commission makes in that order with respect to OCn facilities is based on capacity rather than technology. TDM and packet technologies do not divide neatly along capacity lines. For example, Ethernet loop technology is used today to provide bandwidth at levels that fall between DS1 and DS3 capacity.⁶ Other packet technologies, including ADSL technology, are used to provide bandwidth at sub- and above-DS1 levels. The Commission transported its capacity-based rationale from the unbundling context into its recent *ACS Broadband Forbearance Order*. Regardless of the merits of that decision, it is clear that it is one that rests on a capacity- rather than technology- based distinction.⁷ The Commission’s use of the term “non-TDM-based” is descriptive in nature; it is not used by the Commission as the basis for its decision. Thus, the Commission’s decision not to require section 251 unbundling of OCn facilities, and its subsequent decision to forbear from Title II regulation of such services in the *ACS Broadband Forbearance Order*, are not decisions based on a TDM/packet or even TDM/non-TDM distinction.

³ Letter from Dee May, Vice President, Federal Regulatory, Verizon, to Marlene H. Dortch, Secretary, Federal Communications Commission, WC Docket Nos. 04-440, 06-125 and 06-147, at 3-4 (footnotes omitted) (emphasis added) (filed Sep. 4, 2007) (“Verizon 9/4 Letter”).

⁴ *Id.* at 4.

⁵ *Id.*

⁶ *See, e.g.*, Letter from John J. Heitmann, Counsel to XO *et al.*, to Marlene H. Dortch, Secretary FCC, WC Docket Nos. 04-440, 06-125, 06-147 at 7 (filed Sept. 19, 2007).

⁷ *ACS Broadband Forbearance Order*, ¶¶ 101, 105.

The Commission's forbearance determinations in its *ACS Broadband Forbearance Order* also do not stand for the general proposition that the Commission uses a TDM versus packet or non-TDM distinction as the basis for its section 10 analysis and decision-making. There, the Commission granted forbearance with respect to certain non-TDM-based special access services based on unique market conditions it observed in the Anchorage study area.⁸ The Commission's grant of forbearance with respect to certain non-TDM-based services was not based on a TDM/packet or even TDM/non-TDM distinction. Again, the use of these terms was descriptive rather than dispositive.

In addition, although the so-called *Wireline Broadband Order*⁹ is often cited by Verizon and others as precedent to support almost any request for deregulatory treatment,¹⁰ it has no bearing whatsoever here. For example, the Commission expressly distinguished the service it was deregulating there – wireline broadband Internet access – from other wireline broadband services, including “gigabit Ethernet service, and other high-capacity special access services, that carriers and end users have traditionally used for basic transmission purposes.”¹¹

Finally, the TDM versus packet distinction is not sustainable, sound or one that other National Regulatory Authorities (NRAs) are making. Rather, other NRAs are approaching the analysis on a technology neutral basis and are focusing their analyses on the issue of whether the access product is a high quality enterprise-grade access product with the types of service level agreements (SLAs) that an enterprise access customer would expect to have and accordingly is a substitute for pre-existing enterprise-grade access products. Hence the U.K., France, Spain and other jurisdictions listed in Attachment A have conducted market analyses and determined that enterprise-grade Ethernet access is a product that sits in the high quality terminating access leased lines market just the same way TDM-based 2 Mbps and 45 Mbps services do (*e.g.*, Market 13 reviews under the EC framework¹²). Indeed, if and when new access products emerge

⁸ *ACS Broadband Forbearance Order*, ¶¶ 98 (“the marketplace appears highly competitive”), 100 (recognizing uniqueness of the Anchorage study area), Statement of Commissioner Robert M. McDowell (noting that “the geographic location of Anchorage contributes to special characteristics of that market that are not duplicated in any other market in the country,” and relying on a “local market analysis”).

⁹ *Appropriate Framework for Broadband Access to the Internet over Wireline Facilities*, Report and Order and Notice of Proposed Rulemaking, CC Docket No. 02-33 (re. Sep. 23, 2005) (“*Wireline Broadband Order*”).

¹⁰ *See, e.g.*, Verizon 9/4 Letter at 6.

¹¹ *Wireline Broadband Order*, ¶ 9 (footnote omitted indicates that the *Wireline Broadband Order* has no bearing on the services for which Verizon sought forbearance in WC Docket No. 04-440); *see also ACS Broadband Forbearance Order*, ¶ 16 (same).

¹² Market 13 is “Wholesale terminating segments of leased lines.” *See*, Commission Guidelines on market analysis and the assessment of significant market power (2003/311/EC, OJ L 114, 8.3.2003) setting out a common methodology and principles for the national regulatory authorities charged with these tasks and Commission Recommendation on relevant markets

(e.g. business FIOS) that have the requisite quality, SLAs, resiliency and other characteristics of high quality enterprise grade access, are sold by providers to enterprise customers and accepted by customers as a substitute, then such products should be included in the special access category for a determination of whether this market is competitive.

This is sound and reasoned decision making that provides regulatory certainty that in turn encourages investment. The Commission should not subscribe to the arguments for Ethernet forbearance that since Ethernet meets the broadband definition (*i.e.* has a greater speed than 200 kbps) and is packet-based, and since the Commission has deregulated consumer broadband including packet-based broadband, that all services that are packet based and meet broadband threshold speeds are or should be deregulated. Typically residential consumers would not purchase a large Ethernet access which has high SLAs and hence large Ethernet access would not be an easy economic replacement to existing residential broadband services. However Ethernet access with SLAs and above the 1.5 Mbps speeds do fit as a substitutional offering for existing TDM services. The argument by Ethernet forbearance proponents that all broadband is the same is an invitation to engage in arbitrary decisionmaking and will lead to further deterioration of competition in retail services to enterprise customers.

Respectfully submitted,

/s/

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Attachment A -- Country by Country Ethernet Status as at 27 July 2007

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| UK | Ethernet in the UK was a wholesale remedy made under the Leased Line Market review. BT was found to have a dominant position in the supply of wholesale Ethernet access and backhaul (WES A, WES B). In the last leased lines market review, Ofcom split the market in two with Traditional Interface Symmetric Broadband Origination (TISBO) and Alternative Interface Symmetric Broadband Origination (AISBO). The former are SDH, PDH and analogue leased lines and the latter are Ethernet, optical and other like services. |
| France | Wholesale Ethernet was part of the leased lines market review. Significant market power was found on terminating and trunk segments. The decision requires France Telecom to publish a reference offer for capacity services, including Ethernet terminating/originating segments. As regards terminating/originating segments, cost-orientation is only required for terminating segments <i>below</i> 10 Mb (article 15). |
| Italy | Incumbent Telecom Italia was found to have significant market power on terminating and trunk segments of Markets 13&14: NRA decision 45/06 covers 'analogue and digital leased lines' up to 2.5 Gbit/s without specifying technology. Telecom Italia must publish a reference offer for terminating segments containing all speeds <u>and all interfaces</u> that it uses for its own retail services. Interpreted to include Ethernet. |
| Germany | For Market 13, BNetzA's revised proposal is to find that the incumbent DT has significant market power for Ethernet among other leased lines access products. BNetzA was to renotify its draft to Brussels early July. Should the Commission approve BNetzA's proposals, the NRA will in a second step draft a Remedy decision that will include Ethernet. |
| Spain | CMT adopted its decision on Markets 13 and 14 on 23 Nov 2006. Telefonica was found to have significant market power on terminating/originating and trunk segments. The decision requires Telefonica to publish a modification of its reference interconnection offer to include Ethernet (10 Mb and 100 Mb only) terminating and trunk segments. Provision of Ethernet terminating segments is subject to the following conditions/obligations. <ul style="list-style-type: none"> • Provision of Ethernet and Fast Ethernet (no GigE) • Retail minus (=different from regulation for traditional interfaces). • Transparency. • Non discrimination • Accounting separation • KPIs (i.e. metrics) |
| Netherlands | Wholesale Ethernet falls within the scope of the +2 Mbit leased lines market (including originating and terminating access) which has been deemed to be offered competitively in the Netherlands. OPTA has determined that there are enough alternative suppliers that it does not have to regulate wholesale Ethernet |
| Belgium | BIPT's remedies include an explicit requirement for the incumbent Belgacom to provide wholesale Ethernet terminating/originating segments as part of its decision on the leased lines market. |
| Ireland | Unclear - wholesale Ethernet not explicitly mandated but could consider that it is mandated and regulator could explicitly mandate it as a precision of its Market 13 decision). |

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